

**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, 2017

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:

<b>Registrant</b>	<b>Title of Each Class</b>	<b>Name of Exchange on Which Registered</b>
Vornado Realty Trust	Common Shares of beneficial interest, \$.04 par value per share	New York Stock Exchange
	Cumulative Redeemable Preferred Shares of beneficial interest, no par value:	
Vornado Realty Trust	6.625% Series G	New York Stock Exchange
Vornado Realty Trust	6.625% Series I	New York Stock Exchange
Vornado Realty Trust	5.70% Series K	New York Stock Exchange
Vornado Realty Trust	5.40% Series L	New York Stock Exchange
Vornado Realty Trust	5.25% Series M	New York Stock Exchange

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

<b>Registrant</b>	<b>Title of Each Class</b>
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 and posted on its corporate website, if any, every Interactive Data File required to be submitted and posted 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 if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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

Vornado Realty Trust:

Large Accelerated Filer  Accelerated Filer  
 Non-Accelerated Filer (Do not check if smaller reporting company)  Smaller Reporting Company  
 Emerging Growth Company

Vornado Realty L.P.:

Large Accelerated Filer  Accelerated Filer  
 Non-Accelerated Filer (Do not check if smaller reporting company)  Smaller Reporting Company  
 Emerging Growth Company

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Vornado Realty Trust: YES  NO  Vornado Realty L.P.: YES  NO

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 \$16,284,558,000 at June 30, 2017.

As of December 31, 2017, there were 189,983,858 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, 2017 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 \$897,361,000 at June 30, 2017.

#### Documents Incorporated by Reference

**Part III:** Portions of Proxy Statement for Annual Meeting of Vornado Realty Trust's Shareholders to be held on May 17, 2018.

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## EXPLANATORY NOTE

This report combines the Annual Reports on Form 10-K for the fiscal year ended December 31, 2017 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 entities/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 93.5% 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 other 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, as applicable, the Operating Partnership generates all remaining capital required by the Company’s business. These capital 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 6. Selected Financial Data;
- 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 9. Redeemable Noncontrolling Interests/Redeemable Partnership Units
  - Note 10. Shareholders’ Equity/Partners’ Capital
  - Note 13. Stock-based Compensation
  - Note 17. Income Per Share/Income Per Class A Unit
  - Note 22. Summary of Quarterly Results (Unaudited)

This report also includes separate Part II, Item 9A. Controls and Procedures sections, separate Exhibit 12 computation of ratios, 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, 2017, 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 future 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.

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 is 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 93.5% of the common limited partnership interest in the Operating Partnership at December 31, 2017.

On July 17, 2017, we completed the spin-off of our Washington, DC segment comprised of (i) 37 office properties totaling over 11.1 million square feet, five multifamily properties with 3,133 units and five other assets totaling approximately 406,000 square feet and (ii) 18 future development assets totaling over 10.4 million square feet of estimated potential development density, and (iii) \$412.5 million of cash (\$275.0 million plus The Bartlett financing proceeds less transaction costs and other mortgage items) to JBG SMITH Properties ("JBGS"). On July 18, 2017, JBGS was combined with the management business and certain Washington, DC assets of The JBG Companies ("JBG"), a Washington, DC real estate company. Steven Roth, the Chairman of the Board of Trustees and Chief Executive Officer of Vornado, is the Chairman of the Board of Trustees of JBGS. Mitchell Shear, former President of our Washington, DC business, is a member of the Board of Trustees of JBGS. We are providing transition services to JBGS initially including information technology, financial reporting and payroll services. The spin-off was effected through a tax-free distribution by Vornado to the holders of Vornado common shares of all of the common shares of JBGS at the rate of one JBGS common share for every two common shares of Vornado and the distribution by the Operating Partnership to the holders of its common units of all of the outstanding common units of JBG SMITH Properties LP ("JBGSLP") at the rate of one JBGSLP common unit for every two common units of VRLP held of record. See JBGS' Amendment No. 3 on Form 10 (File No. 1-37994) filed with the Securities and Exchange Commission on June 9, 2017 for additional information. Beginning in the third quarter of 2017, the historical financial results of our Washington, DC segment are reflected in our consolidated financial statements as discontinued operations for all periods presented.

We currently own all or portions of:

#### New York:

- 20.3 million square feet of Manhattan office in 36 properties;
- 2.7 million square feet of Manhattan street retail in 71 properties;
- 2,009 units in twelve residential properties;
- The 1,700 room Hotel Pennsylvania located on Seventh Avenue at 33rd Street in the heart of the Penn Plaza district;
- 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;

#### Other Real Estate and Related 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, known as the Bank of America Center;
- A 25.0% interest in Vornado Capital Partners, our real estate fund (the "Fund"). We are the general partner and investment manager of the Fund;
- A 32.5% interest in Toys "R" Us, Inc. ("Toys"), which is in Chapter 11 bankruptcy and carried at zero in our consolidated balance sheets; and
- Other real estate and other 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 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;
- investing in retail properties in select under-stored locations such as the New York City metropolitan area;
- developing and redeveloping our existing 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, 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.

## ACQUISITIONS

We completed the following acquisition during 2017:

- \$230.0 million upfront contribution for the acquisition of a 99-year leasehold of Farley Post Office (50.1% interest)

## DISPOSITIONS

We completed the following sale transactions during 2017:

- \$6.0 billion spin-off of our Washington, DC segment on July 17, 2017;
- \$155.0 million sale of property comprising the Suffolk Downs racetrack in East Boston, Massachusetts (21.2% interest);
- \$148.0 million sale of 800 Corporate Pointe in Culver City, CA (25% interest);
- \$23.9 million sale of investments by India Property Fund (36.5% interest);
- \$18.7 million sale of our 25% interest in TCG Urban Infrastructure Holdings Private Limited, which substantially completes our sale of our investments in India; and
- We received \$50.0 million representing our interest in the \$150.0 million mezzanine loan owned by a joint venture in which we had a 33.3% ownership interest.

## FINANCINGS

We completed the following financing transactions during 2017:

- \$1.25 billion revolving credit facility extended to January 2022 with two six-month extension options, lowering the interest rate from LIBOR plus 105 basis points to LIBOR plus 100 basis points.
- \$1.2 billion refinancing of 280 Park Avenue (50% interest);
- \$500 million refinancing of the office portion of 731 Lexington (32.4% interest);
- \$500 million refinancing of 330 Madison (25% interest);
- \$450 million public offering of 3.5% 7-year senior unsecured notes;
- \$450 million redemption of 2.5% senior unsecured notes;
- \$320 million issuance of 5.25% Series M cumulative redeemable preferred shares and \$470 million redemption of 6.625% Series G and 6.625% Series I cumulative redeemable preferred shares in January 2018;
- \$271 million loan facility for the Moynihan Office Building (50.1% interest);
- \$220 million financing of The Bartlett (included in the spin-off of our Washington, DC segment);
- \$100 million loan facility for the refinancing of Lincoln Road (25% interest);
- \$44 million repayment of 1700 and 1730 M Street (included in the spin-off of our Washington, DC segment); and
- \$20 million refinancing of 50 West 57th Street (50% interest).



## DEVELOPMENT AND REDEVELOPMENT EXPENDITURES

We are constructing a residential condominium tower containing 397,000 salable square feet at 220 Central Park South. The development cost of this project (exclusive of land cost of \$515 million) is estimated to be approximately \$1.4 billion, of which \$890 million has been expended as of December 31, 2017.

We are developing a 173,000 square foot Class A office building, located along the western edge of the High Line at 512 West 22nd Street in the West Chelsea submarket of Manhattan (55.0% interest). The development cost of this project is estimated to be approximately \$130,000,000, of which our share is \$72,000,000. As of December 31, 2017, \$73,890,000 has been expended, of which our share is \$40,640,000.

We are developing a 170,000 square foot office and retail building at 61 Ninth Avenue, located on the southwest corner of Ninth Avenue and 15th Street in the West Chelsea submarket of Manhattan (45.1% interest). The development cost of this project is estimated to be approximately \$152,000,000, of which our share is \$69,000,000. As of December 31, 2017, \$105,281,000 has been expended, of which our share is \$47,482,000.

We are developing a 34,000 square foot office and retail building at 606 Broadway, located on the northeast corner of Broadway and Houston Street in Manhattan (50.0% interest). The venture's development cost of this project is estimated to be approximately \$60,000,000, of which our share is \$30,000,000. As of December 31, 2017, \$34,189,000 has been expended, of which our share is \$17,095,000.

A joint venture in which we have a 50.1% ownership interest is redeveloping the historic Farley Post Office building which will include a new Moynihan Train Hall and approximately 850,000 rentable square feet of commercial space, comprised of approximately 730,000 square feet of office space and approximately 120,000 square feet of retail space. As of December 31, 2017, \$271,641,000 has been expended, of which our share is \$136,092,000. The joint venture has also entered into a development agreement with Empire State Development ("ESD") and a design-build contract with Skanska Moynihan Train Hall Builders. Under the development agreement with ESD, the joint venture is obligated to build the Moynihan Train Hall, with Vornado and Related Companies ("Related") each guaranteeing the joint venture's obligations. Under the design-build agreement, Skanska Moynihan Train Hall Builders is obligated to fulfill all of the joint venture's obligations. The obligations of Skanska Moynihan Train Hall Builders have been bonded by Skanska USA and bear a full guaranty from Skanska AB.

We are redeveloping a 64,000 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 \$46,000,000, of which our share is \$32,000,000. As of December 31, 2017, \$2,720,000 has been expended, of which our share is \$1,904,000.

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

There can be no assurance that any of our development or redevelopment projects will commence, or if commenced, be completed, or completed on schedule or within budget.

## **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, 2017, 2016 and 2015 is set forth in Note 23 – *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, 2017, 2016 and 2015.

## **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 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.

## **EMPLOYEES**

As of December 31, 2017, we have approximately 3,989 employees, of which 290 are corporate staff. The New York segment has 3,551 employees, including 2,788 employees of Building Maintenance Services LLC, a wholly owned subsidiary, which provides cleaning, security and engineering services primarily to our New York properties and our former Washington, DC properties and 449 employees at the Hotel Pennsylvania. theMART has 148 employees. The foregoing does not include employees of partially owned entities.

## **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](http://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 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.

### **OUR INVESTMENTS ARE CONCENTRATED CURRENTLY IN THE NEW YORK CITY METROPOLITAN AREA AND CIRCUMSTANCES AFFECTING THIS AREA GENERALLY COULD MATERIALLY AND ADVERSELY AFFECT OUR BUSINESS.**

*A significant portion of our properties are located currently in the New York City/New Jersey metropolitan area and are affected by the economic cycles and risks inherent to this area.*

In 2017, approximately 89% 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 and development 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 could 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;
- industry slowdowns;
- relocations of businesses;
- changing demographics;
- increased telecommuting 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);
- infrastructure quality;
- changes in the treatment of the deductibility of state and local taxes; and
- any oversupply of, or reduced demand for, real estate.

It is impossible for us to assess the future effects 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, would negatively affect 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 street retail properties. As such, these properties are affected by the general and New York City retail environments, including the level of consumer spending and consumer confidence, change in relative strengths of world currencies, the threat of terrorism, increasing competition from retailers, outlet malls, retail websites and catalog companies and the impact of technological change upon the retail environment generally. These factors could adversely affect the financial condition of our retail tenants and the willingness of retailers to lease space in our retail locations.

*Terrorist attacks, such as those of September 11, 2001 in New York City, may adversely affect the value of our properties and our ability to generate cash flow.*

We have significant investments in large metropolitan areas, including the New York, 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 and hurricanes, could impact our properties in these and other areas in which we operate. Potentially adverse consequences of “global warming” could similarly have an impact on 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.

#### **REAL ESTATE INVESTMENTS’ VALUE AND INCOME FLUCTUATE DUE TO VARIOUS FACTORS.**

The value of real estate 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;
- 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 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;
- 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;
- 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;
- consequences of any armed conflict involving, or terrorist attacks against, the United States or individual acts of violence in public spaces including retail centers;
- potential liability under environmental or other laws or regulations;
- natural disasters;
- general competitive factors; and
- climate changes.

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 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.

***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 may decline nationwide, as it did in 2008 and 2009 due to the 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.

***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”) represents sweeping tax reform legislation that makes 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 also depends on the future interpretations and regulations that may be issued by U.S. tax authorities, and it is possible that future guidance could adversely impact us.

***Real estate is a competitive business.***

We compete with a large number of real estate 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.

***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 by causing us the inability to acquire a desired property or cause an increase in the purchase price for such acquisition property.

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.

***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. During periods of economic adversity, there may be an increase in the number of tenants that cannot pay their rent and an increase in vacancy rates.

***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, taking into account among other things, 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 revenue, net income and funds available to pay our indebtedness or make distributions to equity holders.

***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 also 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.

***We face risks associated with our tenants being designated “Prohibited Persons” by the Office of Foreign Assets Control and similar requirements.***

Pursuant to Executive Order 13224 and other laws, the Office of Foreign Assets Control of the United States Department of the Treasury (“OFAC”) maintains a list of persons designated as terrorists or who are otherwise blocked or banned (“Prohibited Persons”) from conducting business or engaging in transactions in the United States and thereby restricts our doing business with such persons. In addition, our leases, loans and other agreements may require us to comply with OFAC and related requirements, and any failure to do so may result in a breach of such agreements. If a tenant or other party with whom we conduct business is placed on the OFAC list or is otherwise a party with whom we are prohibited from doing business, we may be required to terminate the lease or other agreement. Any such termination could result in a loss of revenue or otherwise negatively affect our financial results and cash flows.

***Our business and operations would suffer in the event of system failures.***

Despite system redundancy, the implementation of security measures and the existence of a disaster recovery plan for our internal information technology systems, our systems are vulnerable to damages from any number of sources, including computer viruses, unauthorized access, energy blackouts, natural disasters, terrorism, war and telecommunication failures. Any system failure or accident that causes interruptions in our operations could result in a material disruption to our business. We may also incur additional costs to remedy damages caused by such disruptions.

***The occurrence of cyber incidents, or a deficiency in our cyber security, 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. 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. 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 claims for breach of contract, damages, credits, penalties 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.

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

We maintain general liability insurance with limits of \$300,000,000 per occurrence and per property, and 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. Our California properties have earthquake insurance with coverage of \$180,000,000 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 terrorism acts with limits of \$4.0 billion per occurrence and in the aggregate, and \$2.0 billion per occurrence and in the aggregate for terrorism involving nuclear, biological, chemical and radiological (“NBCR”) terrorism events, as defined by Terrorism Risk Insurance Program Reauthorization Act of 2015, which expires in December 2020.

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 \$1,976,000 (\$1,601,000 for 2018) and 17% (18% for 2018) 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.

We continue to monitor the state of the insurance market and the scope and costs of coverage for acts of terrorism. However, we cannot anticipate what coverage will be available on commercially reasonable terms in the future. We are responsible 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 which are non-recourse to us, 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 our properties and expand our portfolio.

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

The Americans with Disabilities Act (“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.

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

The chief executive of the United Kingdom Financial Conduct Authority (“FCA”), which regulates LIBOR, has recently announced that the FCA intends to stop compelling banks to submit rates for the calculation of LIBOR after 2021. It is not possible to predict the effect of these changes, other reforms or the establishment of alternative reference rates in the United Kingdom or elsewhere. Furthermore, in the United States, efforts to identify a set of alternative U.S. dollar reference interest rates include proposals by the Alternative Reference Rates Committee of the Federal Reserve Board and the Federal Reserve Bank of New York. On August 24, 2017, the Federal Reserve Board requested public comment on a proposal by the Federal Reserve Bank of New York, in cooperation with the Office of Financial Research, to produce three new reference rates intended to serve as alternatives to LIBOR. These alternative rates are based on overnight repurchase agreement transactions secured by U.S. Treasury Securities. The Federal Reserve Bank said that the publication of these alternative rates is targeted to commence by mid-2018.

Any changes announced by the FCA, including the FCA Announcement, other regulators or any other successor governance or oversight body, or future changes adopted by such body, in the method pursuant to which the LIBOR rates are determined may result in a sudden or prolonged increase or decrease in the reported LIBOR rates. If that were to occur, 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 if LIBOR is not reported, which include requesting certain rates from major reference banks in London or New York, or alternatively using LIBOR for the immediately preceding interest period or using the initial interest rate, as applicable, uncertainty as to the extent and manner of future changes may result in interest rates and/or payments that are higher than, 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 rate was available in its current form.

**WE MAY ACQUIRE OR SELL ASSETS OR ENTITIES OR DEVELOP PROPERTIES. OUR FAILURE OR INABILITY TO CONSUMMATE THESE TRANSACTIONS OR MANAGE THE RESULTS OF THESE TRANSACTIONS COULD ADVERSELY AFFECT OUR OPERATIONS AND FINANCIAL RESULTS.**

***We may acquire, develop or redevelop real estate and acquire related companies and this may create risks.***

We may acquire, develop or redevelop properties or acquire real estate related companies when we believe doing so is consistent with our business strategy. We may not succeed in (i) developing, redeveloping or acquiring real estate and real estate related companies; (ii) completing these activities on time or within budget; or (iii) leasing or selling developed, redeveloped or acquired properties at amounts sufficient to cover our costs. Competition in these activities could also significantly increase our costs. Difficulties in integrating acquisitions may prove costly or time-consuming and could divert management’s attention. Acquisitions or developments in new markets or industries where we do not have the same level of market knowledge may result in weaker than anticipated performance. We may also abandon acquisition or development opportunities that we have begun pursuing and consequently fail to recover expenses already incurred. Furthermore, 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.



***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.***

We are continuously looking at material transactions 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 buy and sell real estate quickly, which may limit our flexibility.***

Real estate investments are relatively difficult to buy and sell quickly. Consequently, we may have limited ability to vary our portfolio promptly in response to changes in economic or other conditions.

***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, Inc. ("Alexander's"), Toys "R" Us, Inc. ("Toys"), Urban Edge Properties ("UE"), Pennsylvania Real Estate Investment Trust ("PREIT"), 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, including operating or managing toy stores. 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.

***Our investment in Toys has in the past and may in the future result in increased seasonality and volatility in our reported earnings.***

We carry our Toys investment at zero. As a result, we no longer record our equity in Toys' income or loss. Because Toys is a retailer, its operations subject us to the risks of a retail company that are different than those presented by our other lines of business. The business of Toys is highly seasonal and substantially all of Toys net income is generated in its fourth quarter. It is possible that the value of Toys may increase and we could again resume recording our equity in Toys' income or loss, which would increase the seasonality and volatility of our reported earnings.

***Our decision to dispose of real estate assets would change the holding period assumption in our valuation analyses, which could result in material impairment losses and adversely affect our financial results.***

We evaluate real estate assets for impairment based on the projected cash flow of the asset over our anticipated holding period. If we change our intended holding period, due to our intention to sell or otherwise dispose of an asset, then under accounting principles generally accepted in the United States of America, we must reevaluate whether that asset is impaired. Depending on the carrying value of the property at the time we change our intention and the amount that we estimate we would receive on disposal, we may record an impairment loss that would adversely affect our financial results. This loss could be material to our results of operations in the period that it is recognized.

***We invest in marketable equity securities. The value of these investments may decline as a result of operating performance or economic or market conditions.***

We invest in marketable equity securities of publicly-traded companies, such as Lexington Realty Trust. As of December 31, 2017, our marketable securities have an aggregate carrying amount of \$182,752,000, at market. Significant declines in the value of these

investments due to, among other reasons, operating performance or economic or market conditions, may result in the recognition of impairment losses which could be material.

## **OUR ORGANIZATIONAL AND FINANCIAL STRUCTURE GIVES RISE TO OPERATIONAL AND FINANCIAL RISKS.**

### ***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, 2017, there were four series of preferred units of the Operating Partnership not held by Vornado with a total liquidation value of \$56,010,000.

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, 2017, our consolidated mortgages and unsecured indebtedness, excluding related premium, discount and deferred financing costs, net, totaled \$9.8 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 required debt service. Our debt service costs generally will not be reduced if developments at the property, such as the entry of new competitors or the loss of major tenants, cause a reduction in the income from the property. 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.

***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 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 level 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 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 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.

***Vornado may fail to qualify or remain qualified as a REIT and may be required to pay 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 face possible adverse changes in tax laws, which may result in an increase in our tax liability.***

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. The shortfall in tax revenues for states and municipalities in recent years may lead to an increase in the frequency and size of such changes. 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 payment of dividends and distributions.

***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.

**VORNADO'S CHARTER DOCUMENTS AND APPLICABLE LAW MAY HINDER ANY ATTEMPT TO ACQUIRE US.**

***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. 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.

***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.

## **OUR OWNERSHIP STRUCTURE AND RELATED-PARTY TRANSACTIONS MAY GIVE RISE TO CONFLICTS OF INTEREST.**

***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, 2017, Interstate Properties, a New Jersey general partnership, and its partners owned an aggregate of approximately 7.2% of the common shares of Vornado and 26.2% 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 also 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 21 – *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, 2017, 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 26.2% of the outstanding common stock of Alexander's as of December 31, 2017. 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 also Directors of Alexander's and general partners of Interstate Properties. Dr. Richard West is a Trustee of Vornado and a Director of Alexander's. In addition, Joseph Macnow, our Executive Vice President – Chief Financial Officer and Chief Administrative Officer, is the Treasurer of Alexander's and 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 and development agreements and leasing agreements under which we receive annual fees from Alexander's. See Note 21 – *Related Party Transactions* to our consolidated financial statements in this Annual Report on Form 10-K for additional information.

## **THE NUMBER OF SHARES OF VORNADO REALTY TRUST AND THE MARKET FOR THOSE SHARES GIVE RISE TO VARIOUS RISKS.**

***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 a number of 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. Among those factors are:

- 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, 2017, Vornado had authorized but unissued, 60,016,142 common shares of beneficial interest, \$.04 par value and 72,116,023 preferred shares of beneficial interest, no par value; of which 19,666,004 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.

#### **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, 2017.

NEW YORK SEGMENT Property	% Ownership	Type	% Occupancy	Square Feet		
				In Service	Under Development or Not Available for Lease	Total Property
One Penn Plaza (ground leased through 2098)	100.0%	Office/Retail	92.5%	2,530,000	—	2,530,000
1290 Avenue of the Americas	70.0%	Office/Retail	100.0%	2,114,000	—	2,114,000
Two Penn Plaza	100.0%	Office/Retail	98.7%	1,634,000	—	1,634,000
909 Third Avenue (ground leased through 2063)	100.0%	Office	97.6%	1,347,000	—	1,347,000
Independence Plaza, Tribeca (1,327 units) <sup>(1)</sup>	50.1%	Retail/Residential	97.7% <sup>(2)</sup>	1,245,000	12,000	1,257,000
280 Park Avenue <sup>(1)</sup>	50.0%	Office/Retail	97.4%	1,254,000	—	1,254,000
770 Broadway	100.0%	Office/Retail	100.0%	1,160,000	—	1,160,000
Eleven Penn Plaza	100.0%	Office/Retail	99.2%	1,152,000	—	1,152,000
90 Park Avenue	100.0%	Office/Retail	98.3%	961,000	—	961,000
One Park Avenue <sup>(1)</sup>	55.0%	Office/Retail	99.1%	939,000	—	939,000
888 Seventh Avenue (ground leased through 2067)	100.0%	Office/Retail	97.3%	889,000	—	889,000
100 West 33rd Street	100.0%	Office	98.2%	855,000	—	855,000
Moynihan Train Hall/Farley Building <sup>(1)</sup>	50.1%	Office/Retail	n/a	—	850,000	850,000
330 Madison Avenue <sup>(1)</sup>	25.0%	Office/Retail	98.1%	846,000	—	846,000
330 West 34th Street (ground leased through 2149)	100.0%	Office/Retail	92.6%	709,000	—	709,000
85 Tenth Avenue <sup>(1)</sup>	49.9%	Office/Retail	100.0%	627,000	—	627,000
650 Madison Avenue <sup>(1)</sup>	20.1%	Office/Retail	91.1%	593,000	—	593,000
350 Park Avenue	100.0%	Office/Retail	100.0%	571,000	—	571,000
150 East 58th Street (ground leased through 2098)	100.0%	Office/Retail	94.3%	542,000	—	542,000
7 West 34th Street <sup>(1)</sup>	53.0%	Office/Retail	98.8%	479,000	—	479,000
33-00 Northern Boulevard (Center Building)	100.0%	Office	99.6%	471,000	—	471,000
595 Madison Avenue	100.0%	Office/Retail	91.5%	325,000	—	325,000
640 Fifth Avenue	100.0%	Office/Retail	91.8%	314,000	—	314,000
50-70 W 93rd Street (326 units) <sup>(1)</sup>	49.9%	Residential	95.1%	283,000	—	283,000
Manhattan Mall	100.0%	Retail	97.4%	256,000	—	256,000
40 Fulton Street	100.0%	Office/Retail	88.1%	251,000	—	251,000
4 Union Square South	100.0%	Retail	100.0%	206,000	—	206,000
260 Eleventh Avenue (ground leased through 2114)	100.0%	Office	100.0%	184,000	—	184,000
512 W 22nd Street <sup>(1)</sup>	55.0%	Office	n/a	—	173,000	173,000
61 Ninth Avenue (ground leased through 2115) <sup>(1)</sup>	45.1%	Office/Retail	100.0%	23,000	147,000	170,000
825 Seventh Avenue	51.2%	Office <sup>(1)</sup> /Retail	100.0%	169,000	—	169,000
1540 Broadway	100.0%	Retail	100.0%	160,000	—	160,000
608 Fifth Avenue (ground leased through 2033)	100.0%	Office/Retail	99.9%	137,000	—	137,000
Paramus	100.0%	Office	94.7%	129,000	—	129,000
666 Fifth Avenue Retail Condominium	100.0%	Retail	100.0%	114,000	—	114,000
1535 Broadway (Marriott Marquis - retail and signage) (ground and building leased through 2032)	100.0%	Retail/Theatre	98.1%	106,000	—	106,000
57th Street (2 buildings) <sup>(1)</sup>	50.0%	Office/Retail	87.9%	103,000	—	103,000
689 Fifth Avenue	100.0%	Office/Retail	91.7%	98,000	—	98,000
478-486 Broadway (2 buildings) (10 units)	100.0%	Retail/Residential	100.0% <sup>(2)</sup>	85,000	—	85,000
150 West 34th Street	100.0%	Retail	100.0%	78,000	—	78,000
510 Fifth Avenue	100.0%	Retail	100.0%	66,000	—	66,000
655 Fifth Avenue	92.5%	Retail	100.0%	57,000	—	57,000
155 Spring Street	100.0%	Retail	93.6%	50,000	—	50,000
3040 M Street	100.0%	Retail	100.0%	44,000	—	44,000
435 Seventh Avenue	100.0%	Retail	100.0%	43,000	—	43,000
692 Broadway	100.0%	Retail	100.0%	36,000	—	36,000
606 Broadway	50.0%	Office/Retail	n/a	—	34,000	34,000
697-703 Fifth Avenue (St. Regis - retail)	74.3%	Retail	100.0%	26,000	—	26,000
715 Lexington Avenue	100.0%	Retail	35.9%	23,000	—	23,000

See notes on page 25.

**ITEM 2. PROPERTIES – CONTINUED**

<b>NEW YORK SEGMENT – CONTINUED</b> <b>Property</b>	<b>% Ownership</b>	<b>Type</b>	<b>% Occupancy</b>	<b>Square Feet</b>		
				<b>In Service</b>	<b>Under Development or Not Available for Lease</b>	<b>Total Property</b>
1131 Third Avenue	100.0%	Retail	100.0%	23,000	—	23,000
40 East 66th Street (5 units)	100.0%	Retail/Residential	84.1% <sup>(2)</sup>	23,000	—	23,000
131-135 West 33rd Street	100.0%	Retail	100.0%	23,000	—	23,000
828-850 Madison Avenue	100.0%	Retail	100.0%	18,000	—	18,000
443 Broadway	100.0%	Retail	100.0%	16,000	—	16,000
484 Eighth Avenue	100.0%	Retail	n/a	—	16,000	16,000
334 Canal Street (4 units)	100.0%	Retail/Residential	73.3% <sup>(2)</sup>	15,000	—	15,000
304 Canal Street (4 units)	100.0%	Retail/Residential	n/a	9,000	4,000	13,000
677-679 Madison Avenue (8 units)	100.0%	Retail/Residential	90.4% <sup>(2)</sup>	13,000	—	13,000
431 Seventh Avenue	100.0%	Retail	100.0%	10,000	—	10,000
138-142 West 32nd Street	100.0%	Retail	35.3%	8,000	—	8,000
148 Spring Street	100.0%	Retail	100.0%	8,000	—	8,000
150 Spring Street (1 unit)	100.0%	Retail/Residential	100.0% <sup>(2)</sup>	7,000	—	7,000
966 Third Avenue	100.0%	Retail	100.0%	7,000	—	7,000
488 Eighth Avenue	100.0%	Retail	100.0%	6,000	—	6,000
267 West 34th Street	100.0%	Retail	n/a	—	6,000	6,000
968 Third Avenue <sup>(1)</sup>	50.0%	Retail	n/a	6,000	—	6,000
265 West 34th Street	100.0%	Retail	n/a	—	3,000	3,000
486 Eighth Avenue	100.0%	Retail	n/a	—	3,000	3,000
137 West 33rd Street	100.0%	Retail	100.0%	3,000	—	3,000
339 Greenwich	100.0%	Retail	100.0%	8,000	—	8,000
Other (34 units)	80.6%	Retail/Residential	85.8% <sup>(2)</sup>	57,000	36,000	93,000
<b>Hotel Pennsylvania</b>	100.0%	Hotel	n/a	1,400,000	—	1,400,000
<b>Alexander's, Inc.:</b>						
731 Lexington Avenue <sup>(1)</sup>	32.4%	Office/Retail	99.9%	1,063,000	—	1,063,000
Rego Park II, Queens <sup>(1)</sup>	32.4%	Retail	99.9%	609,000	—	609,000
Rego Park I, Queens <sup>(1)</sup>	32.4%	Retail	100.0%	343,000	—	343,000
The Alexander Apartment Tower, Queens (312 units) <sup>(1)</sup>	32.4%	Residential	94.6%	255,000	—	255,000
Flushing, Queens <sup>(1)</sup>	32.4%	Retail	100.0%	167,000	—	167,000
Paramus, New Jersey (30.3 acres ground leased through 2041) <sup>(1)</sup>	32.4%	Retail	100.0%	—	—	—
Rego Park III, Queens (3.2 acres) <sup>(1)</sup>	32.4%	n/a	n/a	—	—	—
<b>Total New York Segment</b>			<b>97.4%</b>	<b>28,381,000</b>	<b>1,284,000</b>	<b>29,665,000</b>
<b>Our Ownership Interest</b>			<b>97.2%</b>	<b>22,478,000</b>	<b>661,000</b>	<b>23,139,000</b>

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
<b>theMART:</b>						
theMART, Chicago	100.0 %	Office/Retail/ Showroom	98.6 %	3,670,000	—	3,670,000
Other (2 properties) <sup>(1)</sup>	50.0 %	Retail	100.0 %	19,000	—	19,000
<b>Total theMART</b>			<b>98.6 %</b>	<b>3,689,000</b>	<b>—</b>	<b>3,689,000</b>
<b>Our Ownership Interest</b>			<b>98.6 %</b>	<b>3,680,000</b>	<b>—</b>	<b>3,680,000</b>
<b>555 California Street:</b>						
555 California Street	70.0 %	Office	96.2 %	1,506,000	—	1,506,000
315 Montgomery Street	70.0 %	Office/Retail	81.7 %	235,000	—	235,000
345 Montgomery Street	70.0 %	Office/Retail	n/a	—	64,000	64,000
<b>Total 555 California Street</b>			<b>94.2 %</b>	<b>1,741,000</b>	<b>64,000</b>	<b>1,805,000</b>
<b>Our Ownership Interest</b>			<b>94.2 %</b>	<b>1,219,000</b>	<b>45,000</b>	<b>1,264,000</b>
<b>Vornado Capital Partners Real Estate Fund ("Fund")<sup>(3)</sup> :</b>						
Crowne Plaza Times Square, NY	75.3 %	Office/Retail/ Hotel	68.9 %	241,000	—	241,000
Lucida, 86th Street and Lexington Avenue, NY (ground leased through 2082)	100 %	Retail/Residential	100.0 % <sup>(2)</sup>	155,000	—	155,000
11 East 68th Street Retail, NY	100 %	Retail	100.0 %	11,000	—	11,000
501 Broadway, NY	100 %	Retail	100.0 %	9,000	—	9,000
1100 Lincoln Road, Miami, FL	100 %	Retail/Theatre	90.2 %	128,000	2,000	130,000
<b>Total Real Estate Fund</b>			<b>83.8 %</b>	<b>544,000</b>	<b>2,000</b>	<b>546,000</b>
<b>Our Ownership Interest</b>			<b>80.2 %</b>	<b>155,000</b>	<b>1,000</b>	<b>156,000</b>
<b>Other:</b>						
666 Fifth Avenue Office Condominium <sup>(1)</sup>	49.5 %	Office/Retail	n/a	—	1,448,000	1,448,000
Rosslyn Plaza <sup>(1)</sup>	46.2 %	Office/Residential	65.9 % <sup>(2)</sup>	688,000	301,000	989,000
Wayne Towne Center, Wayne (ground leased through 2064)	100 %	Retail	100.0 %	671,000	6,000	677,000
Annapolis (ground leased through 2042)	100 %	Retail	100.0 %	128,000	—	128,000
Fashion Centre Mall <sup>(1)</sup>	7.5 %	Retail	99.4 %	868,000	—	868,000
Washington Tower <sup>(1)</sup>	7.5 %	Office	100.0 %	170,000	—	170,000
<b>Total Other</b>			<b>93.2 %</b>	<b>2,525,000</b>	<b>1,755,000</b>	<b>4,280,000</b>
<b>Our Ownership Interest</b>			<b>93.6 %</b>	<b>1,188,000</b>	<b>862,000</b>	<b>2,050,000</b>

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

(2) Excludes residential occupancy statistics.

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

## NEW YORK

As of December 31, 2017, our New York segment consisted of 28.4 million square feet in 88 properties. The 28.4 million square feet is comprised of 20.3 million square feet of office in 36 properties, 2.7 million square feet of retail in 71 properties, 2,018 units in twelve 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 11 garages totaling 1.7 million square feet (4,970 spaces) which are managed by, or leased to, third parties.

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, 2017, the occupancy rate for our New York segment was 97.2%.

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

#### Office:

As of December 31,	Total Property Square Feet	Vornado's Ownership Interest		
		Square Feet	Occupancy Rate	Weighted Average Annual Rent Per Square Foot
2017	20,256,000	16,982,000	97.1%	\$ 71.09
2016	20,227,000	16,962,000	96.3%	68.90
2015	19,918,000	16,734,000	97.1%	66.42
2014	18,785,000	15,730,925	97.7%	65.31
2013	17,373,000	14,625,000	96.9%	61.71

#### Retail:

As of December 31,	Total Property Square Feet	Vornado's Ownership Interest		
		Square Feet	Occupancy Rate	Weighted Average Annual Rent Per Square Foot
2017	2,720,000	2,471,000	96.9%	\$ 217.17
2016	2,672,000	2,464,000	97.1%	213.85
2015	2,596,000	2,396,000	96.1%	202.72
2014	2,436,000	2,176,000	96.4%	173.55
2013	2,303,000	2,103,225	97.5%	162.27

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

#### Residential:

As of December 31,	Number of Units	Vornado's Ownership Interest		
		Number of Units	Occupancy Rate	Average Monthly Rent Per Unit
2017	2,009	981	96.7%	\$ 3,722
2016 <sup>(1)</sup>	2,004	977	95.7%	3,576
2015	1,711	886	95.0%	3,495
2014	1,678	855	95.2%	3,146
2013	1,672	847	94.8%	2,920

(1) Includes The Alexander Apartment Tower (32.4% ownership) from the date of stabilization in the third quarter of 2016.

**NEW YORK – CONTINUED**

*Tenants accounting for 2% or more of revenues:*

<b>Tenant</b>	<b>Square Feet Leased</b>	<b>2017 Revenues</b>	<b>Percentage of New York Total Revenues</b>	<b>Percentage of Total Revenues</b>
IPG and affiliates	924,000	\$ 58,826,000	3.3%	2.8%
Swatch Group USA	32,000	56,140,000	3.2%	2.7%
AXA Equitable Life Insurance	481,000	41,180,000	2.3%	2.0%
Macy's	646,000	41,142,000	2.3%	2.0%
Victoria's Secret	64,000	34,734,000	2.0%	1.7%

*2017 rental revenue by tenants' industry:*

<b>Industry</b>	<b>Percentage</b>
<b>Office:</b>	
Financial Services	13%
Real Estate	7%
Family Apparel	6%
Communications	5%
Advertising/Marketing	5%
Legal Services	5%
Technology	5%
Insurance	4%
Publishing	3%
Government	2%
Engineering, Architect & Surveying	2%
Banking	2%
Home Entertainment & Electronics	2%
Health Services	1%
Pharmaceutical	1%
Other	8%
	<u>71%</u>
<b>Retail:</b>	
Women's Apparel	8%
Family Apparel	7%
Luxury Retail	5%
Restaurants	2%
Banking	1%
Department Stores	1%
Discount Stores	1%
Other	4%
	<u>29%</u>
<b>Total</b>	<u><u>100%</u></u>

## NEW YORK – CONTINUED

Lease expirations as of December 31, 2017, assuming none of the tenants exercise renewal options:

Year	Number of Expiring Leases	Square Feet of Expiring Leases	Percentage of New York Square Feet	Weighted Average Annual Rent of Expiring Leases	
				Total	Per Square Foot
<b>Office:</b>					
Month to month	13	73,000	0.4%	\$ 3,086,000	\$ 42.27
2018	89	896,000	5.5%	66,949,000	74.72 <sup>(1)</sup>
2019	89	750,000	4.6%	51,029,000	68.04
2020	117	1,394,000	8.6%	96,261,000	69.05
2021	122	1,160,000	7.1%	85,881,000	74.04
2022	86	792,000	4.9%	48,215,000	60.88
2023	81	2,001,000 <sup>(2)</sup>	12.3%	152,874,000	76.40
2024	82	1,292,000	7.9%	101,263,000	78.38
2025	51	800,000	4.9%	58,916,000	73.65
2026	72	1,376,000	8.4%	101,555,000	73.80
2027	57	996,000	6.1%	68,674,000	68.95
<b>Retail:</b>					
Month to month	19	97,000	5.1%	\$ 3,461,000	\$ 35.68
2018	25	96,000	5.0%	28,157,000	293.30 <sup>(3)</sup>
2019	27	204,000	10.6%	35,085,000	171.99
2020	19	69,000	3.6%	10,388,000	150.55
2021	18	67,000	3.5%	11,613,000	173.33
2022	9	19,000	1.0%	4,913,000	258.58
2023	16	90,000	4.7%	38,199,000	424.43
2024	20	155,000	8.1%	63,852,000	411.95
2025	11	41,000	2.1%	17,777,000	433.59
2026	18	135,000	7.0%	42,626,000	315.75
2027	10	31,000	1.6%	21,204,000	684.00

(1) Based on current market conditions, we expect to re-lease this space at weighted average rents between \$75 to \$80 per square foot.

(2) Excludes 492,000 square feet leased at 909 Third Avenue to the U.S. Post Office through 2038 (including three 5-year renewal options) for which the annual escalated rent is \$12.31 per square foot.

(3) Based on current market conditions, we expect to re-lease this space at weighted average rents between \$270 to \$290 per square foot.

### Alexander's

As of December 31, 2017, 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 \$1.24 billion of outstanding debt, net, at December 31, 2017, of which our pro rata share was \$401.8 million, 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 Plaza 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.

	Year Ended December 31,				
	2017	2016	2015	2014	2013
Hotel Pennsylvania:					
Average occupancy rate	87.3%	84.7%	90.7%	92.0%	93.4%
Average daily rate	\$ 139.09	\$ 134.38	\$ 147.46	\$ 162.01	\$ 158.01
Revenue per available room	\$ 121.46	\$ 113.84	\$ 133.69	\$ 149.04	\$ 147.63

## **OTHER INVESTMENTS**

### **theMART**

As of December 31, 2017, 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, 2017, theMART had an occupancy rate of 98.6% and a weighted average annual rent per square foot of \$42.15.

### **555 California Street**

As of December 31, 2017, we own a 70% controlling interest in a three-building office complex containing 1.8 million square feet, known as the Bank of America Center, located at California and Montgomery Streets in San Francisco's financial district ("555 California Street"). 555 California Street is encumbered by a \$569,215,000 mortgage loan that bears interest at a fixed rate of 5.10% and matures in September 2021. As of December 31, 2017, 555 California Street had an occupancy rate of 94.2% and a weighted average annual rent per square foot of \$73.40.

### **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, 2017, we own a 25.0% interest in the Fund which currently has five investments, one of which is the Crowne Plaza Times Square Hotel in which we also own an additional interest through a joint venture. We are the general partner and investment manager of the Fund. As of December 31, 2017, these five investments are carried on our consolidated balance sheet at an aggregate fair value of \$354,804,000, including the Crowne Plaza Joint Venture. As of December 31, 2017, our share of unfunded commitments was \$34,502,000.

## **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."

Quarterly high and low sales prices of Vornado's common shares and dividends paid per common share for the years ended December 31, 2017 and 2016 were as follows:

Quarter	Year Ended December 31, 2017			Year Ended December 31, 2016		
	High	Low	Dividends	High	Low	Dividends
1st	\$ 111.72	\$ 98.51	\$ 0.71	\$ 99.97	\$ 78.91	\$ 0.63
2nd	103.35	91.18	0.71	100.13	90.13	0.63
3rd	97.25	72.77 <sup>(1)</sup>	0.60 <sup>(1)</sup>	108.69	97.18	0.63
4th	80.30 <sup>(1)</sup>	71.90 <sup>(1)</sup>	0.60 <sup>(1)</sup>	105.91	86.35	0.63

(1) Reflects the July 17, 2017 spin-off of JBG SMITH Properties ("JBGS") (NYSE: JBGS).

As of February 1, 2018, there were 993 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 or preferred units. The following table sets forth, for the periods indicated, the distributions declared on the Operating Partnership's Class A units:

Quarter	Declared Distributions	
	Year ended December 31,	
	2017	2016
1st	\$ 0.71	\$ 0.63
2nd	0.71	0.63
3rd	0.60 <sup>(1)</sup>	0.63
4th	0.60 <sup>(1)</sup>	0.63

(1) Reflects the July 17, 2017 spin-off of JBG SMITH Properties ("JBGS") (NYSE: JBGS).

As of February 1, 2018, there were 984 Class A unitholders of record.

#### *Recent Sales of Unregistered Securities*

During 2017, the Operating Partnership issued 1,213,237 Class A units in connection with equity awards issued 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 \$29,720,215 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.

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.

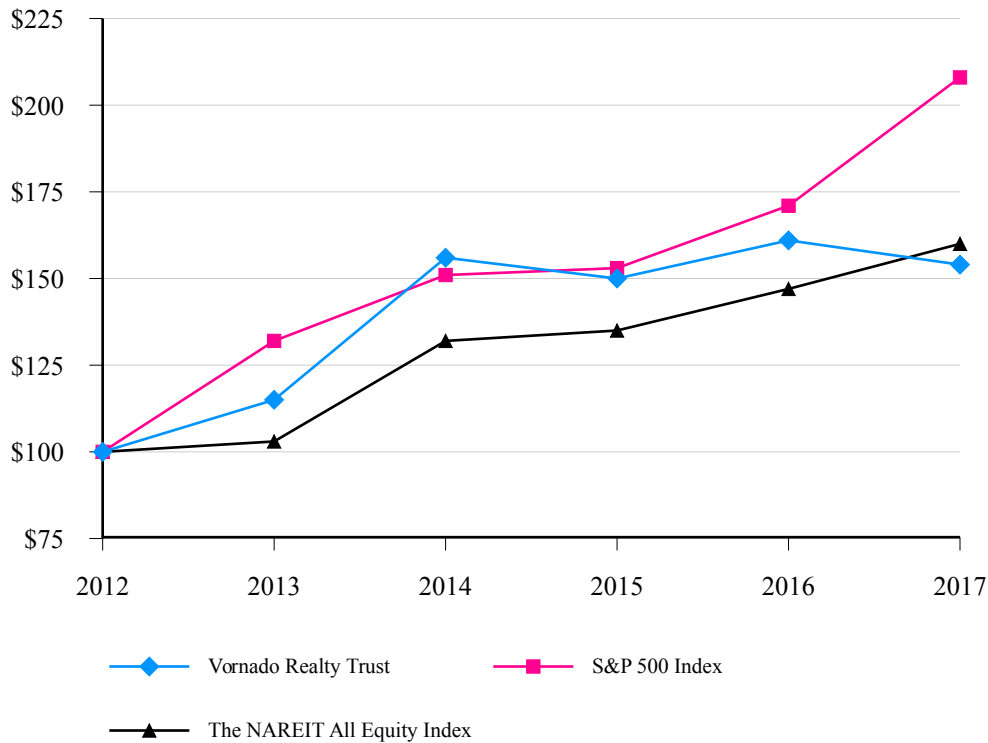
#### *Recent Purchases of Equity Securities*

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, 2012 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**



	2012	2013	2014	2015	2016	2017
Vornado Realty Trust	\$ 100	\$ 115	\$ 156	\$ 150	\$ 161	\$ 154
S&P 500 Index	100	132	151	153	171	208
The NAREIT All Equity Index	100	103	132	135	147	160

## Item 6. SELECTED FINANCIAL DATA

### Vornado Realty Trust

(Amounts in thousands, except per share amounts)

	Year Ended December 31,				
	2017	2016	2015	2014	2013
<b>Operating Data:</b>					
Revenues:					
Property rentals	\$ 1,714,952	\$ 1,662,093	\$ 1,626,866	\$ 1,460,391	\$ 1,422,828
Tenant expense reimbursements	233,424	221,563	218,739	203,120	184,161
Cleveland Medical Mart development project	—	—	—	—	36,369
Fee and other income	135,750	120,086	139,890	128,657	132,340
Total revenues	<u>2,084,126</u>	<u>2,003,742</u>	<u>1,985,495</u>	<u>1,792,168</u>	<u>1,775,698</u>
Expenses:					
Operating	886,596	844,566	824,511	768,341	748,010
Depreciation and amortization	429,389	421,023	379,803	351,583	337,139
General and administrative	158,999	149,550	149,256	141,931	150,306
Cleveland Medical Mart development project	—	—	—	—	32,210
Acquisition and transaction related costs	1,776	9,451	12,511	18,435	24,857
Total expenses	<u>1,476,760</u>	<u>1,424,590</u>	<u>1,366,081</u>	<u>1,280,290</u>	<u>1,292,522</u>
Operating income	607,366	579,152	619,414	511,878	483,176
Income (loss) from partially owned entities	15,200	168,948	(9,947)	(58,484)	(336,292)
Income (loss) from real estate fund investments	3,240	(23,602)	74,081	163,034	102,898
Interest and other investment income (loss), net	37,793	29,548	27,240	38,569	(25,016)
Interest and debt expense	(345,654)	(330,240)	(309,298)	(337,360)	(323,505)
Net gains on disposition of wholly owned and partially owned assets	501	160,433	149,417	13,568	2,030
Income (loss) before income taxes	318,446	584,239	550,907	331,205	(96,709)
Income tax (expense) benefit	(41,090)	(7,229)	85,012	(9,039)	(5,314)
Income (loss) from continuing operations	277,356	577,010	635,919	322,166	(102,023)
(Loss) income from discontinued operations	(13,228)	404,912	223,511	686,860	666,763
Net income	<u>264,128</u>	<u>981,922</u>	<u>859,430</u>	<u>1,009,026</u>	<u>564,740</u>
Less net income attributable to noncontrolling interests in:					
Consolidated subsidiaries	(25,802)	(21,351)	(55,765)	(96,561)	(63,952)
Operating Partnership	(10,910)	(53,654)	(43,231)	(47,613)	(24,817)
Net income attributable to Vornado	227,416	906,917	760,434	864,852	475,971
Preferred share dividends	(65,399)	(75,903)	(80,578)	(81,464)	(82,807)
Preferred unit and share redemptions	—	(7,408)	—	—	(1,130)
Net income attributable to common shareholders	<u>\$ 162,017</u>	<u>\$ 823,606</u>	<u>\$ 679,856</u>	<u>\$ 783,388</u>	<u>\$ 392,034</u>
<b>Per Share Data:</b>					
Income (loss) from continuing operations, net - basic	\$ 0.92	\$ 2.35	\$ 2.49	\$ 0.73	\$ (1.25)
Income (loss) from continuing operations, net - diluted	0.91	2.34	2.48	0.72	(1.25)
Net income per common share - basic	0.85	4.36	3.61	4.18	2.10
Net income per common share - diluted	0.85	4.34	3.59	4.15	2.09
Dividends per common share	2.62 <sup>(1)</sup>	2.52	2.52 <sup>(2)</sup>	2.92	2.92
<b>Balance Sheet Data:</b>					
Total assets	\$ 17,397,934	\$ 20,814,847	\$ 21,143,293	\$ 21,157,980	\$ 20,018,210
Real estate, at cost	14,756,295	14,187,820	13,545,295	12,438,940	11,149,920
Accumulated depreciation and amortization	(2,885,283)	(2,581,514)	(2,356,728)	(2,209,778)	(1,958,132)
Debt, net	9,729,487	9,446,670	9,095,670	7,557,877	6,830,994
Total equity	<u>5,007,701</u>	<u>7,618,496</u>	<u>7,476,078</u>	<u>7,489,382</u>	<u>7,594,744</u>

(1) Post spin-off of JBG SMITH Properties (NYSE: JBGS) on July 17, 2017.

(2) Post spin-off of Urban Edge Properties (NYSE: UE) on January 15, 2015.



## Item 6. SELECTED FINANCIAL DATA – CONTINUED

### Vornado Realty Trust

(Amounts in thousands)

	Year Ended December 31,				
	2017	2016	2015	2014	2013
<b>Other Data:</b>					
Funds From Operations ("FFO") <sup>(1)</sup> :					
Net income attributable to common shareholders	\$ 162,017	\$ 823,606	\$ 679,856	\$ 783,388	\$ 392,034
FFO adjustments:					
Depreciation and amortization of real property	467,966	531,620	514,085	517,493	501,753
Net gains on sale of real estate	(3,489)	(177,023)	(289,117)	(507,192)	(411,593)
Real estate impairment losses	—	160,700	256	26,518	37,170
Proportionate share of adjustments to equity in net income (loss) of partially owned entities to arrive at FFO:					
Depreciation and amortization of real property	137,000	154,795	143,960	117,766	157,270
Net gains on sale of real estate	(17,777)	(2,853)	(4,513)	(11,580)	(465)
Real estate impairment losses	7,692	6,328	16,758	—	6,552
Income tax effect of above adjustments	—	—	—	(7,287)	(26,703)
	591,392	673,567	381,429	135,718	263,984
Noncontrolling interests' share of above adjustments	(36,728)	(41,267)	(22,342)	(8,073)	(15,089)
FFO adjustments, net	554,664	632,300	359,087	127,645	248,895
FFO attributable to common shareholders	716,681	1,455,906	1,038,943	911,033	640,929
Convertible preferred share dividends	77	86	92	97	108
Earnings allocated to Out-Performance Plan units	1,047	1,591	—	—	—
FFO attributable to common shareholders plus assumed conversions <sup>(1)</sup>	\$ 717,805	\$ 1,457,583	\$ 1,039,035	\$ 911,130	\$ 641,037

- (1) 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 depreciated real estate assets, real estate impairment losses, depreciation and amortization expense from real estate assets and other specified non-cash 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.

## Item 6. SELECTED FINANCIAL DATA – CONTINUED

### Vornado Realty L.P.

(Amounts in thousands)

	Year Ended December 31,				
	2017	2016	2015	2014	2013
<b>Operating Data:</b>					
Revenues:					
Property rentals	\$ 1,714,952	\$ 1,662,093	\$ 1,626,866	\$ 1,460,391	\$ 1,422,828
Tenant expense reimbursements	233,424	221,563	218,739	203,120	184,161
Cleveland Medical Mart development project	—	—	—	—	36,369
Fee and other income	135,750	120,086	139,890	128,657	132,340
<b>Total revenues</b>	<b>2,084,126</b>	<b>2,003,742</b>	<b>1,985,495</b>	<b>1,792,168</b>	<b>1,775,698</b>
Expenses:					
Operating	886,596	844,566	824,511	768,341	748,010
Depreciation and amortization	429,389	421,023	379,803	351,583	337,139
General and administrative	158,999	149,550	149,256	141,931	150,306
Cleveland Medical Mart development project	—	—	—	—	32,210
Acquisition and transaction related costs	1,776	9,451	12,511	18,435	24,857
<b>Total expenses</b>	<b>1,476,760</b>	<b>1,424,590</b>	<b>1,366,081</b>	<b>1,280,290</b>	<b>1,292,522</b>
<b>Operating income</b>	<b>607,366</b>	<b>579,152</b>	<b>619,414</b>	<b>511,878</b>	<b>483,176</b>
Income (loss) from partially owned entities	15,200	168,948	(9,947)	(58,484)	(336,292)
Income (loss) from real estate fund investments	3,240	(23,602)	74,081	163,034	102,898
Interest and other investment income (loss), net	37,793	29,548	27,240	38,569	(25,016)
Interest and debt expense	(345,654)	(330,240)	(309,298)	(337,360)	(323,505)
Net gains on disposition of wholly owned and partially owned assets	501	160,433	149,417	13,568	2,030
<b>Income (loss) before income taxes</b>	<b>318,446</b>	<b>584,239</b>	<b>550,907</b>	<b>331,205</b>	<b>(96,709)</b>
Income tax (expense) benefit	(41,090)	(7,229)	85,012	(9,039)	(5,314)
<b>Income (loss) from continuing operations</b>	<b>277,356</b>	<b>577,010</b>	<b>635,919</b>	<b>322,166</b>	<b>(102,023)</b>
(Loss) income from discontinued operations	(13,228)	404,912	223,511	686,860	666,763
<b>Net income</b>	<b>264,128</b>	<b>981,922</b>	<b>859,430</b>	<b>1,009,026</b>	<b>564,740</b>
Less net income attributable to noncontrolling interests in consolidated subsidiaries	(25,802)	(21,351)	(55,765)	(96,561)	(63,952)
<b>Net income attributable to Vornado Realty L.P.</b>	<b>238,326</b>	<b>960,571</b>	<b>803,665</b>	<b>912,465</b>	<b>500,788</b>
Preferred unit distributions	(65,593)	(76,097)	(80,736)	(81,514)	(83,965)
Preferred unit redemptions	—	(7,408)	—	—	(1,130)
<b>Net income attributable to Class A unitholders</b>	<b>\$ 172,733</b>	<b>\$ 877,066</b>	<b>\$ 722,929</b>	<b>\$ 830,951</b>	<b>\$ 415,693</b>

### Per Unit Data:

Income (loss) from continuing operations, net - basic	\$ 0.91	\$ 2.34	\$ 2.49	\$ 0.71	\$ (1.27)
Income (loss) from continuing operations, net - diluted	0.90	2.32	2.46	0.70	(1.26)
Net income per Class A unit - basic	0.84	4.36	3.61	4.17	2.09
Net income per Class A unit - diluted	0.83	4.32	3.57	4.14	2.08
Distributions per Class A unit	2.62 <sup>(1)</sup>	2.52	2.52 <sup>(2)</sup>	2.92	2.92

### Balance Sheet Data:

Total assets	\$ 17,397,934	\$ 20,814,847	\$ 21,143,293	\$ 21,157,980	\$ 20,018,210
Real estate, at cost	14,756,295	14,187,820	13,545,295	12,438,940	11,149,920
Accumulated depreciation and amortization	(2,885,283)	(2,581,514)	(2,356,728)	(2,209,778)	(1,958,132)
Debt, net	9,729,487	9,446,670	9,095,670	7,557,877	6,830,994
<b>Total equity</b>	<b>5,007,701</b>	<b>7,618,496</b>	<b>7,476,078</b>	<b>7,489,382</b>	<b>7,594,744</b>

(1) Post spin-off of JBG SMITH (NYSE: JBGS) on July 17, 2017.

(2) Post spin-off of Urban Edge Properties (NYSE: UE) on January 15, 2015.

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

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## 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 is 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 93.5% of the common limited partnership interest in the Operating Partnership as of December 31, 2017. All references to the “Company,” “we,” “us” and “our” mean collectively Vornado, the Operating Partnership and those entities/subsidiaries consolidated by Vornado.

On July 17, 2017, we completed the spin-off of our Washington, DC segment comprised of (i) 37 office properties totaling over 11.1 million square feet, five multifamily properties with 3,133 units and five other assets totaling approximately 406,000 square feet and (ii) 18 future development assets totaling over 10.4 million square feet of estimated potential development density, and (iii) \$412.5 million of cash (\$275.0 million plus The Bartlett financing proceeds less transaction costs and other mortgage items) to JBG SMITH Properties (“JBGS”). On July 18, 2017, JBGS was combined with the management business and certain Washington, DC assets of The JBG Companies (“JBG”), a Washington, DC real estate company. Steven Roth, the Chairman of the Board of Trustees and Chief Executive Officer of Vornado, is the Chairman of the Board of Trustees of JBGS. Mitchell Schear, former President of our Washington, DC business, is a member of the Board of Trustees of JBGS. We are providing transition services to JBGS initially including information technology, financial reporting and payroll services. The spin-off was effected through a tax-free distribution by Vornado to the holders of Vornado common shares of all of the common shares of JBGS at the rate of one JBGS common share for every two common shares of Vornado and the distribution by the Operating Partnership to the holders of its common units of all of the outstanding common units of JBG SMITH Properties LP (“JBGSLP”) at the rate of one JBGSLP common unit for every two common units of VRLP held of record. See JBGS’ Amendment No. 3 on Form 10 (File No. 1-37994) filed with the Securities and Exchange Commission on June 9, 2017 for additional information. Beginning in the third quarter of 2017, the historical financial results of our Washington, DC segment are reflected in our consolidated financial statements as discontinued operations for all periods presented.

We own and operate office and retail properties with a large 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, a 32.5% interest in Toys “R” Us, Inc. (“Toys”) as well as interests in other real estate and related 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, 2017:

	Total Return <sup>(1)</sup>		
	Vornado	Office REIT	MSCI
Three-month	2.5 %	4.3%	1.4%
One-year	(4.3)%	5.3%	5.1%
Three-year	(1.4)%	19.5%	17.0%
Five-year	54.3 %	58.7%	56.3%
Ten-year	75.7 %	70.1%	105.1%

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

## Overview - continued

We intend to achieve this objective by continuing to pursue our investment philosophy and 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;
- investing in retail properties in select under-stored locations such as the New York City metropolitan area;
- developing and redeveloping our existing 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, 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 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.

### ***Vornado Realty Trust***

#### *Year Ended December 31, 2017 Financial Results Summary*

Net income attributable to common shareholders for the year ended December 31, 2017 was \$162,017,000, or \$0.85 per diluted share, compared to \$823,606,000, or \$4.34 per diluted share, for the year ended December 31, 2016. The years ended December 31, 2017 and 2016 include certain items that impact net income attributable to common shareholders, which are listed in the table on the following page. The aggregate of these items, net of amounts attributable to noncontrolling interests, decreased net income attributable to common shareholders for the year ended December 31, 2017 by \$88,934,000, or \$0.46 per diluted share, and increased net income attributable to common shareholders for the year ended December 31, 2016 by \$594,447,000, or \$3.13 per diluted share.

Funds From Operations attributable to common shareholders plus assumed conversions (“FFO”) for the year ended December 31, 2017 was \$717,805,000, or \$3.75 per diluted share, compared to \$1,457,583,000, or \$7.66 per diluted share, for the year ended December 31, 2016. The years ended December 31, 2017 and 2016 include certain items that impact FFO, which are listed in the table on page 39. The aggregate of these items, net of amounts attributable to noncontrolling interests, increased FFO by \$3,989,000 and \$774,188,000, or \$0.02 and \$4.07 per diluted share, for the years ended December 31, 2017 and 2016, respectively.

## Overview - continued

### Vornado Realty Trust – continued

#### Quarter Ended December 31, 2017 Financial Results Summary

Net income attributable to common shareholders for the quarter ended December 31, 2017 was \$27,319,000, or \$0.14 per diluted share, compared to \$651,181,000, or \$3.43 per diluted share, for the prior year's quarter. The quarters ended December 31, 2017 and 2016 include certain items that impact net income attributable to common shareholders, which are listed in the table below. The aggregate of these items, net of amounts attributable to noncontrolling interests, decreased net income attributable to common shareholders for the quarter ended December 31, 2017 by \$38,160,000, or \$0.20 per diluted share, and increased net income attributable to common shareholders for the quarter ended December 31, 2016 by \$573,414,000, or \$3.02 per diluted share.

FFO for the quarter ended December 31, 2017 was \$153,151,000, or \$0.80 per diluted share, compared to \$797,734,000, or \$4.20 per diluted share, for the prior year's quarter. The quarters ended December 31, 2017 and 2016 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, decreased FFO for the quarter ended December 31, 2017 by \$34,402,000, or \$0.18 per diluted share and increased FFO for the quarter ended December 31, 2016 by \$604,495,000, or \$3.18 per diluted share.

(Amounts in thousands)

	For the Year Ended December 31,		For the Three Months Ended December 31,	
	2017	2016	2017	2016
Certain items that impact net income attributable to common shareholders:				
JBG SMITH Properties which is treated as a discontinued operation:				
Transaction costs	\$ (68,662)	\$ (16,586)	\$ (1,617)	\$ (11,989)
Operating results through July 17, 2017 spin-off	47,752	87,237	—	20,523
	(20,910)	70,651	(1,617)	8,534
Impairment loss on our investment in Pennsylvania REIT	(44,465)	—	—	—
Tax expense related to the reduction of our taxable REIT subsidiaries deferred tax assets	(34,800)	—	(34,800)	—
666 Fifth Avenue Office Condominium (49.5% interest) <sup>(1)</sup>	(25,414)	(41,532)	(3,042)	(7,869)
Net gain resulting from Urban Edge Properties operating partnership unit issuances	21,100	—	—	—
Our share of net gain on sale of property of Suffolk Downs JV	15,314	—	—	—
Net gain on repayment of Suffolk Downs JV debt investments	11,373	—	—	—
(Loss) income from real estate fund investments, net	(10,804)	(21,042)	529	(34,704)
Expense related to the prepayment of our 2.50% senior unsecured notes due 2019	(4,836)	—	(4,836)	—
Our share of write-off of deferred financing costs	(3,819)	—	—	—
Net gain on extinguishment of Skyline properties debt	—	487,877	—	487,877
Income from the repayment of our investments in 85 Tenth Avenue loans and preferred equity	—	160,843	—	160,843
Skyline properties impairment loss	—	(160,700)	—	—
Net gain on sale of 47% ownership interest in 7 West 34th Street	—	159,511	—	—
Gain on sale of our 20% interest in Fairfax Square	—	15,302	—	15,302
Our share of impairment on India non-depreciable real estate	—	(13,962)	—	(13,962)
Default interest on Skyline properties mortgage loan	—	(7,823)	—	(2,480)
Preferred share issuance costs (Series J redemption)	—	(7,408)	—	—
Other	2,060	(8,298)	3,084	(2,942)
	(95,201)	633,419	(40,682)	610,599
Noncontrolling interests' share of above adjustments	6,267	(38,972)	2,522	(37,185)
Total of certain items that impact net (loss) income attributable to common shareholders, net	\$ (88,934)	\$ 594,447	\$ (38,160)	\$ 573,414

(1) Included in "certain items that impact net income" because we do not intend to hold this asset on a long-term basis.

## Overview - continued

### Vornado Realty Trust – continued

(Amounts in thousands)

	For the Year Ended December 31,		For the Three Months Ended December 31,	
	2017	2016	2017	2016
Certain items that impact FFO:				
JBG SMITH Properties which is treated as a discontinued operation:				
Transaction costs	\$ (68,662)	\$ (16,586)	\$ (1,617)	\$ (11,989)
Operating results through July 17, 2017 spin-off	122,201	226,288	—	57,147
	53,539	209,702	(1,617)	45,158
Impairment loss on our investment in Pennsylvania REIT	(44,465)	—	—	—
Tax expense related to the reduction of our taxable REIT subsidiaries deferred tax assets	(34,800)	—	(34,800)	—
Net gain resulting from Urban Edge Properties operating partnership unit issuances	21,100	—	—	—
666 Fifth Avenue Office Condominium (49.5% interest) <sup>(1)</sup>	13,164	10,925	1,103	808
Net gain on repayment of our Suffolk Downs JV debt investments	11,373	—	—	—
(Loss) income from real estate fund investments, net	(10,804)	(21,042)	529	(34,704)
Expense related to the prepayment of our 2.50% senior unsecured notes due 2019	(4,836)	—	(4,836)	—
Our share of write-off of deferred financing costs	(3,819)	—	—	—
Net gain on extinguishment of Skyline properties debt	—	487,877	—	487,877
Income from the repayment of our investments in 85 Tenth Avenue loans and preferred equity	—	160,843	—	160,843
Our share of impairment on India non-depreciable real estate	—	(13,962)	—	(13,962)
Preferred share issuance costs (Series J redemption)	—	(7,408)	—	—
Other	3,801	(2,454)	2,945	(2,324)
	4,253	824,481	(36,676)	643,696
Noncontrolling interests' share of above adjustments	(264)	(50,293)	2,274	(39,201)
Total certain items that impact FFO, net	\$ 3,989	\$ 774,188	\$ (34,402)	\$ 604,495

(1) Included in "certain items that impact FFO" because we do not intend to hold this asset on a long-term basis.

### Vornado Realty L.P.

#### Year Ended December 31, 2017 Financial Results Summary

Net income attributable to Class A unitholders for the year ended December 31, 2017 was \$172,733,000, or \$0.83 per diluted Class A unit, compared to \$877,066,000, or \$4.32 per diluted Class A unit, for the year ended December 31, 2016. The year ended December 31, 2017 and 2016 include certain items that impact net income attributable to Class A unitholders which are listed in the table on the following page. The aggregate of these items decreased net income attributable to Class A unitholders by \$95,201,000, or \$0.47 per diluted Class A unit, for the year ended December 31, 2017 and increased net income attributable to Class A unitholders by \$633,419,000, or \$3.14 per diluted Class A unit, for the year ended December 31, 2016.

#### Quarter Ended December 31, 2017 Financial Results Summary

Net income attributable to Class A unitholders for the quarter ended December 31, 2017 was \$29,123,000, or \$0.14 per diluted Class A unit, compared to \$693,377,000, or \$3.43 per diluted Class A unit, for the prior year's quarter. The quarters ended December 31, 2017 and 2016 include certain items that impact net income attributable to Class A unitholders, which are listed in the table on the following page. The aggregate of these items decreased net income attributable to Class A unitholders by \$40,682,000, or \$0.20 per diluted Class A unit, for the quarter ended December 31, 2017 and increased net income attributable to Class A unitholders by \$610,599,000, or \$3.02 per diluted Class A unit, for the quarter ended December 31, 2016.

## Overview - continued

### Vornado Realty L.P. – continued

(Amounts in thousands)

	For the Year Ended December 31,		For the Three Months Ended December 31,	
	2017	2016	2017	2016
Certain items that impact net income attributable to Class A unitholders:				
JBG SMITH Properties which is treated as a discontinued operation:				
Transaction costs	\$ (68,662)	\$ (16,586)	\$ (1,617)	\$ (11,989)
Operating results through July 17, 2017 spin-off	47,752	87,237	—	20,523
	(20,910)	70,651	(1,617)	8,534
Impairment loss on our investment in Pennsylvania REIT	(44,465)	—	—	—
Tax expense related to the reduction of our taxable REIT subsidiaries deferred tax assets	(34,800)	—	(34,800)	—
666 Fifth Avenue Office Condominium (49.5% interest) <sup>(1)</sup>	(25,414)	(41,532)	(3,042)	(7,869)
Net gain resulting from Urban Edge Properties operating partnership unit issuances	21,100	—	—	—
Our share of net gain on sale of property of Suffolk Downs JV	15,314	—	—	—
Net gain on repayment of Suffolk Downs JV debt investments	11,373	—	—	—
(Loss) income from real estate fund investments, net	(10,804)	(21,042)	529	(34,704)
Expense related to the prepayment of our 2.50% senior unsecured notes due 2019	(4,836)	—	(4,836)	—
Our share of write-off of deferred financing costs	(3,819)	—	—	—
Net gain on extinguishment of Skyline properties debt	—	487,877	—	487,877
Income from the repayment of our investments in 85 Tenth Avenue loans and preferred equity	—	160,843	—	160,843
Skyline properties impairment loss	—	(160,700)	—	—
Net gain on sale of 47% ownership interest in 7 West 34th Street	—	159,511	—	—
Gain on sale of our 20% interest in Fairfax Square	—	15,302	—	15,302
Our share of impairment on India non-depreciable real estate	—	(13,962)	—	(13,962)
Default interest on Skyline properties mortgage loan	—	(7,823)	—	(2,480)
Preferred unit issuance costs (Series J redemption)	—	(7,408)	—	—
Other	2,060	(8,298)	3,084	(2,942)
	<u>\$ (95,201)</u>	<u>\$ 633,419</u>	<u>\$ (40,682)</u>	<u>\$ 610,599</u>

(1) Included in "certain items that impact net income" because we do not intend to hold this asset on a long-term basis.



## Overview - continued

### *Vornado Realty Trust and Vornado Realty L.P.*

#### Same Store Net Operating Income ("NOI")

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

	<u>New York</u>	<u>theMART</u>	<u>555 California Street</u>
Same store NOI at share % increase (decrease):			
Year ended December 31, 2017 compared to December 31, 2016	2.7%	4.2 % <sup>(1)</sup>	1.9 %
Year ended December 31, 2016 compared to December 31, 2015	6.4%	14.0 % <sup>(2)</sup>	(9.3)%
Three months ended December 31, 2017 compared to December 31, 2016	2.8%	7.1 %	10.4 %
Three months ended December 31, 2017 compared to September 30, 2017	1.8%	(7.1)% <sup>(3)</sup>	4.2 %
Same store NOI at share - cash basis % increase (decrease):			
Year ended December 31, 2017 compared to December 31, 2016	11.3%	7.6 % <sup>(1)</sup>	36.0 %
Year ended December 31, 2016 compared to December 31, 2015	8.5%	12.4 % <sup>(2)</sup>	(12.2)%
Three months ended December 31, 2017 compared to December 31, 2016	7.0%	13.7 %	32.4 %
Three months ended December 31, 2017 compared to September 30, 2017	1.7%	(4.4)% <sup>(3)</sup>	9.4 %

(1) The year ended December 31, 2016 includes a \$2,000,000 reversal of an expense accrued in 2015. Excluding this amount, same store NOI increased by 6.4% and same store NOI - cash basis increased by 10.0%.

(2) The year ended December 31, 2016 includes a \$2,000,000 reversal of an expense accrued in 2015. Excluding this amount, same store NOI increased by 11.7% and same store NOI - cash basis increased by 9.9%.

(3) Excluding tradeshows seasonality, same store NOI increased by 0.3% and same store NOI - cash basis increased by 3.9%.

Calculations of same store NOI, reconciliations of our net income to NOI, NOI - 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 the Financial Condition and Results of Operations.

## Overview - continued

### Acquisitions

In September 2016, our 50.1% joint venture with the Related Companies ("Related") was designated by Empire State Development ("ESD"), an entity of New York State, to redevelop the historic Farley Post Office building. The building will include a new Moynihan Train Hall and approximately 850,000 rentable square feet of commercial space, comprised of approximately 730,000 square feet of office space and approximately 120,000 square feet of retail space. On June 15, 2017, the joint venture closed a 99-year, triple-net lease with ESD for the commercial space at the Moynihan Office Building and made a \$230,000,000 upfront contribution, of which our share is \$115,230,000, towards the construction of the train hall. The lease calls for annual rent payments of \$5,000,000 plus payments in lieu of real estate taxes. Simultaneously, the joint venture completed a \$271,000,000 loan facility, of which \$210,269,000 is outstanding at December 31, 2017. The interest-only loan is at LIBOR plus 3.25% (4.64% at December 31, 2017) and matures in June 2019 with two one-year extension options.

The joint venture has also entered into a development agreement with ESD and a design-build contract with Skanska Moynihan Train Hall Builders. Under the development agreement with ESD, the joint venture is obligated to build the Moynihan Train Hall, with Vornado and Related each guaranteeing the joint venture's obligations. Under the design-build agreement, Skanska Moynihan Train Hall Builders is obligated to fulfill all of the joint venture's obligations. The obligations of Skanska Moynihan Train Hall Builders have been bonded by Skanska USA and bears a full guaranty from Skanska AB.

### Dispositions

On May 26, 2017, Sterling Suffolk Racecourse, LLC ("Suffolk Downs JV"), a joint venture in which we have a 21.2% equity interest, sold the property comprising the Suffolk Downs racetrack in East Boston, Massachusetts ("Suffolk Downs") for \$155,000,000, which resulted in net proceeds and a net gain to us of \$15,314,000. In addition, we were repaid \$29,318,000 of principal and \$6,129,000 of accrued interest on our debt investments in Suffolk Downs JV, resulting in a net gain of \$11,373,000.

On September 29, 2017, Vornado Capital Partners Real Estate Fund (the "Fund"), in which we have a 25.0% ownership interest, completed the sale of 800 Corporate Pointe in Culver City, CA for \$148,000,000. From the inception of this investment through its disposition, the Fund realized a \$35,620,000 net gain.

During 2017, India Property Fund, in which we had a 36.5% interest, sold its investments. Our share of the aggregate sales price was approximately \$23,895,000 which resulted in a financial statement loss of \$533,000. In addition, on December 28, 2017, we sold our 25% interest in TCG Urban Infrastructure Holdings Private Limited for \$18,742,000 which resulted in a financial statement gain of \$1,885,000, which substantially completes the disposition of our investments in India.

### Financings

#### *Unsecured Revolving Credit Facility*

On October 17, 2017, we extended one of our two \$1.25 billion unsecured revolving credit facilities from November 2018 to January 2022 with two six-month extension options. The interest rate on the extended facility was lowered from LIBOR plus 1.05% to LIBOR plus 1.00%. The interest rate and facility fees are the same as our other \$1.25 billion unsecured revolving credit facility, which matures in February 2021 with two six-month extension options.

#### *Senior Unsecured Notes*

On December 27, 2017, we completed a public offering of \$450,000,000 3.50% senior unsecured notes due January 15, 2025. The interest rate on the senior unsecured notes will be payable semi-annually on January 15 and July 15, commencing July 15, 2018. The notes were sold at 99.596% of their face amount to yield 3.565%.

On December 27, 2017, we redeemed all of the \$450,000,000 principal amount of our outstanding 2.50% senior unsecured notes which were scheduled to mature on June 30, 2019, at a redemption price of approximately 100.71% of the principal amount plus accrued interest through the date of redemption. In connection therewith, we expensed \$4,836,000 of debt prepayment costs and wrote-off unamortized deferred financing costs which are included in "interest and debt expense" on our consolidated statements of income.

## Overview - continued

## Financings - continued

### *Preferred Securities*

In December 2017, we sold 12,780,000 5.25% Series M cumulative redeemable preferred shares at a price of \$25.00 per share in an underwritten public offering pursuant to an effective registration statement. We received aggregate net proceeds of \$309,609,000, after underwriters' discounts and issuance costs and contributed the net proceeds to the Operating Partnership in exchange for 12,780,000 5.25% Series M preferred units (with economic terms that mirror those of the Series M preferred shares). Dividends on the Series M preferred shares/units are cumulative and payable quarterly in arrears. The Series M 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), we may redeem the Series M preferred shares/units at a redemption price of \$25.00 per share, plus accrued and unpaid dividends through the date of redemption. The Series M preferred shares/units have no maturity date and will remain outstanding indefinitely unless redeemed by us.

In December 2017, we called for redemption of all of the outstanding 6.625% Series G and 6.625% Series I cumulative redeemable preferred shares/units. As a result, as of December 31, 2017, we reclassified the 6.625% Series G and 6.625% Series I cumulative redeemable preferred shares/units from shareholder's equity/partner's capital to liabilities on our consolidated balance sheets. On January 4, 2018, we redeemed all of the outstanding 6.625% Series G cumulative redeemable preferred shares/units at their redemption price of \$25.00 per share/unit, or \$200,000,000 in the aggregate, plus accrued and unpaid dividends/distributions through the date of redemption. On January 4 and 11, 2018, we redeemed 6,000,000 shares/units and 4,800,000 shares/units, respectively, representing all of the outstanding 6.625% Series I cumulative redeemable preferred shares/units at their redemption price of \$25.00 per share/unit, or \$270,000,000 in the aggregate, plus accrued and unpaid dividends/distributions through the date of redemption. Upon redemption of both series, we expensed \$14,486,000 of issuance costs, which will be included in the quarter ended March 31, 2018 consolidated statements of income.

### **Other Activities**

On May 9, 2017, a \$150,000,000 mezzanine loan owned by a joint venture in which we had a 33.3% ownership interest was repaid at its maturity and we received our \$50,000,000 share. The mezzanine loan earned interest at LIBOR plus 9.42%.

On June 1, 2017, Alexander's, Inc. (NYSE: ALX), in which we have a 32.4% ownership interest, completed a \$500,000,000 refinancing of the office portion of 731 Lexington Avenue. The interest-only loan is at LIBOR plus 0.90% (2.38% at December 31, 2017) and matures in June 2020 with four one-year extension options. In connection therewith, Alexander's purchased an interest rate cap with a notional amount of \$500,000,000 that caps LIBOR at a rate of 6.00%. The property was previously encumbered by a \$300,000,000 interest-only mortgage at LIBOR plus 0.95% which was scheduled to mature in March 2021.

On June 15, 2017, the joint venture, in which we have a 50.1% interest, completed a \$271,000,000 loan facility for the Moynihan Office Building, of which \$210,269,000 is outstanding at December 31, 2017. The interest-only loan is at LIBOR plus 3.25% (4.64% at December 31, 2017) and matures in June 2019 with two one-year extension options.

On June 20, 2017, we completed a \$220,000,000 financing of The Bartlett residential building. The five-year interest-only loan is at LIBOR plus 1.70%, and matures in June 2022. On July 17, 2017, the property, the loan and the \$217,000,000 of net proceeds were transferred to JBGS in connection with the tax-free spin-off of our Washington, DC segment.

On July 17, 2017, prior to completion of the tax-free spin-off of our Washington, DC segment, we repaid the \$43,581,000 LIBOR plus 1.25% mortgage encumbering 1700 and 1730 M Street which was scheduled to mature in August 2017. The unencumbered property was then transferred to JBGS in connection with the tax-free spin-off of our Washington, DC segment.

On July 19, 2017, the joint venture, in which we have a 25.0% interest, completed a \$500,000,000 refinancing of 330 Madison Avenue, an 845,000 square foot Manhattan office building. The seven-year interest-only loan matures in August 2024 and has a fixed rate of 3.43%. Our share of net proceeds, after repayment of the existing \$150,000,000 LIBOR plus 1.30% mortgage and closing costs, was approximately \$85,000,000.

On July 27, 2017, the Fund completed a \$100,000,000 loan facility for the refinancing of 1100 Lincoln Road, a 130,000 square foot retail and theater property in Miami, Florida. The loan is interest-only at LIBOR plus 2.40% (3.76% at December 31, 2017), matures in July 2020 with two one-year extension options. At closing, the fund drew \$82,750,000, and subject to property performance, may borrow up to \$17,250,000 of additional proceeds within the first 18 months of the loan term. The property was previously encumbered by a \$66,000,000 interest-only mortgage at LIBOR plus 2.25% which was scheduled to mature in August 2017.

## **Overview - continued**

### **Other Activities - continued**

On August 23, 2017, the joint venture, in which we have a 50.0% interest, completed a \$1.2 billion refinancing of 280 Park Avenue, a 1,250,000 square foot Manhattan office building. The loan is interest-only at LIBOR plus 1.73% (3.16% at December 31, 2017) and matures in September 2019 with five one-year extension options. Our share of net proceeds, after repayment of the existing \$900,000,000 LIBOR plus 2.00% mortgage and closing costs, was approximately \$140,000,000.

On December 13, 2017, the joint venture, in which we have a 50.0% interest, completed a \$20,000,000 refinancing of 50 West 57th Street, an 81,000 square foot Manhattan office building. The loan is interest-only at LIBOR plus 1.60% (3.06% at December 31, 2017) and matures in December 2022. The new loan replaced the existing \$20,000,000 mortgage which had a fixed rate of 3.50%.

## Overview - continued

### Leasing Activity

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.

	New York			
	Office	Retail	theMART	555 California Street
<b>Quarter Ended December 31, 2017:</b>				
Total square feet leased	319	39	118	153
Our share of square feet leased	281	29	118	107
Initial rent <sup>(1)</sup>	\$ 76.07	\$ 412.74	\$ 46.13	\$ 95.73
Weighted average lease term (years)	7.0	11.4	6.1	5.3
Second generation relet space:				
Square feet	205	17	112	106
GAAP basis:				
Straight-line rent <sup>(2)</sup>	\$ 75.85	\$ 205.33	\$ 46.83	\$ 101.46
Prior straight-line rent	\$ 70.69	\$ 123.24	\$ 39.12	\$ 80.09
Percentage increase	7.3%	66.6%	19.7%	26.7%
Cash basis:				
Initial rent <sup>(1)</sup>	\$ 78.02	\$ 181.52	\$ 46.23	\$ 97.45
Prior escalated rent	\$ 72.98	\$ 117.40	\$ 42.50	\$ 87.40
Percentage increase	6.9%	54.6%	8.8%	11.5%
Tenant improvements and leasing commissions:				
Per square foot	\$ 71.35	\$ 332.74	\$ 17.79	\$ 41.94
Per square foot per annum:	\$ 10.19	\$ 29.19	\$ 2.92	\$ 7.91
Percentage of initial rent	13.4%	7.1%	6.3%	8.3%
<b>Year Ended December 31, 2017:</b>				
Total square feet leased	1,867	126	345	285
Our share of square feet leased	1,469	97	345	200
Initial rent <sup>(1)</sup>	\$ 78.72	\$ 318.67	\$ 47.60	\$ 88.42
Weighted average lease term (years)	8.1	7.6	6.6	7.2
Second generation relet space:				
Square feet	1,018	61	319	152
GAAP basis:				
Straight-line rent <sup>(2)</sup>	\$ 74.28	\$ 171.74	\$ 47.93	\$ 99.53
Prior straight-line rent	\$ 65.85	\$ 135.81	\$ 38.04	\$ 80.15
Percentage increase	12.8%	26.5%	26.0%	24.2%
Cash basis:				
Initial rent <sup>(1)</sup>	\$ 76.03	\$ 159.53	\$ 47.55	\$ 94.14
Prior escalated rent	\$ 69.19	\$ 127.18	\$ 40.77	\$ 84.76
Percentage increase	9.9%	25.4%	16.6%	11.1%
Tenant improvements and leasing commissions:				
Per square foot	\$ 73.97	\$ 209.76	\$ 33.86	\$ 74.38
Per square foot per annum:	\$ 9.13	\$ 27.60	\$ 5.13	\$ 10.33
Percentage of initial rent	11.6%	8.7%	10.8%	11.7%

See notes on the following page.

## Overview - continued

### Leasing Activity – continued

(Square feet in thousands)

	New York			
	Office	Retail	theMART	555 California Street
<b>Year Ended December 31, 2016:</b>				
Total square feet leased	2,241	111	270	151
Our share of square feet leased:	1,842	90	269	106
Initial rent <sup>(1)</sup>	\$ 72.56	\$ 285.17	\$ 48.16	\$ 77.25
Weighted average lease term (years)	8.8	9.1	6.4	8.4
Second generation relet space:				
Square feet	1,667	69	221	69
GAAP basis:				
Straight-line rent <sup>(2)</sup>	\$ 71.52	\$ 204.95	\$ 50.74	\$ 82.69
Prior straight-line rent	\$ 59.75	\$ 166.14	\$ 40.43	\$ 66.92
Percentage increase	19.7%	23.4%	25.5%	23.6%
Percentage increase inclusive of 3 square foot Dyson lease at 640 Fifth Avenue		94.9%		
Cash basis:				
Initial rent <sup>(1)</sup>	\$ 71.82	\$ 194.35	\$ 49.65	\$ 79.69
Prior escalated rent	\$ 61.62	\$ 173.70	\$ 43.43	\$ 66.51
Percentage increase	16.6%	11.9%	14.3%	19.8%
Percentage increase inclusive of 3 square foot Dyson lease at 640 Fifth Avenue		70.1%		
Tenant improvements and leasing commissions:				
Per square foot	\$ 64.44	\$ 184.74	\$ 35.62	\$ 76.29
Per square foot per annum:	\$ 7.32	\$ 20.30	\$ 5.57	\$ 9.08
Percentage of initial rent	10.1%	7.1%	11.6%	11.8%

(1) Represents the cash basis weighted average starting rent per square foot, which is generally indicative of market rents. Most leases include free rent and periodic step-ups in rent which are not included in the initial cash basis rent per square foot but are included in the GAAP basis straight-line rent per square foot.

(2) Represents the GAAP basis weighted average rent per square foot that is recognized over the term of the respective leases, and includes the effect of free rent and periodic step-ups in rent.

## Overview - continued

### Square footage (in service) and Occupancy as of December 31, 2017:

(Square feet in thousands)

	Number of properties	Square Feet (in service)		Occupancy %
		Total Portfolio	Our Share	
New York:				
Office	36	20,256	16,982	97.1%
Retail (includes retail properties that are in the base of our office properties)	71	2,720	2,471	96.9%
Residential - 1,697 units	11	1,568	835	96.7%
Alexander's, including 312 residential units	7	2,437	790	99.3%
Hotel Pennsylvania	1	1,400	1,400	
		<u>28,381</u>	<u>22,478</u>	97.2%
Other:				
theMART	3	3,689	3,680	98.6%
555 California Street	3	1,741	1,219	94.2%
Other	11	2,525	1,188	93.6%
		<u>7,955</u>	<u>6,087</u>	
Total square feet at December 31, 2017		<u>36,336</u>	<u>28,565</u>	

### Square footage (in service) and Occupancy as of December 31, 2016:

(Square feet in thousands)

	Number of properties	Square Feet (in service)		Occupancy %
		Total Portfolio	Our Share	
New York:				
Office	35	20,227	16,962	96.3%
Retail (includes retail properties that are in the base of our office properties)	69	2,672	2,464	97.1%
Residential - 1,692 units	11	1,559	826	95.7%
Alexander's, including 312 residential units	7	2,437	790	99.8%
Hotel Pennsylvania	1	1,400	1,400	
		<u>28,295</u>	<u>22,442</u>	96.5%
Other:				
theMART	3	3,671	3,662	98.9%
555 California Street	3	1,738	1,217	92.4%
Other	11	2,557	1,188	92.2%
		<u>7,966</u>	<u>6,067</u>	
Total square feet at December 31, 2016		<u>36,261</u>	<u>28,509</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. 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 2 – *Basis of Presentation and Significant Accounting Policies* to our consolidated financial statements in this Annual Report on Form 10-K.

### *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 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 that meets the criteria of a business under Accounting Standards Codification (“ASC”) Topic 805, *Business Combinations* (“ASC 805”), 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 record acquired intangible assets (including acquired above-market leases, acquired in-place leases and tenant relationships) and acquired intangible liabilities (including below-market leases) at their estimated fair value separate and apart from goodwill. 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.

As of December 31, 2017 and 2016, the carrying amounts of real estate, net of accumulated depreciation, were \$11.9 billion and \$11.6 billion, respectively. As of December 31, 2017 and 2016, the carrying amounts of identified intangible assets (including acquired above-market leases, tenant relationships and acquired in-place leases) were \$159,260,000 and \$189,668,000, respectively, and the carrying amounts of identified intangible liabilities, a component of “deferred revenue” on our consolidated balance sheets, were \$205,600,000 and \$252,216,000, respectively.

Our properties, including any related 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 projected 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. The evaluation of anticipated cash flows is subjective and is based, in part, on assumptions regarding future occupancy, rental rates and capital requirements that could differ materially from actual results. Plans to hold properties over longer periods decrease the likelihood of recording impairment losses.



## Critical 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 whether the entity is a variable interest entity (“VIE”) and whether we are the primary beneficiary. 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 entity is not considered a VIE and 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 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 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 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. The evaluation of anticipated cash flows is subjective and is based, in part, on assumptions regarding future occupancy, rental rates and capital requirements that could differ materially from actual results.

As of December 31, 2017 and 2016, the carrying amounts of investments in partially owned entities were \$1.1 billion and \$1.4 billion, respectively.

### *Allowance for Doubtful Accounts*

We periodically evaluate the collectability of amounts due from tenants and maintain an allowance for doubtful accounts (\$5,526,000 and \$6,708,000 as of December 31, 2017 and 2016, respectively) for estimated losses resulting from the inability of tenants to make required payments under the lease agreements. We also maintain an allowance for receivables arising from the straight-lining of rents (\$954,000 and \$1,913,000 as of December 31, 2017 and 2016, respectively). These receivables arise from earnings recognized in excess of amounts currently due under the lease agreements. Management exercises judgment in establishing these allowances and considers payment history and current credit status in developing these estimates. These estimates may differ from actual results, which could be material to our consolidated financial statements.

## Critical Accounting Policies - continued

### *Revenue Recognition*

We have the following revenue sources and revenue recognition policies:

- **Base Rent** — income arising from tenant leases. These rents are recognized over the non-cancelable term of the related leases on a straight-line basis which includes the effects of rent steps and rent abatements under the leases. We commence rental revenue recognition when the tenant takes possession of the leased space and the leased space is substantially ready for its intended use. In addition, in circumstances where we provide a tenant improvement allowance for improvements that are owned by the tenant, we recognize the allowance as a reduction of rental revenue on a straight-line basis over the term of the lease.
- **Percentage Rent** — income arising from retail tenant leases that is contingent upon tenant sales exceeding defined thresholds. These rents are recognized only after the contingency has been removed (i.e., when tenant sales thresholds have been achieved).
- **Hotel Revenue** — income arising from the operation of the Hotel Pennsylvania which consists of rooms revenue, food and beverage revenue, and banquet revenue. Income is recognized when rooms are occupied. Food and beverage and banquet revenue are recognized when the services have been rendered.
- **Trade Shows Revenue** — income arising from the operation of trade shows, including rentals of booths. This revenue is recognized when the trade shows have occurred.
- **Expense Reimbursements** — revenue arising from tenant leases which provide for the recovery of all or a portion of the operating expenses and real estate taxes of the respective property. This revenue is recognized in the same periods as the expenses are incurred.
- **Management, Leasing and Other Fees** — income arising from contractual agreements with third parties or with partially owned entities. This revenue is recognized as the related services are performed under the respective agreements.

Before we recognize revenue, we assess, among other things, its collectability. If our assessment of the collectability of revenue changes, the impact on our consolidated financial statements could be material.

### *Income Taxes*

Vornado operates in a manner intended to enable it to continue to qualify as a Real Estate Investment Trust (“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 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 2 – *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.

## Net Operating Income by Segment for the Years Ended December 31, 2017, 2016 and 2015

On December 1, 2016 we were repaid the 85 Tenth Avenue mezzanine loans and we received a 49.9% equity interest in the property. In 2017, our 49.9% equity interest in the property is included in the "New York" segment. In 2016, our investment in 85 Tenth Avenue mezzanine loans was included in the "Other" segment.

On July 17, 2017, we completed the spin-off of our Washington, DC segment. Beginning in the third quarter of 2017, the historical financial results of our former Washington, DC segment are reflected in our consolidated financial statements as discontinued operations for all periods presented and are included in the Other segment. Subsequent to the Washington, DC spin-off, we operate in two segments, New York and Other, which is based on how we manage our business.

We have reclassified our 49.5% interest in 666 Fifth Avenue Office Condominium from "New York" to "Other" in all periods presented because we do not intend to hold this asset on a long-term basis.

NOI represents total revenues less operating expenses. We consider NOI 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, we utilize this measure to make investment decisions as well as to compare the performance of our assets to that of our peers. NOI should not be considered a substitute for net income. NOI may not be comparable to similarly titled measures employed by other companies.

Below is a summary of NOI by segment for the years ended December 31, 2017, 2016 and 2015.

(Amounts in thousands)

	For the Year Ended December 31, 2017		
	Total	New York	Other
Total revenues	\$ 2,084,126	\$ 1,779,307	\$ 304,819
Operating expenses	886,596	756,670	129,926
NOI - consolidated	1,197,530	1,022,637	174,893
Deduct: NOI attributable to noncontrolling interests in consolidated subsidiaries	(65,311)	(45,899)	(19,412)
Add: Our share of NOI from partially owned entities	269,164	189,327	79,837
NOI at share	1,401,383	1,166,065	235,318
Non-cash adjustments for straight-line rents, amortization of acquired below-market leases, net and other	(86,842)	(79,202)	(7,640)
NOI at share - cash basis	\$ 1,314,541	\$ 1,086,863	\$ 227,678

(Amounts in thousands)

	For the Year Ended December 31, 2016		
	Total	New York	Other
Total revenues	\$ 2,003,742	\$ 1,713,374	\$ 290,368
Operating expenses	844,566	716,754	127,812
NOI - consolidated	1,159,176	996,620	162,556
Deduct: NOI attributable to noncontrolling interests in consolidated subsidiaries	(66,182)	(47,480)	(18,702)
Add: Our share of NOI from partially owned entities	271,114	159,386	111,728
NOI at share	1,364,108	1,108,526	255,582
Non-cash adjustments for straight-line rents, amortization of acquired below-market leases, net and other	(170,477)	(143,239)	(27,238)
NOI at share - cash basis	\$ 1,193,631	\$ 965,287	\$ 228,344

(Amounts in thousands)

	For the Year Ended December 31, 2015		
	Total	New York	Other
Total revenues	\$ 1,985,495	\$ 1,695,925	\$ 289,570
Operating expenses	824,511	694,228	130,283
NOI - consolidated	1,160,984	1,001,697	159,287
Deduct: NOI attributable to noncontrolling interests in consolidated subsidiaries	(64,859)	(42,905)	(21,954)
Add: Our share of NOI from partially owned entities	245,750	156,177	89,573
NOI at share	1,341,875	1,114,969	226,906
Non-cash adjustments for straight-line rents, amortization of acquired below-market leases, net and other	(214,322)	(186,781)	(27,541)
NOI at share - cash basis	\$ 1,127,553	\$ 928,188	\$ 199,365

## Net Operating Income by Segment for the Years Ended December 31, 2017, 2016 and 2015 - continued

The elements of our New York and Other NOI for the years ended December 31, 2017, 2016 and 2015 are summarized below.

(Amounts in thousands)	For the Year Ended December 31,		
	2017	2016	2015
New York:			
Office	\$ 721,183	\$ 662,221	\$ 684,110
Retail	359,944	364,953	342,999
Residential	24,370	25,060	22,266
Alexander's	47,302	47,295	43,409
Hotel Pennsylvania	13,266	8,997	22,185
Total New York	<u>1,166,065</u>	<u>1,108,526</u>	<u>1,114,969</u>
Other:			
theMART	102,339	98,498	85,963
555 California Street	47,588	45,848	50,268
Other investments	85,391	111,236	90,675
Total Other	<u>235,318</u>	<u>255,582</u>	<u>226,906</u>
NOI at share	<u>\$ 1,401,383</u>	<u>\$ 1,364,108</u>	<u>\$ 1,341,875</u>

The elements of our New York and Other NOI - cash basis for the years ended December 31, 2017, 2016 and 2015 are summarized below.

(Amounts in thousands)	For the Year Ended December 31,		
	2017	2016	2015
New York:			
Office	\$ 678,839	\$ 593,785	\$ 580,252
Retail	324,318	292,019	262,698
Residential	21,626	22,285	20,254
Alexander's	48,683	48,070	42,965
Hotel Pennsylvania	13,397	9,128	22,019
Total New York	<u>1,086,863</u>	<u>965,287</u>	<u>928,188</u>
Other:			
theMART	99,242	92,571	81,867
555 California Street	45,281	32,601	36,686
Other investments	83,155	103,172	80,812
Total Other	<u>227,678</u>	<u>228,344</u>	<u>199,365</u>
NOI at share - cash basis	<u>\$ 1,314,541</u>	<u>\$ 1,193,631</u>	<u>\$ 1,127,553</u>

## Reconciliation of Net Income to Net Operating Income for the Years Ended December 31, 2017, 2016 and 2015

Below is a reconciliation of net income to NOI for the years ended December 31, 2017, 2016 and 2015.

(Amounts in thousands)

	For the Year Ended December 31,		
	2017	2016	2015
Net income	\$ 264,128	\$ 981,922	\$ 859,430
Deduct:			
Our share of (income) loss from partially owned entities	(15,200)	(168,948)	9,947
Our share of (income) loss from real estate fund investments	(3,240)	23,602	(74,081)
Interest and other investment income, net	(37,793)	(29,548)	(27,240)
Net gains on disposition of wholly owned and partially owned assets	(501)	(160,433)	(149,417)
Loss (income) from discontinued operations	13,228	(404,912)	(223,511)
NOI attributable to noncontrolling interests in consolidated subsidiaries	(65,311)	(66,182)	(64,859)
Add:			
Depreciation and amortization expense	429,389	421,023	379,803
General and administrative expense	158,999	149,550	149,256
Acquisition and transaction related costs	1,776	9,451	12,511
NOI from partially owned entities	269,164	271,114	245,750
Interest and debt expense	345,654	330,240	309,298
Income tax expense (benefit)	41,090	7,229	(85,012)
NOI at share	1,401,383	1,364,108	1,341,875
Non cash adjustments for straight-line rents, amortization of acquired below-market leases, net and other	(86,842)	(170,477)	(214,322)
NOI at share - cash basis	\$ 1,314,541	\$ 1,193,631	\$ 1,127,553

## Results of Operations – Year Ended December 31, 2017 Compared to December 31, 2016

### Revenues

Our revenues, which consist of property rentals, tenant expense reimbursements, and fee and other income, were \$2,084,126,000 in the year ended December 31, 2017 compared to \$2,003,742,000 for the prior year, an increase of \$80,384,000. Below are the details of the increase by segment:

(Amounts in thousands)

Increase (decrease) due to:	<u>Total</u>	<u>New York</u>	<u>Other</u>
<b>Property rentals:</b>			
Acquisitions, dispositions and other	\$ 9,455	\$ 9,229 <sup>(1)</sup>	\$ 226
Development and redevelopment	824	(93)	917
Hotel Pennsylvania	7,974	7,974 <sup>(2)</sup>	—
Trade shows	(634)	—	(634)
Same store operations	35,240	25,066	10,174
	<u>52,859</u>	<u>42,176</u>	<u>10,683</u>
<b>Tenant expense reimbursements:</b>			
Acquisitions, dispositions and other	(2,663)	(2,663)	—
Development and redevelopment	705	(75)	780
Same store operations	13,819	11,320	2,499
	<u>11,861</u>	<u>8,582</u>	<u>3,279</u>
<b>Fee and other income:</b>			
BMS cleaning fees	10,718	13,374 <sup>(3)</sup>	(2,656)
Management and leasing fees	1,843	1,068	775
Lease termination fees	(599)	250	(849)
Other income	3,702	483	3,219
	<u>15,664</u>	<u>15,175</u>	<u>489</u>
<b>Total increase in revenues</b>	<u>\$ 80,384</u>	<u>\$ 65,933</u>	<u>\$ 14,451</u>

(1) Primarily due to (i) \$20,515 from the write-off of straight-line rents recorded in 2016, partially offset by (ii) \$5,050 from the partial sale of 7 West 34th Street in May 2016 and (iii) \$7,834 from the write-off of straight-line rents and FAS 141 recorded in 2017.

(2) Average occupancy and revenue per available room were 87.3% and \$121.46 respectively, for 2017 as compared to 84.7% and \$113.84, respectively, for 2016.

(3) Primarily due to an increase in third party cleaning agreements from JBGS, Skyline Properties and from tenants at theMART.

## Results of Operations – Year Ended December 31, 2017 Compared to December 31, 2016 - continued

### Expenses

Our expenses, which consist primarily of operating, depreciation and amortization, general and administrative expenses and acquisition and transaction related costs, were \$1,476,760,000 in the year ended December 31, 2017 compared to \$1,424,590,000 for the prior year, an increase of \$52,170,000. Below are the details of the increase by segment:

(Amounts in thousands)

(Decrease) increase due to:

	<u>Total</u>	<u>New York</u>	<u>Other</u>
<b>Operating:</b>			
Acquisitions, dispositions and other	\$ (2,978)	\$ (2,978)	\$ —
Development and redevelopment	69	119	(50)
Non-reimbursable expenses, including bad-debt reserves	(3,940)	(4,109)	169
Hotel Pennsylvania	3,721	3,721	—
Trade shows	(1,222)	—	(1,222)
BMS expenses	15,368	12,835 <sup>(1)</sup>	2,533
Same store operations	31,012	30,328	684
	<u>42,030</u>	<u>39,916</u>	<u>2,114</u>
<b>Depreciation and amortization:</b>			
Acquisitions, dispositions and other	2,227	2,227	—
Development and redevelopment	2,752	3,182	(430)
Same store operations	3,387	(1,503)	4,890
	<u>8,366</u>	<u>3,906</u>	<u>4,460</u>
<b>General and administrative:</b>			
Mark-to-market of deferred compensation plan liability	1,719	—	1,719 <sup>(2)</sup>
Same store operations	7,730 <sup>(3)</sup>	4,333	3,397
	<u>9,449</u>	<u>4,333</u>	<u>5,116</u>
<b>Acquisition and transaction related costs</b>	<u>(7,675)</u>	<u>—</u>	<u>(7,675)</u>
<b>Total increase in expenses</b>	<u>\$ 52,170</u>	<u>\$ 48,155</u>	<u>\$ 4,015</u>

(1) Primarily due to an increase in third party cleaning agreements from JBGS, Skyline Properties and from tenants at theMART.

(2) This increase in expense is entirely offset by a corresponding decrease in income from the mark-to-market of the deferred compensation plan assets, a component of "interest and other investment income, net" on our consolidated statements of income.

(3) Primarily due to lower capitalized leasing and development payroll for consolidated projects in 2017 and higher franchise tax in 2017.

## Results of Operations – Year Ended December 31, 2017 Compared to December 31, 2016 - continued

### Income from Partially Owned Entities

Summarized below are the components of income from partially owned entities for the years ended December 31, 2017 and 2016.

(Amounts in thousands)	Percentage Ownership at December 31, 2017	For the Year Ended December 31,	
		2017	2016
<b>Equity in Net (Loss) Income:</b>			
Pennsylvania Real Estate Investment Trust ("PREIT") <sup>(1)</sup>	8.0%	\$ (53,325)	\$ (5,213)
Alexander's	32.4%	31,853	34,240
Urban Edge Properties ("UE") <sup>(2)</sup>	4.5%	27,328	5,839
Partially owned office buildings <sup>(3)</sup>	Various	2,020	5,773
Other investments <sup>(4)</sup>	Various	7,324	128,309
		<u>\$ 15,200</u>	<u>\$ 168,948</u>

(1) In 2017, we recognized a \$44,465 "other-than-temporary" impairment loss on our investment in PREIT.

(2) 2017 includes \$21,100 of net gains resulting from UE operating partnership unit issuances.

(3) Includes interests in 280 Park Avenue, 650 Madison Avenue, One Park Avenue, 7 West 34th Street, 330 Madison Avenue, 512 West 22nd Street, 85 Tenth Avenue (in 2017 only) and others.

(4) Includes interests in Independence Plaza, Fashion Centre Mall/Washington Tower, Rosslyn Plaza, 50-70 West 93rd Street, 85 Tenth Avenue (in 2016 only), 666 Fifth Avenue Office Condominium, India real estate ventures and others. In 2017, we recognized \$26,687 of net gains, comprised of \$15,314 representing our share of a net gain on the sale of Suffolk Downs and \$11,373 representing the net gain on repayment of our debt investments in Suffolk Downs JV. In 2017 and 2016, we recognized net losses of \$25,414 and \$41,532, respectively, from our 666 Fifth Avenue Office Condominium joint venture as a result of our share of depreciation expense. In 2016, the owner of 85 Tenth Avenue completed a 10-year, 4.55% \$625,000 refinancing of the property and we received net proceeds of \$191,779 in repayment of our existing loans and preferred equity investments. We recognized \$160,843 of income and no tax gain as a result of this transaction. In addition, we recognized \$13,962 of non-cash impairment losses related to India real estate ventures in 2016.

### 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, 2017 and 2016.

(Amounts in thousands)	For the Year Ended December 31,	
	2017	2016
Net investment income	\$ 18,507	\$ 17,053
Net realized gains on exited investments	36,078	14,761
Previously recorded unrealized gain on exited investments	(25,538)	(14,254)
Net unrealized loss on held investments	(25,807)	(41,162)
Income (loss) from real estate fund investments	<u>3,240</u>	<u>(23,602)</u>
Less (income) loss attributable to noncontrolling interests in consolidated subsidiaries	(14,044)	2,560
Loss from real estate fund investments attributable to the Operating Partnership <sup>(1)</sup>	<u>(10,804)</u>	<u>(21,042)</u>
Less loss attributable to noncontrolling interests in the Operating Partnership	673	1,270
Loss from real estate fund investments attributable to Vornado	<u>\$ (10,131)</u>	<u>\$ (19,772)</u>

(1) Excludes \$4,091 and \$3,831 of management and leasing fees in the years ended December 31, 2017 and 2016, respectively, which are included as a component of "fee and other income" on our consolidated statements of income.



## **Results of Operations – Year Ended December 31, 2017 Compared to December 31, 2016 - continued**

### Interest and Other Investment Income, net

Interest and other investment income, net was \$37,793,000 in the year ended December 31, 2017, compared to \$29,548,000 in the prior year, an increase of \$8,245,000. This increase resulted primarily from increased interest rates and an increase in the value of investments in our deferred compensation plan (offset by a corresponding decrease in the liability for plan assets in general and administrative expenses).

### Interest and Debt Expense

Interest and debt expense was \$345,654,000 in the year ended December 31, 2017, compared to \$330,240,000 in the prior year, an increase of \$15,414,000. This increase was primarily due to (i) \$19,887,000 of higher interest expense relating to our variable rate loans, (ii) \$9,409,000 of higher interest expense from the refinancing of 350 Park Avenue and the \$750,000,000 drawn on our \$750,000,000 delayed draw term loan, (iii) \$7,052,000 of higher interest expense from the 1535 Broadway capital lease obligation, (iv) \$4,836,000 of interest expense relating to the December 27, 2017 prepayment of our \$450,000,000 aggregate principal amount of 2.50% senior unsecured notes due 2019, partially offset by (v) \$17,888,000 of higher capitalized interest and debt expense and (vi) \$8,626,000 of interest savings from the refinancing of theMART.

### Net Gains on Disposition of Wholly Owned and Partially Owned Assets

The net gain of \$501,000 in the year ended December 31, 2017, resulted from the sale of residential condominiums. The net gain of \$160,433,000 in the prior year primarily consists of a \$159,511,000 net gain on sale of our 47% ownership interest in 7 West 34th Street and \$714,000 from the sale of residential condominiums.

### Income Tax Expense

In the year ended December 31, 2017, we had an income tax expense of \$41,090,000, compared to \$7,229,000 in the prior year, an increase of \$33,861,000. This increase resulted primarily from \$34,800,000 of expense due to the reduction of our taxable REIT subsidiaries' deferred tax assets based on the decrease in corporate tax rates under the December 22, 2017 Tax Cuts and Jobs Act.

## Results of Operations – Year Ended December 31, 2017 Compared to December 31, 2016 - continued

### (Loss) Income from Discontinued Operations

We have reclassified the revenues and expenses of our former Washington, DC segment which was spun off on July 17, 2017 and other related retail assets that were sold or are currently held for sale to “(loss) income from discontinued operations” and the related assets and liabilities to “assets related to discontinued operations” and “liabilities related to discontinued operations” for all the periods presented in the accompanying financial statements. The table below sets forth the combined results of assets related to discontinued operations for the years ended December 31, 2017 and 2016.

(Amounts in thousands)	For the Year Ended December 31,	
	2017	2016
Total revenues	\$ 261,290	\$ 521,084
Total expenses	212,169	442,032
	49,121	79,052
JBGS spin-off transaction costs	(68,662)	(16,586)
Net gains on sale of real estate, a lease position and other	6,605	5,074
Income (loss) from partially owned assets	435	(3,559)
Net gain on early extinguishment of debt	—	487,877
Impairment losses	—	(161,165)
Net gain on sale of our 20% interest in Fairfax Square	—	15,302
Pretax (loss) income from discontinued operations	(12,501)	405,995
Income tax expense	(727)	(1,083)
(Loss) income from discontinued operations	\$ (13,228)	\$ 404,912

### Net Income Attributable to Noncontrolling Interests in Consolidated Subsidiaries

Net income attributable to noncontrolling interests in consolidated subsidiaries was \$25,802,000 in the year ended December 31, 2017, compared to \$21,351,000 in the prior year, an increase of \$4,451,000. This increase resulted primarily from higher net income allocated to the noncontrolling interests of our real estate fund investments.

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

Net income attributable to noncontrolling interests in the Operating Partnership was \$10,910,000 in the year ended December 31, 2017, compared to \$53,654,000 in the prior year, a decrease of \$42,744,000. This decrease resulted primarily from lower net income subject to allocation to unitholders.

### Preferred Share Dividends of Vornado Realty Trust

Preferred share dividends were \$65,399,000 in the year ended December 31, 2017, compared to \$75,903,000 in the prior year, a decrease of \$10,504,000. This decrease resulted primarily from the redemption of the 6.875% Series J cumulative redeemable preferred shares on September 1, 2016.

### Preferred Unit Distributions of Vornado Realty L.P.

Preferred unit distributions were \$65,593,000 in the year ended December 31, 2017, compared to \$76,097,000 in the prior year, a decrease of \$10,504,000. This decrease resulted primarily from the redemption of the 6.875% Series J cumulative redeemable preferred units on September 1, 2016.

### Preferred Share/Unit Issuance Costs

In the year ended December 31, 2016, we recognized a \$7,408,000 expense in connection with the write-off of issuance costs upon redeeming all of the outstanding 6.875% Series J cumulative redeemable preferred shares/units on September 1, 2016.

## Results of Operations – Year Ended December 31, 2017 Compared to December 31, 2016 - continued

### Same Store Net Operating Income

Same store NOI represents NOI from operations which are owned by us and in service in both the current and prior year reporting periods. Same store NOI - cash basis is NOI from operations before straight-line rental income and expense, amortization of acquired below and above market leases, net and other non-cash adjustments which are owned by us and in service in both the current and prior year reporting periods. 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 and same store NOI - cash basis should not be considered as an alternative 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 to same store NOI for our New York segment, theMART and 555 California Street for the year ended December 31, 2017 compared to December 31, 2016.

(Amounts in thousands)	<u>New York</u>	<u>theMART</u>	<u>555 California Street</u>
NOI at share for the year ended December 31, 2017	\$ 1,166,065	\$ 102,339	\$ 47,588
Less NOI at share from:			
Acquisitions	(20,027)	164	—
Dispositions	(698)	—	—
Development properties placed into and out of service	816	—	—
Lease termination income, net of straight-line and FAS 141 adjustments	(1,973)	(20)	—
Other non-operating income, net	(2,303)	—	—
Same store NOI at share for the year ended December 31, 2017	<u>\$ 1,141,880</u>	<u>\$ 102,483</u>	<u>\$ 47,588</u>
NOI at share for the year ended December 31, 2016	\$ 1,108,526	\$ 98,498	\$ 45,848
Less NOI at share from:			
Acquisitions	(60)	—	—
Dispositions	(3,107)	—	—
Development properties placed into and out of service	82	—	1,079
Lease termination income (expense), net of straight-line and FAS 141 adjustments	10,559	(157)	(238)
Other non-operating income, net	(3,610)	—	—
Same store NOI at share for the year ended December 31, 2016	<u>\$ 1,112,390</u>	<u>\$ 98,341</u>	<u>\$ 46,689</u>
Increase in same store NOI at share for the year ended December 31, 2017 compared to December 31, 2016	<u>\$ 29,490</u>	<u>\$ 4,142</u>	<u>\$ 899</u>
% increase in same store NOI at share	<u>2.7%</u>	<u>4.2% <sup>(1)</sup></u>	<u>1.9%</u>

(1) The year ended December 31, 2016 includes a \$2,000 reversal of an expense accrued in 2015. Excluding this amount, same store NOI increased by 6.4%.

## Results of Operations – Year Ended December 31, 2017 Compared to December 31, 2016 - continued

### Same Store Net Operating Income - continued

Below are reconciliations of NOI - cash basis to same store NOI - cash basis for our New York segment, theMART, and 555 California Street for the year ended December 31, 2017 compared to December 31, 2016.

(Amounts in thousands)	<u>New York</u>	<u>theMART</u>	<u>555 California Street</u>
NOI at share - cash basis for the year ended December 31, 2017	\$ 1,086,863	\$ 99,242	\$ 45,281
Less NOI at share - cash basis from:			
Acquisitions	(17,217)	164	—
Dispositions	(698)	—	—
Development properties placed into and out of service	814	—	—
Lease termination income	(4,927)	(31)	—
Other non-operating income, net	(3,021)	—	—
Same store NOI at share - cash basis for the year ended December 31, 2017	<u>\$ 1,061,814</u>	<u>\$ 99,375</u>	<u>\$ 45,281</u>
NOI at share - cash basis for the year ended December 31, 2016	\$ 965,287	\$ 92,571	\$ 32,601
Less NOI at share - cash basis from:			
Acquisitions	(13)	—	—
Dispositions	(2,219)	—	—
Development properties placed into and out of service	289	—	1,079
Lease termination income	(7,272)	(248)	(397)
Other non-operating income, net	(2,362)	—	—
Same store NOI at share - cash basis for the year ended December 31, 2016	<u>\$ 953,710</u>	<u>\$ 92,323</u>	<u>\$ 33,283</u>
Increase in same store NOI at share - cash basis for the year ended December 31, 2017 compared to December 31, 2016	<u>\$ 108,104</u>	<u>\$ 7,052</u>	<u>\$ 11,998</u>
% increase in same store NOI at share - cash basis	<u>11.3%</u>	<u>7.6% <sup>(1)</sup></u>	<u>36.0%</u>

(1) The year ended December 31, 2016 includes a \$2,000 reversal of an expense accrued in 2015. Excluding this amount, same store NOI - cash basis increased by 10.0%.

## Results of Operations – Year Ended December 31, 2016 Compared to December 31, 2015

### Revenues

Our revenues, which consist of property rentals, tenant expense reimbursements, and fee and other income, were \$2,003,742,000 in the year ended December 31, 2016 compared to \$1,985,495,000 for the prior year, an increase of \$18,247,000. Below are the details of the increase by segment:

(Amounts in thousands)

(Decrease) increase due to:

	<u>Total</u>	<u>New York</u>	<u>Other</u>
<b>Property rentals:</b>			
Acquisitions, dispositions and other	\$ (33,841)	\$ (33,841) <sup>(1)</sup>	\$ —
Development and redevelopment	2,346	(150)	2,496
Hotel Pennsylvania	(12,837)	(12,837) <sup>(2)</sup>	—
Trade shows	(852)	—	(852)
Same store operations	80,411	77,676	2,735
	<u>35,227</u>	<u>30,848</u>	<u>4,379</u>
<b>Tenant expense reimbursements:</b>			
Acquisitions, dispositions and other	(4,697)	(4,698)	1
Development and redevelopment	1,040	(3)	1,043
Same store operations	6,481	10,170	(3,689)
	<u>2,824</u>	<u>5,469</u>	<u>(2,645)</u>
<b>Fee and other income:</b>			
BMS cleaning fees	(3,455)	(3,233)	(222)
Management and leasing fees	2,009	1,105	904
Lease termination fees	(13,599)	(13,878) <sup>(3)</sup>	279
Other income	(4,759)	(2,862)	(1,897)
	<u>(19,804)</u>	<u>(18,868)</u>	<u>(936)</u>
<b>Total increase in revenues</b>	<u>\$ 18,247</u>	<u>\$ 17,449</u>	<u>\$ 798</u>

(1) Primarily due to (i) \$20,515 from the write-off of New York office straight-line rents recorded in 2016, (ii) \$18,014 from the disposition of 20 Broad Street in 2015 and (iii) \$14,238 of income in 2015 from the acceleration of amortization of acquired below-market lease liabilities at 697-703 Fifth Avenue (St. Regis - retail), partially offset by asset acquisitions.

(2) Average occupancy and revenue per available room were 84.7% and \$113.84, respectively, for 2016 as compared to 90.7% and \$133.69, respectively, for 2015.

(3) Primarily from a lease termination fee received from a tenant at 20 Broad Street in the fourth quarter of 2015.

## Results of Operations – Year Ended December 31, 2016 Compared to December 31, 2015 - continued

### Expenses

Our expenses, which consist primarily of operating, depreciation and amortization, general and administrative expenses and acquisition and transaction related costs, were \$1,424,590,000 in the year ended December 31, 2016 compared to \$1,366,081,000 for the prior year, an increase of \$58,509,000. Below are the details of the increase (decrease) by segment:

(Amounts in thousands)

Increase (decrease) due to:	<u>Total</u>	<u>New York</u>	<u>Other</u>
<b>Operating:</b>			
Acquisitions, dispositions and other	\$ 2,527	\$ 2,527	\$ —
Development and redevelopment	1,389	(99)	1,488
Non-reimbursable expenses, including bad-debt reserves	(2,526)	(2,296)	(230)
Hotel Pennsylvania	322	322	—
Trade shows	456	—	456
BMS expenses	(3,374)	(3,152)	(222)
Same store operations	21,261	25,224	(3,963)
	<u>20,055</u>	<u>22,526</u>	<u>(2,471)</u>
<b>Depreciation and amortization:</b>			
Acquisitions, dispositions and other	3,229	3,229	—
Development and redevelopment	1,025	(296)	1,321
Same store operations	36,966	35,275	1,691
	<u>41,220</u>	<u>38,208</u>	<u>3,012</u>
<b>General and administrative:</b>			
Mark-to-market of deferred compensation plan liability	5,102	—	5,102 <sup>(1)</sup>
Same store operations	(4,808)	838	(5,646) <sup>(2)</sup>
	<u>294</u>	<u>838</u>	<u>(544)</u>
<b>Acquisition and transaction related costs</b>			
	<u>(3,060)</u>	<u>—</u>	<u>(3,060)</u>
<b>Total increase (decrease) in expenses</b>	<u>\$ 58,509</u>	<u>\$ 61,572</u>	<u>\$ (3,063)</u>

(1) This increase in expense is entirely offset by a corresponding decrease in income from the mark-to-market of the deferred compensation plan assets, a component of “interest and other investment income, net” on our consolidated statements of income.

(2) Results primarily from the acceleration of the recognition of compensation expense in 2015 of \$4,542 related to 2012-2014 Out-Performance Plans due to the modification of the vesting criteria of awards such that they fully vest at age 65.

## Results of Operations – Year Ended December 31, 2016 Compared to December 31, 2015 - continued

### Income (Loss) from Partially Owned Entities

Summarized below are the components of income (loss) from partially owned entities for the years ended December 31, 2016 and 2015.

(Amounts in thousands)	Percentage Ownership at December 31, 2016	Year Ended December 31,	
		2016	2015
<b>Equity in Net Income (Loss):</b>			
Partially owned office buildings <sup>(1)</sup>	Various	\$ 5,773	\$ 19,808
Alexander's	32.4%	34,240	31,078
UE	5.4%	5,839	4,394
PREIT	8.0%	(5,213)	(7,450)
Other investments <sup>(2)</sup>	Various	128,309	(57,777)
		<u>\$ 168,948</u>	<u>\$ (9,947)</u>

(1) Includes interests in 280 Park Avenue, 650 Madison Avenue, One Park Avenue, 7 West 34th Street (in 2016 only), 330 Madison Avenue, 512 West 22nd Street and others. In 2015, we recognized our \$12,800 share of a write-off of a below-market lease liability related to a tenant vacating at 650 Madison Avenue.

(2) Includes interests in Independence Plaza, Fashion Centre Mall/Washington Tower, Rosslyn Plaza, 50-70 West 93rd Street, 85 Tenth Avenue, 666 Fifth Avenue Office Condominium, India real estate ventures and others. In 2016, the owner of 85 Tenth Avenue completed a 10-year, 4.55% \$625,000 refinancing of the property and we received net proceeds of \$191,779 in repayment of our existing loans and preferred equity investments. We recognized \$160,843 of income and no tax gain as a result of this transaction. In 2016 and 2015, we recognized net losses of \$41,532 and \$37,495, respectively, from our 666 Fifth Avenue Office Condominium joint venture as a result of our share of depreciation expense and \$13,962 and \$14,806, respectively, of non-cash impairment losses related to India real estate ventures.

### (Loss) Income from Real Estate Fund Investments

Below are the components of the (loss) income from our real estate fund investments for the years ended December 31, 2016 and 2015.

(Amounts in thousands)	For the Year Ended December 31,	
	2016	2015
Net investment income	\$ 17,053	\$ 16,329
Net realized gains on exited investments	14,761	26,036
Previously recorded unrealized gain on exited investments	(14,254)	(23,279)
Net unrealized (loss) gains on held investments	(41,162)	54,995
(Loss) income from real estate fund investments	(23,602)	74,081
Less loss (income) attributable to noncontrolling interests in consolidated subsidiaries	2,560	(40,117)
(Loss) income from real estate fund investments attributable to the Operating Partnership <sup>(1)</sup>	(21,042)	33,964
Less loss (income) attributable to noncontrolling interests in the Operating Partnership	1,270	(2,011)
(Loss) income from real estate fund investments attributable to Vornado	<u>\$ (19,772)</u>	<u>\$ 31,953</u>

(1) Excludes \$3,831 and \$2,939 of management and leasing fees in the years ended December 31, 2016 and 2015, respectively, which are included as a component of "fee and other income" on our consolidated statements of income.

## Results of Operations – Year Ended December 31, 2016 Compared to December 31, 2015 - continued

### Interest and Other Investment Income, net

Interest and other investment income, net, was \$29,548,000 in the year ended December 31, 2016, compared to \$27,240,000 in the year ended December 31, 2015, an increase of \$2,308,000. This increase resulted primarily from an increase in the value of investments in our deferred compensation plan (offset by a corresponding decrease in the liability for plan assets in general and administrative expenses).

### Interest and Debt Expense

Interest and debt expense was \$330,240,000 in the year ended December 31, 2016, compared to \$309,298,000 in the year ended December 31, 2015, an increase of \$20,942,000. This increase was primarily due to (i) \$23,205,000 of higher interest expense from the full year effect of 2015 financings of the St. Regis - retail, 150 West 34th Street, 100 West 33rd Street, and from the \$375,000,000 drawn on our \$750,000,000 delayed draw term loan, (ii) \$8,082,000 of lower capitalized interest, partially offset by (iii) \$13,127,000 of interest savings from the re-financings of 888 7th Avenue and 770 Broadway.

### Net Gains on Disposition of Wholly Owned and Partially Owned Assets

The net gain of \$160,433,000 in year ended December 31, 2016, primarily consists of a \$159,511,000 net gain on sale of our 47% ownership interest in 7 West 34th Street and \$714,000 from the sale of residential condominiums. The net gain of \$149,417,000 in the year ended December 31, 2015 consists of \$142,693,000 net gain on sale of 20 Broad Street and \$6,724,000 from the sale of residential condominiums.

### Income Tax (Expense) Benefit

In the year ended December 31, 2016, we had an income tax expense of \$7,229,000, compared to a benefit of \$85,012,000 in the year ended December 31, 2015, an increase in expense of \$92,241,000. This increase in expense resulted primarily from the prior year reversal of \$90,030,000 of valuation allowances against certain of our deferred tax assets, as we concluded that it was more-likely-than-not that we will generate sufficient taxable income from the sale of 220 Central Park South residential condominium units to realize the deferred tax assets.



## Results of Operations – Year Ended December 31, 2016 Compared to December 31, 2015 - continued

### Income from Discontinued Operations

We have reclassified the revenues and expenses of our former Washington, DC segment which was spun off on July 17, 2017, our strip shopping center and mall business which was spun off to UE on January 15, 2015 and other related retail assets that were sold or are currently held for sale to “(loss) income from discontinued operations” and the related assets and liabilities to “assets related to discontinued operations” and “liabilities related to discontinued operations” for all the periods presented in the accompanying financial statements. The table below sets forth the combined results of assets related to discontinued operations for the years ended December 31, 2016 and 2015.

(Amounts in thousands)	For the Year Ended December 31,	
	2016	2015
Total revenues	\$ 521,084	\$ 558,663
Total expenses	442,032	477,299
	79,052	81,364
Net gain on early extinguishment of debt	487,877	—
Impairment losses	(161,165)	(256)
JBGS spin-off transaction costs	(16,586)	—
Net gain on sale of our 20% interest in Fairfax Square	15,302	—
Net gains on sale of real estate, a lease position and other	5,074	167,801
Loss from partially owned assets	(3,559)	(2,022)
UE spin-off transaction related costs	—	(22,972)
Pretax income from discontinued operations	405,995	223,915
Income tax expense	(1,083)	(404)
Income from discontinued operations	\$ 404,912	\$ 223,511

### Net Income Attributable to Noncontrolling Interests in Consolidated Subsidiaries

Net income attributable to noncontrolling interests in consolidated subsidiaries was \$21,351,000 in the year ended December 31, 2016, compared to \$55,765,000 in the year ended December 31, 2015, a decrease of \$34,414,000. This decrease resulted primarily from lower net income allocated to the noncontrolling interests of our real estate fund investments.

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

Net income attributable to noncontrolling interests in the Operating Partnership was \$53,654,000 in the year ended December 31, 2016, compared to \$43,231,000 in the year ended December 31, 2015, an increase of \$10,423,000. This increase resulted primarily from higher net income subject to allocation to unitholders.

### Preferred Share Dividends of Vornado Realty Trust

Preferred share dividends were \$75,903,000 in the year ended December 31, 2016, compared to \$80,578,000 in the year ended December 31, 2015, a decrease of \$4,675,000. This decrease resulted primarily from the redemption of the 6.875% Series J cumulative redeemable preferred shares on September 1, 2016.

### Preferred Unit Distributions of Vornado Realty L.P.

Preferred unit distributions were \$76,097,000 in the year ended December 31, 2016, compared to \$80,736,000 in the year ended December 31, 2015, a decrease of \$4,639,000. This decrease resulted primarily from the redemption of the 6.875% Series J cumulative redeemable preferred units on September 1, 2016.

### Preferred Share/Unit Issuance Costs

In the year ended December 31, 2016, we recognized a \$7,408,000 expense in connection with the write-off of issuance costs upon redeeming all of the outstanding 6.875% Series J cumulative redeemable preferred shares/units on September 1, 2016.

## Results of Operations – Year Ended December 31, 2016 Compared to December 31, 2015 - continued

### Same Store Net Operating Income

Same store NOI represents NOI from operations which are owned by us and in service in both the current and prior year reporting periods. Same store NOI - cash basis is NOI from operations before straight-line rental income and expense, amortization of acquired below and above market leases, net and other non-cash adjustments which are owned by us and in service in both the current and prior year reporting periods. 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 and same store NOI - cash basis should not be considered as an alternative 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 to same store NOI for our New York segment, theMART and 555 California Street for the years ended December 31, 2016 compared to December 31, 2015.

(Amounts in thousands)	New York	theMART	555 California Street
NOI at share for the year ended December 31, 2016	\$ 1,108,526	\$ 98,498	\$ 45,848
Less NOI at share from:			
Acquisitions	(19,644)	—	—
Dispositions	13	—	—
Development properties placed into and out of service	66	—	—
Lease termination expense (income), net of straight-line and FAS 141 adjustments	10,801	(157)	(238)
Other non-operating income, net	(3,438)	—	—
Same store NOI at share for the year ended December 31, 2016	<u>\$ 1,096,324</u>	<u>\$ 98,341</u>	<u>\$ 45,610</u>
NOI at share for the year ended December 31, 2015	\$ 1,114,969	\$ 85,963	\$ 50,268
Less NOI at share from:			
Acquisitions	(2,827)	—	—
Dispositions	(31,648)	—	—
Development properties placed into and out of service	1,607	—	—
Lease termination (income) expense, net of straight-line and FAS 141 adjustments	(30,493)	274	—
Other non-operating income, net	(21,281)	—	—
Same store NOI at share for the year ended December 31, 2015	<u>\$ 1,030,327</u>	<u>\$ 86,237</u>	<u>\$ 50,268</u>
Increase (decrease) in same store NOI at share for the year ended December 31, 2016 compared to December 31, 2015	<u>\$ 65,997</u>	<u>\$ 12,104</u>	<u>\$ (4,658)</u>
% increase (decrease) in same store NOI at share	<u>6.4%</u>	<u>14.0% <sup>(1)</sup></u>	<u>(9.3)%</u>

(1) The year ended December 31, 2016 includes a \$2,000 reversal of an expense accrued in 2015. Excluding this amount, same store NOI increased by 11.7%.

## Results of Operations – Year Ended December 31, 2016 Compared to December 31, 2015 - continued

### Same Store Net Operating Income - continued

Below are reconciliations of NOI - cash basis to same store NOI - cash basis for our New York segment, theMART and 555 California Street for the year ended December 31, 2016 compared to December 31, 2015.

(Amounts in thousands)	<u>New York</u>	<u>theMART</u>	<u>555 California Street</u>
NOI at share - cash basis for the year ended December 31, 2016	\$ 965,287	\$ 92,571	\$ 32,601
Less NOI at share - cash basis from:			
Acquisitions	(8,683)	—	—
Dispositions	13	—	—
Development properties placed into and out of service	66	—	—
Lease termination income	(7,272)	(248)	(397)
Other non-operating income, net	(2,180)	—	—
Same store NOI at share - cash basis for the year ended December 31, 2016	<u>\$ 947,231</u>	<u>\$ 92,323</u>	<u>\$ 32,204</u>
NOI at share - cash basis for the year ended December 31, 2015	\$ 928,188	\$ 81,867	\$ 36,686
Less NOI at share - cash basis from:			
Acquisitions	(1,185)	—	—
Dispositions	(30,992)	—	—
Development properties placed into and out of service	1,559	—	—
Lease termination (income) expense	(5,800)	274	—
Other non-operating income, net	(18,425)	—	—
Same store NOI at share - cash basis for the year ended December 31, 2015	<u>\$ 873,345</u>	<u>\$ 82,141</u>	<u>\$ 36,686</u>
Increase in same store NOI at share - cash basis for the year ended December 31, 2016 compared to December 31, 2015	<u>\$ 73,886</u>	<u>\$ 10,182</u>	<u>\$ (4,482)</u>
% increase in same store NOI at share - cash basis	<u>8.5%</u>	<u>12.4% <sup>(1)</sup></u>	<u>(12.2)%</u>

(1) The year ended December 31, 2016 includes a \$2,000 reversal of an expense accrued in 2015. Excluding this amount, same store NOI - cash basis increased by 9.9%.

## Supplemental Information

### Net Operating Income by Segment for the Three Months Ended December 31, 2017 and 2016

On December 1, 2016 we were repaid the 85 Tenth Avenue mezzanine loans and we received a 49.9% equity interest in the property. In 2017, our 49.9% equity interest in the property is included in the "New York" segment. In 2016, our investment in 85 Tenth Avenue mezzanine loans was included in the "Other" segment.

On July 17, 2017, we completed the spin-off of our Washington, DC segment. Beginning in the third quarter of 2017, the historical financial results of our former Washington, DC segment are reflected in our consolidated financial statements as discontinued operations for all periods presented and are included in the Other segment. Subsequent to the Washington, DC spin-off, we operate in two segments, New York and Other, which is based on how we manage our business.

We have reclassified our 49.5% interest in 666 Fifth Avenue Office Condominium from "New York" to "Other" in all periods presented because we do not intend to hold this asset on a long-term basis.

NOI represents total revenues less operating expenses. We consider NOI 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, we utilize this measure to make investment decisions as well as to compare the performance of our assets to that of our peers. NOI should not be considered a substitute for net income. NOI may not be comparable to similarly titled measures employed by other companies.

Below is a summary of NOI by segment for the three months ended December 31, 2017 and 2016.

(Amounts in thousands)

	For the Three Months Ended December 31, 2017		
	Total	New York	Other
Total revenues	\$ 536,226	\$ 462,597	\$ 73,629
Operating expenses	225,011	195,421	29,590
NOI - consolidated	311,215	267,176	44,039
Deduct: NOI attributable to noncontrolling interests in consolidated subsidiaries	(16,533)	(11,648)	(4,885)
Add: Our share of NOI from partially owned entities	69,175	48,700	20,475
NOI at share	363,857	304,228	59,629
Non-cash adjustments for straight-line rents, amortization of acquired below-market leases, net and other	(21,579)	(21,441)	(138)
NOI at share - cash basis	<u>\$ 342,278</u>	<u>\$ 282,787</u>	<u>\$ 59,491</u>

(Amounts in thousands)

	For the Three Months Ended December 31, 2016		
	Total	New York	Other
Total revenues	\$ 513,974	\$ 443,910	\$ 70,064
Operating expenses	218,020	182,762	35,258
NOI - consolidated	295,954	261,148	34,806
Deduct: NOI attributable to noncontrolling interests in consolidated subsidiaries	(16,083)	(11,829)	(4,254)
Add: Our share of NOI from partially owned entities	75,142	41,465	33,677
NOI at share	355,013	290,784	64,229
Non-cash adjustments for straight-line rents, amortization of acquired below-market leases, net and other	(36,370)	(29,547)	(6,823)
NOI at share - cash basis	<u>\$ 318,643</u>	<u>\$ 261,237</u>	<u>\$ 57,406</u>

**Supplemental Information - continued**

**Net Operating Income by Segment for the Three Months Ended December 31, 2017 and 2016 - continued**

The elements of our New York and Other NOI for the three months ended December 31, 2017 and 2016 are summarized below.

(Amounts in thousands)	For the Three Months Ended December 31,	
	2017	2016
New York:		
Office	\$ 189,481	\$ 174,609
Retail	90,853	93,117
Residential	5,920	6,158
Alexander's	11,656	11,495
Hotel Pennsylvania	6,318	5,405
Total New York	304,228	290,784
Other:		
theMART	24,249	22,749
555 California Street	12,003	10,578
Other investments	23,377	30,902
Total Other	59,629	64,229
NOI at share	\$ 363,857	\$ 355,013

The elements of our New York and Other NOI - cash basis for the three months ended December 31, 2017 and 2016 are summarized below.

(Amounts in thousands)	For the Three Months Ended December 31,	
	2017	2016
New York:		
Office	\$ 175,787	\$ 157,679
Retail	83,320	80,817
Residential	5,325	5,560
Alexander's	12,004	11,743
Hotel Pennsylvania	6,351	5,438
Total New York	282,787	261,237
Other:		
theMART	24,396	21,660
555 California Street	11,916	8,702
Other investments	23,179	27,044
Total Other	59,491	57,406
NOI at share - cash basis	\$ 342,278	\$ 318,643

**Supplemental Information - continued**

**Reconciliation of Net Income to Net Operating Income for the Three Months Ended December 31, 2017 and 2016**

Below is a reconciliation of net income to NOI for the three months ended December 31, 2017 and 2016.

(Amounts in thousands)	For the Three Months Ended December 31,	
	2017	2016
Net income	\$ 53,551	\$ 704,544
Deduct:		
Our share of income from partially owned entities	(9,622)	(165,056)
Our share of (income) loss from real estate fund investments	(4,889)	52,352
Interest and other investment income, net	(9,993)	(9,427)
Net gains on disposition of wholly owned and partially owned assets	—	(208)
Income from discontinued operations	(1,273)	(509,116)
NOI attributable to noncontrolling interests in consolidated subsidiaries	(16,533)	(16,083)
Add:		
Depreciation and amortization expense	114,166	104,640
General and administrative expense	36,838	36,957
Acquisition and transaction related costs	703	2,754
NOI from partially owned entities	69,175	75,142
Interest and debt expense	93,073	80,206
Income tax expense (benefit)	38,661	(1,692)
NOI at share	363,857	355,013
Non cash adjustments for straight-line rents, amortization of acquired below-market leases, net and other	(21,579)	(36,370)
NOI at share - cash basis	\$ 342,278	\$ 318,643

## Supplemental Information - continued

### Three Months Ended December 31, 2017 Compared to December 31, 2016

#### Same Store Net Operating Income

Same store NOI represents NOI from operations which are owned by us and in service in both the current and prior year reporting periods. Same store NOI - cash basis is NOI from operations before straight-line rental income and expense, amortization of acquired below and above market leases, net and other non-cash adjustments which are owned by us and in service in both the current and prior year reporting periods. 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 and same store NOI - cash basis should not be considered as an alternative 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 to same store NOI for our New York segment, theMART and 555 California Street for the three months ended December 31, 2017 compared to December 31, 2016.

(Amounts in thousands)	New York	theMART	555 California Street
NOI at share for the three months ended December 31, 2017	\$ 304,228	\$ 24,249	\$ 12,003
Less NOI at share from:			
Acquisitions	(4,817)	(46)	—
Dispositions	(79)	—	—
Development properties placed into and out of service	161	—	—
Lease termination income, net of straight-line and FAS 141 adjustments	(984)	—	—
Other non-operating income, net	(12)	—	—
Same store NOI at share for the three months ended December 31, 2017	<u>\$ 298,497</u>	<u>\$ 24,203</u>	<u>\$ 12,003</u>
NOI at share for the three months ended December 31, 2016	\$ 290,784	\$ 22,749	\$ 10,578
Less NOI at share from:			
Acquisitions	36	—	—
Dispositions	(106)	—	—
Development properties placed into and out of service	(280)	—	296
Lease termination expense (income), net of straight-line and FAS 141 adjustments	586	(157)	—
Other non-operating income, net	(679)	—	—
Same store NOI at share for the three months ended December 31, 2016	<u>\$ 290,341</u>	<u>\$ 22,592</u>	<u>\$ 10,874</u>
Increase in same store NOI at share for the three months ended December 31, 2017 compared to December 31, 2016	<u>\$ 8,156</u>	<u>\$ 1,611</u>	<u>\$ 1,129</u>
% increase in same store NOI at share	<u>2.8%</u>	<u>7.1%</u>	<u>10.4%</u>

**Supplemental Information - continued**

**Three Months Ended December 31, 2017 Compared to December 31, 2016 - continued**

Same Store Net Operating Income - continued

Below are reconciliations of NOI - cash basis to same store NOI - cash basis for our New York segment, theMART and 555 California Street for the three months ended December 31, 2017 compared to December 31, 2016.

(Amounts in thousands)	<u>New York</u>	<u>theMART</u>	<u>555 California Street</u>
NOI at share - cash basis for the three months ended December 31, 2017	\$ 282,787	\$ 24,396	\$ 11,916
Less NOI at share - cash basis from:			
Acquisitions	(3,987)	(46)	—
Dispositions	(79)	—	—
Development properties placed into and out of service	160	—	—
Lease termination income	(1,393)	—	—
Other non-operating income, net	(12)	—	—
Same store NOI at share - cash basis for the three months ended December 31, 2017	<u>\$ 277,476</u>	<u>\$ 24,350</u>	<u>\$ 11,916</u>
NOI at share - cash basis for the three months ended December 31, 2016	\$ 261,237	\$ 21,660	\$ 8,702
Less NOI at share - cash basis from:			
Acquisitions	—	—	—
Dispositions	(106)	—	—
Development properties placed into and out of service	(141)	—	296
Lease termination income	(602)	(248)	—
Other non-operating income, net	(1,082)	—	—
Same store NOI at share - cash basis for the three months ended December 31, 2016	<u>\$ 259,306</u>	<u>\$ 21,412</u>	<u>\$ 8,998</u>
Increase in same store NOI at share - cash basis for the three months ended December 31, 2017 compared to December 31, 2016	<u>\$ 18,170</u>	<u>\$ 2,938</u>	<u>\$ 2,918</u>
% increase in same store NOI at share - cash basis	<u>7.0%</u>	<u>13.7%</u>	<u>32.4%</u>



## Supplemental Information - continued

### Net Operating Income by Segment for the Three Months Ended December 31, 2017 and September 30, 2017

On July 17, 2017, we completed the spin-off of our Washington, DC segment. Beginning in the third quarter of 2017, the historical financial results of our former Washington, DC segment are reflected in our consolidated financial statements as discontinued operations for all periods presented and are included in the Other segment. Subsequent to the Washington, DC spin-off, we operate in two segments, New York and Other, which is based on how we manage our business.

We have reclassified our 49.5% interest in 666 Fifth Avenue Office Condominium from "New York" to "Other" in all periods presented because we do not intend to hold this asset on a long-term basis.

NOI represents total revenues less operating expenses. We consider NOI 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, we utilize this measure to make investment decisions as well as to compare the performance of our assets to that of our peers. NOI should not be considered a substitute for net income. NOI may not be comparable to similarly titled measures employed by other companies.

Below is a summary of NOI by segment for the three months ended December 31, 2017 and September 30, 2017.

(Amounts in thousands)

	For the Three Months Ended December 31, 2017		
	Total	New York	Other
Total revenues	\$ 536,226	\$ 462,597	\$ 73,629
Operating expenses	225,011	195,421	29,590
NOI - consolidated	311,215	267,176	44,039
Deduct: NOI attributable to noncontrolling interests in consolidated subsidiaries	(16,533)	(11,648)	(4,885)
Add: Our share of NOI from partially owned entities	69,175	48,700	20,475
NOI at share	363,857	304,228	59,629
Non-cash adjustments for straight-line rents, amortization of acquired below-market leases, net and other	(21,579)	(21,441)	(138)
NOI at share - cash basis	<u>\$ 342,278</u>	<u>\$ 282,787</u>	<u>\$ 59,491</u>

(Amounts in thousands)

	For the Three Months Ended September 30, 2017		
	Total	New York	Other
Total revenues	\$ 528,755	\$ 453,609	\$ 75,146
Operating expenses	225,226	192,430	32,796
NOI - consolidated	303,529	261,179	42,350
Deduct: NOI attributable to noncontrolling interests in consolidated subsidiaries	(16,171)	(11,464)	(4,707)
Add: Our share of NOI from partially owned entities	66,876	48,779	18,097
NOI at share	354,234	298,494	55,740
Non-cash adjustments for straight-line rents, amortization of acquired below-market leases, net and other	(22,307)	(21,092)	(1,215)
NOI at share - cash basis	<u>\$ 331,927</u>	<u>\$ 277,402</u>	<u>\$ 54,525</u>

**Supplemental Information - continued**

**Net Operating Income by Segment for the Three Months Ended December 31, 2017 and September 30, 2017 - continued**

The elements of our New York and Other NOI for the three months ended December 31, 2017 and September 30, 2017 are summarized below.

(Amounts in thousands)	For the Three Months Ended	
	December 31, 2017	September 30, 2017
New York:		
Office	\$ 189,481	\$ 185,169
Retail	90,853	90,088
Residential	5,920	5,981
Alexander's	11,656	11,937
Hotel Pennsylvania	6,318	5,319
Total New York	304,228	298,494
Other:		
theMART	24,249	26,019
555 California Street	12,003	11,519
Other investments	23,377	18,202
Total Other	59,629	55,740
NOI at share	\$ 363,857	\$ 354,234

The elements of our New York and Other NOI - cash basis for the three months ended December 31, 2017 and September 30, 2017 are summarized below.

(Amounts in thousands)	For the Three Months Ended	
	December 31, 2017	September 30, 2017
New York:		
Office	\$ 175,787	\$ 172,741
Retail	83,320	81,612
Residential	5,325	5,417
Alexander's	12,004	12,280
Hotel Pennsylvania	6,351	5,352
Total New York	282,787	277,402
Other:		
theMART	24,396	25,417
555 California Street	11,916	10,889
Other investments	23,179	18,219
Total Other	59,491	54,525
NOI at share - cash basis	\$ 342,278	\$ 331,927

**Supplemental Information - continued**

**Reconciliation of Net Income to Net Operating Income for the Three Months Ended December 31, 2017 and September 30, 2017**

Below is a reconciliation of net income to NOI for the three months ended December 31, 2017 and September 30, 2017.

(Amounts in thousands)

	<b>For the Three Months Ended</b>	
	<b>December 31, 2017</b>	<b>September 30, 2017</b>
Net income (loss)	\$ 53,551	\$ (10,754)
Deduct:		
Our share of (income) loss from partially owned entities	(9,622)	41,801
Our share of (income) loss from real estate fund investments	(4,889)	6,308
Interest and other investment income, net	(9,993)	(9,306)
(Income) loss from discontinued operations	(1,273)	47,930
NOI attributable to noncontrolling interests in consolidated subsidiaries	(16,533)	(16,171)
Add:		
Depreciation and amortization expense	114,166	104,972
General and administrative expense	36,838	36,261
Acquisition and transaction related costs	703	61
NOI from partially owned entities	69,175	66,876
Interest and debt expense	93,073	85,068
Income tax expense	38,661	1,188
NOI at share	<u>363,857</u>	<u>354,234</u>
Non cash adjustments for straight-line rents, amortization of acquired below-market leases, net and other	(21,579)	(22,307)
NOI at share - cash basis	<u>\$ 342,278</u>	<u>\$ 331,927</u>

## Supplemental Information - continued

### Three Months Ended December 31, 2017 Compared to September 30, 2017

#### Same Store Net Operating Income

Same store NOI represents NOI from operations which are owned by us and in service in both the current and prior year reporting periods. Same store NOI - cash basis is NOI from operations before straight-line rental income and expense, amortization of acquired below and above market leases, net and other non-cash adjustments which are owned by us and in service in both the current and prior year reporting periods. 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 and same store NOI - cash basis should not be considered as an alternative 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 to same store NOI for our New York segment, theMART and 555 California Street for the three months ended December 31, 2017 compared to September 30, 2017.

(Amounts in thousands)	New York	theMART	555 California Street
NOI at share for the three months ended December 31, 2017	\$ 304,228	\$ 24,249	\$ 12,003
Less NOI at share from:			
Acquisitions	2	(46)	—
Dispositions	(8)	—	—
Development properties placed into and out of service	161	—	—
Lease termination income, net of straight-line and FAS 141 adjustments	(984)	—	—
Other non-operating income, net	(13)	—	—
Same store NOI at share for the three months ended December 31, 2017	<u>\$ 303,386</u>	<u>\$ 24,203</u>	<u>\$ 12,003</u>
NOI at share for the three months ended September 30, 2017	\$ 298,494	\$ 26,019	\$ 11,519
Less NOI at share from:			
Acquisitions	—	41	—
Dispositions	(15)	—	—
Development properties placed into and out of service	192	—	—
Lease termination income, net of straight-line and FAS 141 adjustments	(185)	—	—
Other non-operating income, net	(584)	—	—
Same store NOI at share for the three months ended September 30, 2017	<u>\$ 297,902</u>	<u>\$ 26,060</u>	<u>\$ 11,519</u>
Increase (decrease) in same store NOI at share for the three months ended December 31, 2017 compared to September 30, 2017	<u>\$ 5,484</u>	<u>\$ (1,857)</u>	<u>\$ 484</u>
% increase (decrease) in same store NOI at share	<u>1.8%</u>	<u>(7.1)% <sup>(1)</sup></u>	<u>4.2%</u>

(1) Excluding tradeshow seasonality, same store NOI increased by 0.3%.

## Supplemental Information - continued

### Three Months Ended December 31, 2017 Compared to September 30, 2017 - continued

#### Same Store Net Operating Income - continued

Below are reconciliations of NOI - cash basis to same store NOI - cash basis for our New York segment, theMART and 555 California Street for the three months ended December 31, 2017 compared to September 30, 2017.

(Amounts in thousands)	New York	theMART	555 California Street
NOI at share - cash basis for the three months ended December 31, 2017	\$ 282,787	\$ 24,396	\$ 11,916
Less NOI at share - cash basis from:			
Acquisitions	2	(46)	—
Dispositions	(8)	—	—
Development properties placed into and out of service	160	—	—
Lease termination income	(1,393)	—	—
Other non-operating income, net	(13)	—	—
Same store NOI at share - cash basis for the three months ended December 31, 2017	<u>\$ 281,535</u>	<u>\$ 24,350</u>	<u>\$ 11,916</u>
NOI at share - cash basis for the three months ended September 30, 2017	\$ 277,402	\$ 25,417	\$ 10,889
Less NOI at share - cash basis from:			
Acquisitions	—	41	—
Dispositions	(15)	—	—
Development properties placed into and out of service	194	—	—
Lease termination income	(285)	—	—
Other non-operating income, net	(584)	—	—
Same store NOI at share - cash basis for the three months ended September 30, 2017	<u>\$ 276,712</u>	<u>\$ 25,458</u>	<u>\$ 10,889</u>
Increase (decrease) in same store NOI at share - cash basis for the three months ended December 31, 2017 compared to September 30, 2017	<u>\$ 4,823</u>	<u>\$ (1,108)</u>	<u>\$ 1,027</u>
% increase (decrease) in same store NOI at share - cash basis	<u>1.7%</u>	<u>(4.4)% <sup>(1)</sup></u>	<u>9.4%</u>

(1) Excluding tradeshow seasonality, same store NOI increased by 3.9%.

## Related Party Transactions

### *Alexander's, Inc.*

We own 32.4% of Alexander's. Steven Roth, the Chairman of Vornado's Board of Trustees and its Chief Executive Officer is also the Chairman of the Board 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 5 - *Investments in Partially Owned Entities* to our consolidated financial statements in this Annual Report on Form 10-K.

### *Urban Edge Properties*

We own 4.5% of UE. In 2017 and 2016, we provided UE with information technology support. UE is providing us with leasing, development and property management services for (i) certain small retail properties that we plan to sell and (ii) our affiliate, Alexander's, Rego retail assets. Fees to UE for servicing the retail assets of Alexander's are similar to the fees that we are receiving from Alexander's as described in Note 5 - *Investments in Partially Owned Entities* to our consolidated financial statements in this Annual Report on Form 10-K.

### *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, are Interstate's two other general partners. As of December 31, 2017, Interstate and its partners beneficially owned an aggregate of approximately 7.2% of the common shares of beneficial interest of Vornado and 26.2% of Alexander's common stock.

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 1 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 \$501,000, \$521,000, and \$541,000 of management fees under the agreement for the years ended December 31, 2017, 2016 and 2015, respectively.

## Liquidity and Capital Resources

Property rental income 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. Other sources of liquidity to fund cash requirements include proceeds from debt financings, including mortgage loans, senior unsecured borrowings, unsecured term loan and unsecured revolving credit facilities; proceeds from the issuance of common and preferred equity securities; and asset sales.

We anticipate that cash flow from continuing operations over the next twelve months 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 and/or equity offerings.

We may from time to time purchase or retire outstanding preferred shares/units and debt 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 17, 2018, Vornado declared a quarterly common dividend of \$0.63 per share (an indicated annual rate of \$2.52 per common share). This dividend, when declared by the Board of Trustees for all of 2018, will require Vornado to pay out approximately \$479,000,000 of cash for common share dividends. In addition, during 2018, Vornado expects to pay approximately \$68,000,000 of cash dividends on outstanding preferred shares and approximately \$32,000,000 of cash distributions to unitholders of the Operating Partnership.

## Liquidity and Capital Resources – continued

### 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, 2017, we are in compliance with all of the financial covenants required by our senior unsecured notes and our unsecured revolving credit facilities.

As of December 31, 2017, we had \$1,817,655,000 of cash and cash equivalents and \$2,491,062,000 of borrowing capacity under our unsecured revolving credit facilities, net of letters of credit of \$8,938,000. A summary of our consolidated debt as of December 31, 2017 and 2016 is presented below.

(Amounts in thousands)	2017		2016	
	December 31, Balance	Weighted Average Interest Rate	December 31, Balance	Weighted Average Interest Rate
Consolidated debt:				
Variable rate	\$ 3,492,133	3.19%	\$ 3,217,763	2.45%
Fixed rate	6,311,706	3.72%	6,329,547	3.65%
Total	9,803,839	3.53%	9,547,310	3.25%
Deferred financing costs, net and other	(74,352)		(100,640)	
Total, net	\$ 9,729,487		\$ 9,446,670	

During 2018 and 2019, \$139,752,000 and \$210,808,000, 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 and commitments at December 31, 2017.

(Amounts in thousands)	Total	Less than 1 Year	1 – 3 Years	3 – 5 Years	Thereafter
Contractual cash obligations (principal and interest <sup>(1)</sup> ):					
Notes and mortgages payable	\$ 9,121,794	\$ 2,281,579	\$ 3,263,813	\$ 2,720,087	\$ 856,315
Operating leases	1,287,568	33,703	69,080	71,614	1,113,171
Purchase obligations, primarily construction commitments	564,573	564,573	—	—	—
Senior unsecured notes due 2025	561,388	15,750	31,500	31,500	482,638
Senior unsecured notes due 2022	480,833	20,000	40,000	420,833	—
Capital lease obligations	360,870	13,508	25,016	25,016	297,330
Unsecured term loan	761,475	761,475	—	—	—
Total contractual cash obligations	\$ 13,138,501	\$ 3,690,588	\$ 3,429,409	\$ 3,269,050	\$ 2,749,454
Commitments:					
Capital commitments to partially owned entities	\$ 41,709	\$ 41,709	\$ —	\$ —	\$ —
Standby letters of credit	8,938	8,938	—	—	—
Total commitments	\$ 50,647	\$ 50,647	\$ —	\$ —	\$ —

(1) Interest on variable rate debt is computed using rates in effect at December 31, 2017.



## Liquidity and Capital Resources – continued

### *Financing Activities and Contractual Obligations – continued*

Details of 2017 financing activities are provided in the “Overview” of Management’s Discussion and Analysis of Financial Conditions and Results of Operations. Details of 2016 financing activities are discussed below.

#### *Unsecured Revolving Credit Facility*

On November 7, 2016, we extended one of our two \$1.25 billion unsecured revolving credit facilities from June 2017 to February 2021 with two six-month extension options. The interest rate on the extended facility was lowered from LIBOR plus 115 basis points to LIBOR plus 100 basis points. The facility fee remains unchanged at 20 basis points.

#### *Secured Debt*

On February 8, 2016, we completed a \$700,000,000 refinancing of 770 Broadway, a 1,158,000 square foot Manhattan office building. The five-year loan is interest only at LIBOR plus 1.75%, which was swapped for four and a half years to a fixed rate of 2.56%. The Company realized net proceeds of approximately \$330,000,000. The property was previously encumbered by a 5.65%, \$353,000,000 mortgage which was scheduled to mature in March 2016.

On May 16, 2016, we completed a \$300,000,000 recourse financing of 7 West 34th Street. The ten-year loan is interest only at a fixed rate of 3.65% and matures in June 2026.

On September 6, 2016, we completed a \$675,000,000 refinancing of the MART, a 3,652,000 square foot commercial building in Chicago. The five-year loan is interest only and has a fixed rate of 2.70%. The Company realized net proceeds of approximately \$124,000,000. The property was previously encumbered by a 5.57%, \$550,000,000 mortgage which was scheduled to mature in December 2016.

On December 2, 2016, we completed a \$400,000,000 refinancing of 350 Park Avenue, a 571,000 square foot Manhattan office building. The ten-year loan is interest only and has a fixed rate of 3.92%. The Company realized net proceeds of approximately \$111,000,000. The property was previously encumbered by a 3.75%, \$284,000,000 mortgage which was scheduled to mature in January 2017.

#### *Preferred Securities*

On September 1, 2016, we redeemed all of the outstanding 6.875% Series J cumulative redeemable preferred shares/units at their redemption price of \$25.00 per share/unit, or \$246,250,000 in the aggregate, plus accrued and unpaid dividends/distributions through the date of redemption. In connection therewith, we expensed \$7,408,000 of issuance costs, which reduced net income attributable to common shareholders and net income attributable to Class A unitholders in the twelve months ended December 31, 2016. These costs had been initially recorded as a reduction of shareholders’ equity and partners’ capital.

## Liquidity and Capital Resources – continued

### Acquisitions and Investments

Details of 2017 acquisition activity is provided in the "Overview" of Management's Discussion and Analysis of Financial Conditions and Results of Operations. Details of 2016 acquisitions and investments are discussed below.

On March 17, 2016, we entered into a joint venture, in which we own a 33.3% interest, which owns a \$150,000,000 mezzanine loan with an interest rate of LIBOR plus 8.88% and an initial maturity date in November 2016, with two three-month extension options. On November 9, 2016, the mezzanine loan was extended to May 2017 with an interest rate of LIBOR plus 9.42% during the extension period. As of December 31, 2016, the joint venture has fully funded its commitments. The joint venture's investment is subordinate to \$350,000,000 of third party debt. We account for our investment in the joint venture under the equity method.

On May 20, 2016, we contributed \$19,650,000 for a 50.0% equity interest in a joint venture that will develop 606 Broadway, a 34,000 square foot office and retail building, located on Houston Street in Manhattan. The development cost of this project is estimated to be approximately \$104,000,000. At closing, the joint venture obtained a \$65,000,000 construction loan, of which approximately \$25,800,000 was outstanding at December 31, 2016. The loan, which bears interest at LIBOR plus 3.00%, matures in May 2019 with two one-year extension options. Because this joint venture is a VIE and we determined we are the primary beneficiary, we consolidate the accounts of this joint venture from the date of our investment.

### Certain Future Cash Requirements

#### Capital Expenditures

The following table summarizes anticipated 2018 capital expenditures.

(Amounts in millions, except square foot data)	Total	New York	theMART	555 California Street
Expenditures to maintain assets	\$ 109.0	\$ 90.0	\$ 15.0	\$ 4.0
Tenant improvements	75.0	58.0	9.0	8.0
Leasing commissions	25.0	22.0	1.0	2.0
Total capital expenditures and leasing commissions	<u>\$ 209.0</u>	<u>\$ 170.0</u>	<u>\$ 25.0</u>	<u>\$ 14.0</u>
Square feet budgeted to be leased (in thousands)		<u>1,000</u>	<u>200</u>	<u>100</u>
Weighted average lease term (years)		<u>10</u>	<u>8</u>	<u>10</u>
Tenant improvements and leasing commissions:				
Per square foot		\$ 80.00	\$ 50.00	\$ 100.00
Per square foot per annum		\$ 8.00	\$ 6.25	\$ 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*

We are constructing a residential condominium tower containing 397,000 salable square feet at 220 Central Park South. The development cost of this project (exclusive of land cost of \$515 million) is estimated to be approximately \$1.4 billion, of which \$890 million has been expended as of December 31, 2017.

We are developing a 173,000 square foot Class A office building, located along the western edge of the High Line at 512 West 22nd Street in the West Chelsea submarket of Manhattan (55.0% interest). The development cost of this project is estimated to be approximately \$130,000,000, of which our share is \$72,000,000. As of December 31, 2017, \$73,890,000 has been expended, of which our share is \$40,640,000.

We are developing a 170,000 square foot office and retail building at 61 Ninth Avenue, located on the southwest corner of Ninth Avenue and 15th Street in the West Chelsea submarket of Manhattan (45.1% interest). The development cost of this project is estimated to be approximately \$152,000,000, of which our share is \$69,000,000. As of December 31, 2017, \$105,281,000 has been expended, of which our share is \$47,482,000.

We are developing a 34,000 square foot office and retail building at 606 Broadway, located on the northeast corner of Broadway and Houston Street in Manhattan (50.0% interest). The venture's development cost of this project is estimated to be approximately \$60,000,000, of which our share is \$30,000,000. As of December 31, 2017, \$34,189,000 has been expended, of which our share is \$17,095,000.

A joint venture in which we have a 50.1% ownership interest is redeveloping the historic Farley Post Office building which will include a new Moynihan Train Hall and approximately 850,000 rentable square feet of commercial space, comprised of approximately 730,000 square feet of office space and approximately 120,000 square feet of retail space. As of December 31, 2017, \$271,641,000 has been expended, of which our share is \$136,092,000. The joint venture has also entered into a development agreement with Empire State Development ("ESD") and a design-build contract with Skanska Moynihan Train Hall Builders. Under the development agreement with ESD, the joint venture is obligated to build the Moynihan Train Hall, with Vornado and Related Companies ("Related") each guaranteeing the joint venture's obligations. Under the design-build agreement, Skanska Moynihan Train Hall Builders is obligated to fulfill all of the joint venture's obligations. The obligations of Skanska Moynihan Train Hall Builders have been bonded by Skanska USA and bear a full guaranty from Skanska AB.

We are redeveloping a 64,000 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 \$46,000,000, of which our share is \$32,000,000. As of December 31, 2017, \$2,720,000 has been expended, of which our share is \$1,904,000.

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

There can be no assurance that any of our development or redevelopment projects will commence, or if commenced, be completed, or completed on schedule or within budget.

## Liquidity and Capital Resources – continued

### *Insurance*

We maintain general liability insurance with limits of \$300,000,000 per occurrence and per property, and 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. Our California properties have earthquake insurance with coverage of \$180,000,000 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 terrorism acts with limits of \$4.0 billion per occurrence and in the aggregate, and \$2.0 billion per occurrence and in the aggregate for terrorism involving nuclear, biological, chemical and radiological (“NBCR”) terrorism events, as defined by Terrorism Risk Insurance Program Reauthorization Act of 2015, which expires in December 2020.

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 \$1,976,000 (\$1,601,000 for 2018) and 17% (18% for 2018) 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.

We continue to monitor the state of the insurance market and the scope and costs of coverage for acts of terrorism. However, we cannot anticipate what coverage will be available on commercially reasonable terms in the future. We are responsible 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 which are non-recourse to us, 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 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.

Generally, our mortgage loans are non-recourse to us. However, 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. As of December 31, 2017, the aggregate dollar amount of these guarantees and master leases is approximately \$668,000,000.

As of December 31, 2017, \$8,938,000 of letters of credit was 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.

In September 2016, our 50.1% joint venture with Related was designated by ESD, an entity of New York State, to redevelop the historic Farley Post Office Building. The joint venture entered into a development agreement with ESD and a design-build contract with Skanska Moynihan Train Hall Builders. Under the development agreement with ESD, the joint venture is obligated to build the Moynihan Train Hall, with Vornado and Related each guaranteeing the joint venture's obligations. Under the design-build agreement, Skanska Moynihan Train Hall Builders is obligated to fulfill all of the joint venture's obligations. The obligations of Skanska Moynihan Train Hall Builders have been bonded by Skanska USA and bear a full guaranty from Skanska AB.

As of December 31, 2017, we expect to fund additional capital to certain of our partially owned entities aggregating approximately \$42,000,000.

As of December 31, 2017, we have construction commitments aggregating approximately \$422,000,000.

## Liquidity and Capital Resources – continued

### *Cash Flows for the Year Ended December 31, 2017*

Our cash and cash equivalents and restricted cash were \$1,914,812,000 at December 31, 2017, a \$315,481,000 increase from the balance at December 31, 2016. Our consolidated outstanding debt, net, was \$9,729,487,000 at December 31, 2017, a \$282,817,000 increase from the balance at December 31, 2016. As of December 31, 2017 and December 31, 2016, \$0 and \$115,630,000, respectively, was outstanding under our revolving credit facilities. During 2018 and 2019, \$139,752,000 and \$210,808,000, respectively, of our outstanding debt matures; we may refinance this maturing debt as it comes due or choose to repay it.

#### Net Cash Provided by Operating Activities

Net cash provided by operating activities of \$860,142,000 was comprised of (i) net income of \$264,128,000, (ii) \$524,166,000 of non-cash adjustments, which include depreciation and amortization expense, amortization of below-market leases, net, the effect of straight-lining of rents, change in allowance for deferred tax assets, equity in net income from partially owned entities, net realized and unrealized losses on real estate fund investments, net gains on sale of real estate and other and net gains on disposition of wholly owned and partially owned assets, (iii) return of capital from real estate fund investments of \$91,606,000 and (iv) distributions of income from partially owned entities of \$82,095,000, partially offset by (v) the net change in operating assets and liabilities of \$101,853,000.

#### Net Cash Used in Investing Activities

Net cash used in investing activities of \$206,317,000 was primarily comprised of (i) \$355,852,000 of development costs and construction in progress, (ii) \$271,308,000 of additions to real estate, (iii) \$40,537,000 of investments in partially owned entities and (iv) \$30,607,000 of acquisitions of real estate and other, partially offset by (v) \$366,155,000 of capital distributions from partially owned entities, (vi) \$115,630,000 of proceeds from the repayment of a loan receivable from JBGS and (vii) \$9,543,000 of proceeds from sales of real estate and related investments.

#### Net Cash Used in Financing Activities

Net cash used in financing activities of Vornado Realty Trust of \$338,344,000 was primarily comprised of (i) \$631,681,000 of repayments of borrowings, (ii) \$496,490,000 of dividends paid on common shares, (iii) \$416,237,000 of cash and cash equivalents and restricted cash included in the spin-off of JBGS, (iv) \$109,697,000 of distributions to noncontrolling interests, (v) \$64,516,000 of dividends paid on preferred shares, (vi) \$12,325,000 of debt issuance costs and (vii) \$3,217,000 of debt prepayment and extinguishment costs, partially offset by (viii) \$1,055,872,000 of proceeds from borrowings, (ix) \$309,609,000 of proceeds from the issuance of preferred shares and (x) \$29,712,000 of proceeds received from exercise of employee share options and other.

Net cash used in financing activities of the Operating Partnership of \$338,344,000 was primarily comprised of (i) \$631,681,000 of repayments of borrowings, (ii) \$496,490,000 of distributions to Vornado, (iii) \$416,237,000 of cash and cash equivalents and restricted cash included in the spin-off of JBGS, (iv) \$109,697,000 of distributions to redeemable security holders and noncontrolling interests in consolidated subsidiaries, (v) \$64,516,000 of distributions to preferred unitholders, (vi) \$12,325,000 of debt issuance costs and (vii) \$3,217,000 of debt prepayment and extinguishment costs, partially offset by (viii) \$1,055,872,000 of proceeds from borrowings, (ix) \$309,609,000 of proceeds from the issuance of preferred units and (x) \$29,712,000 of proceeds received from exercise of Vornado stock options and other.

## Liquidity and Capital Resources – continued

### Capital Expenditures for the Year Ended December 31, 2017

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 capital expenditures, leasing commissions and a reconciliation of total expenditures on an accrual basis to the cash expended in the year ended December 31, 2017.

(Amounts in thousands)	Total	New York	theMART	555 California Street	Other
Expenditures to maintain assets	\$ 100,556	\$ 73,745	\$ 11,725	\$ 7,893	\$ 7,193
Tenant improvements	89,696	42,475	9,423	6,652	31,146
Leasing commissions	30,165	21,183	1,190	2,147	5,645
Non-recurring capital expenditures	80,461	68,977	1,092	6,208	4,184
Total capital expenditures and leasing commissions (accrual basis)	300,878	206,380	23,430	22,900	48,168
Adjustments to reconcile to cash basis:					
Expenditures in the current period applicable to prior periods	153,511	101,500	8,784	17,906	25,321
Expenditures to be made in future periods for the current period	(142,877)	(90,798)	(9,011)	(3,301)	(39,767)
Total capital expenditures and leasing commissions (cash basis)	\$ 311,512	\$ 217,082	\$ 23,203	\$ 37,505	\$ 33,722 <sup>(1)</sup>
Tenant improvements and leasing commissions:					
Per square foot per annum	\$ 9.51	\$ 10.21	\$ 5.13	\$ 10.33	n/a
Percentage of initial rent	11.1%	10.9%	10.8%	11.7%	n/a

(1) Effective July 17, 2017, the date of the spin-off of our Washington, DC segment, capital expenditures and leasing commissions by our former Washington, DC segment have been reclassified to the Other segment. We have reclassified the prior period capital expenditures and leasing commissions to conform to the current period presentation.

### Development and Redevelopment Expenditures for the Year Ended December 31, 2017

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 budgets below include initial leasing costs, which are reflected as non-recurring capital expenditures in the table above.

Below is a summary of development and redevelopment expenditures incurred in the year ended December 31, 2017. These expenditures include interest of \$48,230,000, payroll of \$6,044,000, and other soft costs (primarily architectural and engineering fees, permits, real estate taxes and professional fees) aggregating \$28,197,000, which were capitalized in connection with the development and redevelopment of these projects.

(Amounts in thousands)	Total	New York	theMART	555 California Street	Other
220 Central Park South	\$ 265,791	\$ —	\$ —	\$ —	\$ 265,791
606 Broadway	15,997	15,997	—	—	—
90 Park Avenue	7,523	7,523	—	—	—
Penn Plaza	7,107	7,107	—	—	—
345 Montgomery Street	5,950	—	—	5,950	—
theMART	5,682	—	5,682	—	—
304 Canal Street	3,973	3,973	—	—	—
Other	43,829	8,774	459	6,465	28,131
	\$ 355,852	\$ 43,374	\$ 6,141	\$ 12,415	\$ 293,922

## Liquidity and Capital Resources – continued

### *Cash Flows for the Year Ended December 31, 2016*

Our cash and cash equivalents and restricted cash were \$1,599,331,000 at December 31, 2016, a \$344,184,000 decrease from the balance at December 31, 2015. Our consolidated outstanding debt, net, was \$9,446,670,000 at December 31, 2016, a \$351,000,000 increase from the balance at December 31, 2015.

#### Net Cash Provided by Operating Activities

Cash flows provided by operating activities of \$995,080,000 was comprised of (i) net income of \$981,922,000, (ii) distributions of income from partially owned entities of \$214,800,000, (iii) return of capital from real estate fund investments of \$71,888,000, partially offset by (iv) \$197,568,000 of non-cash adjustments, which include depreciation and amortization expense, net gain on extinguishment of Skyline properties debt, net gains on the disposition of wholly owned and partially owned assets, equity in net income from partially owned entities, real estate impairment losses, the effect of straight-lining of rental income, amortization of below-market leases, net, net realized and unrealized losses on real estate fund investments and net gains on sale of real estate and other, and (v) the net change in operating assets and liabilities of \$75,962,000.

#### Net Cash Used in Investing Activities

Net cash used in investing activities of \$893,110,000 was primarily comprised of (i) \$606,565,000 of development costs and construction in progress, (ii) \$387,545,000 of additions to real estate, (iii) \$127,608,000 of investments in partially owned entities, (iv) \$91,103,000 of acquisitions of real estate and other, (v) \$48,000,000 due to the net deconsolidation of 7 West 34th Street, (vi) \$11,700,000 of investments in loans receivable, and (vii) \$4,379,000 in purchases of marketable securities, partially offset by (viii) \$196,635,000 of capital distributions from partially owned entities, (ix) \$183,173,000 of proceeds from sales of real estate and related investments, and (x) \$3,937,000 of proceeds from the sale of marketable securities.

#### Net Cash Used in Financing Activities

Net cash used in financing activities of Vornado Realty Trust of \$446,154,000 was comprised of (i) \$1,894,990,000 for the repayments of borrowings, (ii) \$475,961,000 of dividends paid on common shares, (iii) \$246,250,000 for the redemption of preferred shares, (iv) \$130,590,000 of distributions to noncontrolling interests, (v) \$80,137,000 of dividends paid on preferred shares, (vi) \$42,157,000 of debt issuance costs, and (vii) \$186,000 for the repurchase of shares related to stock compensation agreements and related tax withholdings and other, partially offset by (viii) \$2,403,898,000 of proceeds from borrowings, (ix) \$11,950,000 of contributions from noncontrolling interests and (x) \$8,269,000 of proceeds received from the exercise of employee share options and other.

Net cash used in financing activities of the Operating Partnership of \$446,154,000 was comprised of (i) \$1,894,990,000 for the repayments of borrowings, (ii) \$475,961,000 of distributions to Vornado, (iii) \$246,250,000 for the redemption of preferred units, (iv) \$130,590,000 of distributions to redeemable security holders and noncontrolling interests in consolidated subsidiaries, (v) \$80,137,000 of distributions to preferred unitholders, (vi) \$42,157,000 of debt issuance costs, and (vii) \$186,000 for the repurchase of Class A units related to equity compensation agreements and related tax withholdings and other, partially offset by (viii) \$2,403,898,000 of proceeds from borrowings, (ix) \$11,950,000 of contributions from noncontrolling interests in consolidated subsidiaries and (x) \$8,269,000 of proceeds received from the exercise of Vornado stock options and other.



## Liquidity and Capital Resources – continued

### Capital Expenditures for the Year Ended December 31, 2016

Below is a summary of capital expenditures, leasing commissions and a reconciliation of total expenditures on an accrual basis to the cash expended in the year ended December 31, 2016.

(Amounts in thousands)	Total	New York	theMART	555 California Street	Other
Expenditures to maintain assets	\$ 114,031	\$ 67,239	\$ 16,343	\$ 5,704	\$ 24,745
Tenant improvements	86,630	63,995	6,722	3,201	12,712
Leasing commissions	38,938	32,475	1,355	1,041	4,067
Non-recurring capital expenditures	55,636	41,322	1,518	3,900	8,896
Total capital expenditures and leasing commissions (accrual basis)	295,235	205,031	25,938	13,846	50,420
Adjustments to reconcile to cash basis:					
Expenditures in the current period applicable to prior periods	268,101	159,144	24,314	12,708	71,935
Expenditures to be made in future periods for the current period	(117,910)	(100,151)	1,654	(3,056)	(16,357)
Total capital expenditures and leasing commissions (cash basis)	\$ 445,426	\$ 264,024	\$ 51,906	\$ 23,498	\$ 105,998 <sup>(1)</sup>
<i>Tenant improvements and leasing commissions:</i>					
<i>Per square foot per annum</i>	\$ 7.79	\$ 7.98	\$ 5.57	\$ 9.08	n/a
<i>Percentage of initial rent</i>	10.0%	9.7%	11.6%	11.8%	n/a

(1) Effective July 17, 2017, the date of the spin-off of our Washington, DC segment, capital expenditures and leasing commissions by our former Washington, DC segment have been reclassified to the Other segment. We have reclassified the prior period capital expenditures and leasing commissions to conform to the current period presentation.

### Development and Redevelopment Expenditures for the Year Ended December 31, 2016

Below is a summary of development and redevelopment expenditures incurred in the year ended December 31, 2016. These expenditures include interest of \$34,097,000, payroll of \$12,516,000, and other soft costs (primarily architectural and engineering fees, permits, real estate taxes and professional fees) aggregating \$46,995,000, which were capitalized in connection with the development and redevelopment of these projects.

(Amounts in thousands)	Total	New York	theMART	555 California Street	Other
220 Central Park South	\$ 303,974	\$ —	\$ —	\$ —	\$ 303,974
640 Fifth Avenue	46,282	46,282	—	—	—
90 Park Avenue	33,308	33,308	—	—	—
theMART	24,788	—	24,788	—	—
Penn Plaza	11,904	11,904	—	—	—
Wayne Towne Center	8,461	—	—	—	8,461
330 West 34th Street	5,492	5,492	—	—	—
Other	172,356	21,217	1,384	9,150	140,605 <sup>(1)</sup>
	\$ 606,565	\$ 118,203	\$ 26,172	\$ 9,150	\$ 453,040

(1) Primarily relates to our former Washington, DC segment which was spun-off on July 17, 2017.

## Liquidity and Capital Resources – continued

### *Cash Flows for the Year Ended December 31, 2015*

Our cash and cash equivalents and restricted cash were \$1,943,515,000 at December 31, 2015, a \$558,526,000 increase over the balance at December 31, 2014. Our consolidated outstanding debt, net, was \$9,095,670,000 at December 31, 2015, a \$1,537,793,000 increase from the balance at December 31, 2014.

#### Net Cash Provided by Operating Activities

Cash flows provided by operating activities of \$672,091,000 was comprised of (i) net income of \$859,430,000, (ii) return of capital from real estate fund investments of \$91,458,000, and (iii) distributions of income from partially owned entities of \$66,819,000, partially offset by (iv) \$81,654,000 of non-cash adjustments, which include depreciation and amortization expense, net gains on the disposition of wholly owned and partially owned assets, the effect of straight-lining of rental income, change in allowance for deferred tax assets, amortization of below-market leases, net, net gains on sale of real estate and other, net realized and unrealized gains on real estate fund investments, equity in net loss from partially owned entities and real estate impairment losses, and (v) the net change in operating assets and liabilities of \$263,962,000 (including \$95,010,000 related to real estate fund investments).

#### Net Cash Used in Investing Activities

Net cash used in investing activities of \$732,424,000 was comprised of (i) \$558,484,000 of acquisitions of real estate and other, (ii) \$475,819,000 of development costs and construction in progress, (iii) \$301,413,000 of additions to real estate, (iv) \$235,439,000 of investments in partially owned entities, and (v) \$1,000,000 of investment in loans receivable, partially offset by (vi) \$786,924,000 of proceeds from sales of real estate and related investments, (vii) \$36,017,000 of capital distributions from partially owned entities, and (viii) \$16,790,000 of proceeds from repayments of mortgage loans receivable.

#### Net Cash Provided by Financing Activities

Net cash provided by financing activities of Vornado Realty Trust of \$618,859,000 was comprised of (i) \$4,468,872,000 of proceeds from borrowings, (ii) \$51,975,000 of contributions from noncontrolling interests, and (iii) \$16,779,000 of proceeds received from exercise of employee share options and other, partially offset by (iv) \$2,936,578,000 for the repayments of borrowings, (v) \$474,751,000 of dividends paid on common shares, (vi) \$234,967,000 of cash and cash equivalents and restricted cash included in the spin-off of UE, (vii) \$102,866,000 of distributions to noncontrolling interests, (viii) \$80,578,000 of dividends paid on preferred shares, (ix) \$66,554,000 of debt issuance costs, (x) \$15,000,000 of debt extinguishment costs and (xi) \$7,473,000 for the repurchase of shares related to stock compensation agreements and related tax withholdings and other.

Net cash provided by financing activities of the Operating Partnership of \$618,859,000 was comprised of (i) \$4,468,872,000 of proceeds from borrowings, (ii) \$51,975,000 of contributions from noncontrolling interests in consolidated subsidiaries, and (iii) \$16,779,000 of proceeds received from exercise of Vornado stock options and other, partially offset by (iv) \$2,936,578,000 for the repayments of borrowings, (v) \$474,751,000 of distributions to Vornado, (vi) \$234,967,000 of cash and cash equivalents and restricted cash included in the spin-off of UE, (vii) \$102,866,000 of distributions to redeemable security holders and noncontrolling interests in consolidated subsidiaries, (viii) \$80,578,000 of distributions to preferred unitholders, (ix) \$66,554,000 of debt issuance costs, (x) \$15,000,000 of debt extinguishment costs and (xi) \$7,473,000 for the repurchase of Class A units related to stock compensation agreements and related tax withholdings and other.

## Liquidity and Capital Resources – continued

### Capital Expenditures for the Year Ended December 31, 2015

Below is a summary of capital expenditures, leasing commissions and a reconciliation of total expenditures on an accrual basis to the cash expended in the year ended December 31, 2015.

(Amounts in thousands)	Total	New York	theMART	555 California Street	Other
Expenditures to maintain assets	\$ 125,215	\$ 57,752	\$ 33,958	\$ 7,916	\$ 25,589
Tenant improvements	153,696	68,869	30,246	3,084	51,497
Leasing commissions	50,081	35,099	7,175	1,046	6,761
Non-recurring capital expenditures	116,875	81,240	411	796	34,428
Total capital expenditures and leasing commissions (accrual basis)	445,867	242,960	71,790	12,842	118,275
Adjustments to reconcile to cash basis:					
Expenditures in the current year applicable to prior periods	156,753	93,105	16,849	10,994	35,805
Expenditures to be made in future periods for the current period	(222,469)	(118,911)	(37,949)	7,618	(73,227)
Total capital expenditures and leasing commissions (cash basis)	\$ 380,151	\$ 217,154	\$ 50,690	\$ 31,454	\$ 80,853 <sup>(1)</sup>
Tenant improvements and leasing commissions:					
Per square foot per annum	\$ 9.10	\$ 10.20	\$ 6.02	\$ 8.13	n/a
Percentage of initial rent	9.8%	8.9%	15.6%	9.7%	n/a

(1) Effective July 17, 2017, the date of the spin-off of our Washington, DC segment, capital expenditures and leasing commissions by our former Washington, DC segment have been reclassified to the Other segment. We have reclassified the prior period capital expenditures and leasing commissions to conform to the current period presentation.

### Development and Redevelopment Expenditures for the Year Ended December 31, 2015

Below is a summary of development and redevelopment expenditures incurred in the year ended December 31, 2015. These expenditures include interest of \$59,305,000, payroll of \$6,077,000, and other soft costs (primarily architectural and engineering fees, permits, real estate taxes and professional fees) aggregating \$90,922,000, which were capitalized in connection with the development and redevelopment of these projects.

(Amounts in thousands)	Total	New York	theMART	555 California Street	Other
220 Central Park South	\$ 158,014	\$ —	\$ —	\$ —	\$ 158,014
330 West 34th Street	32,613	32,613	—	—	—
90 Park Avenue	29,937	29,937	—	—	—
Marriott Marquis Times Square - retail and signage	21,929	21,929	—	—	—
Wayne Towne Center	20,633	—	—	—	20,633
640 Fifth Avenue	17,899	17,899	—	—	—
Penn Plaza	17,701	17,701	—	—	—
Other	192,093	8,100	588	260	183,145 <sup>(1)</sup>
	\$ 490,819	\$ 128,179	\$ 588	\$ 260	\$ 361,792

(1) Primarily relates to our former Washington, DC segment which was spun-off on July 17, 2017.

## Funds From Operations (“FFO”)

### Vornado Realty Trust

FFO is computed in accordance with the definition adopted by the Board of Governors of the National Association of Real Estate Investment Trusts (“NAREIT”). NAREIT defines FFO as GAAP net income or loss adjusted to exclude net gains from sales of depreciated real estate assets, real estate impairment losses, depreciation and amortization expense from real estate assets and other specified non-cash 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.

FFO attributable to common shareholders plus assumed conversions was \$717,805,000, or \$3.75 per diluted share for the year ended December 31, 2017, compared to \$1,457,583,000, or \$7.66 per diluted share for the year ended December 31, 2016. FFO attributable to common shareholders plus assumed conversions was \$153,151,000, or \$0.80 per diluted share for the three months ended December 31, 2017, compared to \$797,734,000, or \$4.20 per diluted share for the three months ended December 31, 2016. 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,		For the Three Months Ended December 31,	
	2017	2016	2017	2016
<b>Reconciliation of our net income to FFO:</b>				
Net income attributable to common shareholders	\$ 162,017	\$ 823,606	\$ 27,319	\$ 651,181
Per diluted share	\$ 0.85	\$ 4.34	\$ 0.14	\$ 3.43
FFO adjustments:				
Depreciation and amortization of real property	\$ 467,966	\$ 531,620	\$ 106,017	\$ 133,389
Net gains on sale of real estate	(3,489)	(177,023)	308	(15,302)
Real estate impairment losses	—	160,700	—	—
Proportionate share of adjustments to equity in net income of partially owned entities to arrive at FFO:				
Depreciation and amortization of real property	137,000	154,795	28,247	37,160
Net gains on sale of real estate	(17,777)	(2,853)	(593)	(12)
Real estate impairment losses	7,692	6,328	145	792
	591,392	673,567	134,124	156,027
Noncontrolling interests' share of above adjustments	(36,728)	(41,267)	(8,310)	(9,495)
FFO adjustments, net	\$ 554,664	\$ 632,300	\$ 125,814	\$ 146,532
FFO attributable to common shareholders	\$ 716,681	\$ 1,455,906	\$ 153,133	\$ 797,713
Convertible preferred share dividends	77	86	18	21
Earnings allocated to Out-Performance Plan units	1,047	1,591	—	—
FFO attributable to common shareholders plus assumed conversions	\$ 717,805	\$ 1,457,583	\$ 153,151	\$ 797,734
Per diluted share	\$ 3.75	\$ 7.66	\$ 0.80	\$ 4.20
<b>Reconciliation of Weighted Average Shares</b>				
Weighted average common shares outstanding	189,526	188,837	189,898	189,013
Effect of dilutive securities:				
Employee stock options and restricted share awards	1,448	1,064	1,122	1,055
Convertible preferred shares	46	42	43	40
Out-Performance Plan units	284	230	—	—
Denominator for FFO per diluted share	191,304	190,173	191,063	190,108

## 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 amounts)

	2017			2016	
	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	\$ 3,492,133	3.19%	\$ 34,921	\$ 3,217,763	2.45%
Fixed rate	6,311,706	3.72%	—	6,329,547	3.65%
	<u>\$ 9,803,839</u>	<u>3.53%</u>	<u>34,921</u>	<u>\$ 9,547,310</u>	<u>3.25%</u>
Pro rata share of debt of non-consolidated entities (non-recourse):					
Variable rate – excluding Toys "R" Us, Inc.	\$ 1,395,001	3.24%	13,950	\$ 1,092,326	2.50%
Variable rate – Toys "R" Us, Inc.	1,269,522	8.20%	12,695	1,162,072	6.05%
Fixed rate - excluding Toys "R" Us, Inc.	2,035,888	4.89%	—	1,969,918	5.15%
Fixed rate - Toys "R" Us, Inc.	587,865	10.31%	—	671,181	9.42%
	<u>\$ 5,288,276</u>	<u>5.85%</u>	<u>26,645</u>	<u>\$ 4,895,497</u>	<u>5.36%</u>
Noncontrolling interests' share of consolidated subsidiaries			(1,456)		
Total change in annual net income attributable to the Operating Partnership			60,110		
Noncontrolling interests' share of the Operating Partnership			(3,727)		
Total change in annual net income attributable to Vornado			<u>\$ 56,383</u>		
Total change in annual net income attributable to the Operating Partnership per diluted Class A unit			<u>\$ 0.30</u>		
Total change in annual net income attributable to Vornado per diluted share			<u>\$ 0.29</u>		

We may 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. As of December 31, 2017, we have an interest rate swap on a \$407,000,000 mortgage loan on Two Penn Plaza that swapped the rate from LIBOR plus 1.65% (3.01% as of December 31, 2017) to a fixed rate of 4.78% through March 2018, an interest rate swap on a \$375,000,000 mortgage loan on 888 Seventh Avenue that swapped the rate from LIBOR plus 1.60% (2.96% as of December 31, 2017) to a fixed rate of 3.15% through December 2020 and an interest rate swap on a \$700,000,000 mortgage loan on 770 Broadway that swapped the rate from LIBOR plus 1.75% (3.15% as of December 31, 2017) to a fixed rate of 2.56% through September 2020.

### 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, 2017, the estimated fair value of our consolidated debt was \$9,822,000,000.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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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, 2017 and 2016, 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, 2017, and the related notes and the schedules 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, 2017 and 2016, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2017, 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, 2017, 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 12, 2018, 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 U.S. 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.

/s/ DELOITTE & TOUCHE LLP

Parsippany, New Jersey  
February 12, 2018

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)

	<u>December 31,</u> <u>2017</u>	<u>December 31,</u> <u>2016</u>
<b>ASSETS</b>		
Real estate, at cost:		
Land	\$ 3,143,648	\$ 3,130,825
Buildings and improvements	9,898,605	9,684,144
Development costs and construction in progress	1,615,101	1,278,941
Leasehold improvements and equipment	98,941	93,910
Total	14,756,295	14,187,820
Less accumulated depreciation and amortization	(2,885,283)	(2,581,514)
Real estate, net	11,871,012	11,606,306
Cash and cash equivalents	1,817,655	1,501,027
Restricted cash	97,157	95,032
Marketable securities	182,752	203,704
Tenant and other receivables, net of allowance for doubtful accounts of \$5,526 and \$6,708	58,700	61,069
Investments in partially owned entities	1,056,829	1,378,254
Real estate fund investments	354,804	462,132
Receivable arising from the straight-lining of rents, net of allowance of \$954 and \$1,913	926,711	885,167
Deferred leasing costs, net of accumulated amortization of \$191,827 and \$170,952	403,492	354,997
Identified intangible assets, net of accumulated amortization of \$150,837 and \$194,422	159,260	189,668
Assets related to discontinued operations	1,357	3,568,613
Other assets	468,205	508,878
	<u>\$ 17,397,934</u>	<u>\$ 20,814,847</u>
<b>LIABILITIES, REDEEMABLE NONCONTROLLING INTERESTS AND EQUITY</b>		
Mortgages payable, net	\$ 8,137,139	\$ 8,113,248
Senior unsecured notes, net	843,614	845,577
Unsecured term loan, net	748,734	372,215
Unsecured revolving credit facilities	—	115,630
Accounts payable and accrued expenses	415,794	397,134
Deferred revenue	227,069	276,276
Deferred compensation plan	109,177	121,183
Liabilities related to discontinued operations	3,620	1,259,443
Preferred shares to be redeemed on January 4 and 11, 2018	455,514	—
Other liabilities	464,635	417,199
Total liabilities	11,405,296	11,917,905
Commitments and contingencies		
Redeemable noncontrolling interests:		
Class A units - 12,528,899 and 12,197,162 units outstanding	979,509	1,273,018
Series D cumulative redeemable preferred units - 177,101 units outstanding	5,428	5,428
Total redeemable noncontrolling interests	984,937	1,278,446
Vornado's shareholders' equity:		
Preferred shares of beneficial interest: no par value per share; authorized 110,000,000 shares; issued and outstanding 36,799,573 and 42,824,829 shares	891,988	1,038,055
Common shares of beneficial interest: \$0.04 par value per share; authorized 250,000,000 shares; issued and outstanding 189,983,858 and 189,100,876 shares	7,577	7,542
Additional capital	7,492,658	7,153,332
Earnings less than distributions	(4,183,253)	(1,419,382)
Accumulated other comprehensive income	128,682	118,972
Total Vornado shareholders' equity	4,337,652	6,898,519
Noncontrolling interests in consolidated subsidiaries	670,049	719,977
Total equity	<u>\$ 5,007,701</u>	<u>\$ 7,618,496</u>
	<u>\$ 17,397,934</u>	<u>\$ 20,814,847</u>

See notes to the consolidated financial statements.



**VORNADO REALTY TRUST**  
**CONSOLIDATED STATEMENTS OF INCOME**

(Amounts in thousands, except per share amounts)

	Year Ended December 31,		
	2017	2016	2015
<b>REVENUES:</b>			
Property rentals	\$ 1,714,952	\$ 1,662,093	\$ 1,626,866
Tenant expense reimbursements	233,424	221,563	218,739
Fee and other income	135,750	120,086	139,890
Total revenues	<u>2,084,126</u>	<u>2,003,742</u>	<u>1,985,495</u>
<b>EXPENSES:</b>			
Operating	886,596	844,566	824,511
Depreciation and amortization	429,389	421,023	379,803
General and administrative	158,999	149,550	149,256
Acquisition and transaction related costs	1,776	9,451	12,511
Total expenses	<u>1,476,760</u>	<u>1,424,590</u>	<u>1,366,081</u>
Operating income	607,366	579,152	619,414
Income (loss) from partially owned entities	15,200	168,948	(9,947)
Income (loss) from real estate fund investments	3,240	(23,602)	74,081
Interest and other investment income, net	37,793	29,548	27,240
Interest and debt expense	(345,654)	(330,240)	(309,298)
Net gains on disposition of wholly owned and partially owned assets	501	160,433	149,417
Income before income taxes	318,446	584,239	550,907
Income tax (expense) benefit	(41,090)	(7,229)	85,012
Income from continuing operations	277,356	577,010	635,919
(Loss) income from discontinued operations	(13,228)	404,912	223,511
Net income	264,128	981,922	859,430
Less net income attributable to noncontrolling interests in:			
Consolidated subsidiaries	(25,802)	(21,351)	(55,765)
Operating Partnership	(10,910)	(53,654)	(43,231)
Net income attributable to Vornado	227,416	906,917	760,434
Preferred share dividends	(65,399)	(75,903)	(80,578)
Preferred share issuance costs (Series J redemption)	—	(7,408)	—
<b>NET INCOME attributable to common shareholders</b>	<u>\$ 162,017</u>	<u>\$ 823,606</u>	<u>\$ 679,856</u>
<b>INCOME PER COMMON SHARE - BASIC:</b>			
Income from continuing operations, net	\$ 0.92	\$ 2.35	\$ 2.49
(Loss) income from discontinued operations, net	(0.07)	2.01	1.12
Net income per common share	<u>\$ 0.85</u>	<u>\$ 4.36</u>	<u>\$ 3.61</u>
Weighted average shares outstanding	<u>189,526</u>	<u>188,837</u>	<u>188,353</u>
<b>INCOME PER COMMON SHARE - DILUTED:</b>			
Income from continuing operations, net	\$ 0.91	\$ 2.34	\$ 2.48
(Loss) income from discontinued operations, net	(0.06)	2.00	1.11
Net income per common share	<u>\$ 0.85</u>	<u>\$ 4.34</u>	<u>\$ 3.59</u>
Weighted average shares outstanding	<u>191,258</u>	<u>190,173</u>	<u>189,564</u>

See notes to consolidated financial statements.

**VORNADO REALTY TRUST**  
**CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME**

(Amounts in thousands)

	<b>Year Ended December 31,</b>		
	<b>2017</b>	<b>2016</b>	<b>2015</b>
Net income	\$ 264,128	\$ 981,922	\$ 859,430
Other comprehensive (loss) income:			
(Reduction) increase in unrealized net gain on available-for-sale securities	(20,951)	52,057	(55,326)
Pro rata share of amounts reclassified from accumulated other comprehensive income of a nonconsolidated subsidiary	14,402	—	—
Pro rata share of other comprehensive income (loss) of nonconsolidated subsidiaries	1,425	(2,739)	(327)
Increase in value of interest rate swaps and other	15,477	27,432	6,441
Comprehensive income	274,481	1,058,672	810,218
Less comprehensive income attributable to noncontrolling interests	(37,356)	(79,704)	(96,130)
Comprehensive income attributable to Vornado	<u>\$ 237,125</u>	<u>\$ 978,968</u>	<u>\$ 714,088</u>

See notes to consolidated financial statements.

**VORNADO REALTY TRUST**  
**CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY**

(Amounts in thousands)

	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					
<b>Balance, December 31, 2016</b>	42,825	\$ 1,038,055	189,101	\$ 7,542	\$ 7,153,332	\$ (1,419,382)	\$ 118,972	\$ 719,977	\$ 7,618,496
Net income attributable to Vornado	—	—	—	—	—	227,416	—	—	227,416
Net income attributable to noncontrolling interests in consolidated subsidiaries	—	—	—	—	—	—	—	25,802	25,802
Dividends on common shares	—	—	—	—	—	(496,490)	—	—	(496,490)
Dividends on preferred shares	—	—	—	—	—	(65,399)	—	—	(65,399)
Common shares issued:									
Upon redemption of Class A units, at redemption value	—	—	403	16	38,731	—	—	—	38,747
Under employees' share option plan	—	—	449	18	28,235	—	—	—	28,253
Under dividend reinvestment plan	—	—	17	1	1,458	—	—	—	1,459
Contributions	—	—	—	—	—	—	—	1,044	1,044
Distributions:									
JBG SMITH Properties	—	—	—	—	—	(2,428,345)	—	—	(2,428,345)
Real estate fund investments	—	—	—	—	—	—	—	(73,850)	(73,850)
Other	—	—	—	—	—	—	—	(2,618)	(2,618)
Conversion of Series A preferred shares to common shares	(5)	(162)	10	—	162	—	—	—	—
Deferred compensation shares and options	—	—	—	—	2,246	(418)	—	—	1,828
Reduction in unrealized net gain on available-for-sale securities	—	—	—	—	—	—	(20,951)	—	(20,951)
Pro rata share of amounts reclassified related to a nonconsolidated subsidiary	—	—	—	—	—	—	14,402	—	14,402
Pro rata share of other comprehensive income of nonconsolidated subsidiaries	—	—	—	—	—	—	1,425	—	1,425
Increase in value of interest rate swaps	—	—	—	—	—	—	15,476	—	15,476
Adjustments to carry redeemable Class A units at redemption value	—	—	—	—	268,494	—	—	—	268,494
Preferred shares issuance	12,780	309,609	—	—	—	—	—	—	309,609
Cumulative redeemable preferred shares called for redemption	(18,800)	(455,514)	—	—	—	—	—	—	(455,514)
Redeemable noncontrolling interests' share of above adjustments	—	—	—	—	—	—	(642)	—	(642)
Other	—	—	4	—	—	(635)	—	(306)	(941)
<b>Balance, December 31, 2017</b>	<b>36,800</b>	<b>\$ 891,988</b>	<b>189,984</b>	<b>\$ 7,577</b>	<b>\$ 7,492,658</b>	<b>\$ (4,183,253)</b>	<b>\$ 128,682</b>	<b>\$ 670,049</b>	<b>\$ 5,007,701</b>

See notes to consolidated financial statements.

**VORNADO REALTY TRUST**  
**CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY – CONTINUED**

(Amounts in thousands)

	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					
<b>Balance, December 31, 2015</b>	52,677	\$ 1,276,954	188,577	\$ 7,521	\$ 7,132,979	\$ (1,766,780)	\$ 46,921	\$ 778,483	\$ 7,476,078
Net income attributable to Vornado	—	—	—	—	—	906,917	—	—	906,917
Net income attributable to noncontrolling interests in consolidated subsidiaries	—	—	—	—	—	—	—	21,351	21,351
Dividends on common shares	—	—	—	—	—	(475,961)	—	—	(475,961)
Dividends on preferred shares	—	—	—	—	—	(75,903)	—	—	(75,903)
Redemption of Series J preferred shares	(9,850)	(238,842)	—	—	—	(7,408)	—	—	(246,250)
Common shares issued:									
Upon redemption of Class A units, at redemption value	—	—	376	15	36,495	—	—	—	36,510
Under employees' share option plan	—	—	123	5	6,820	—	—	—	6,825
Under dividend reinvestment plan	—	—	16	1	1,443	—	—	—	1,444
Contributions	—	—	—	—	—	—	—	19,749	19,749
Distributions:									
Real estate fund investments	—	—	—	—	—	—	—	(62,444)	(62,444)
Other	—	—	—	—	—	—	—	(36,804)	(36,804)
Conversion of Series A preferred shares to common shares	(2)	(56)	3	—	56	—	—	—	—
Deferred compensation shares and options	—	—	7	—	1,788	(186)	—	—	1,602
Increase in unrealized net gain on available-for-sale securities	—	—	—	—	—	—	52,057	—	52,057
Pro rata share of other comprehensive loss of nonconsolidated subsidiaries	—	—	—	—	—	—	(2,739)	—	(2,739)
Increase in value of interest rate swap	—	—	—	—	—	—	27,434	—	27,434
Adjustments to carry redeemable Class A units at redemption value	—	—	—	—	(26,251)	—	—	—	(26,251)
Redeemable noncontrolling interests' share of above adjustments	—	—	—	—	—	—	(4,699)	—	(4,699)
Other	—	(1)	(1)	—	2	(61)	(2)	(358)	(420)
<b>Balance, December 31, 2016</b>	<u>42,825</u>	<u>\$ 1,038,055</u>	<u>189,101</u>	<u>\$ 7,542</u>	<u>\$ 7,153,332</u>	<u>\$ (1,419,382)</u>	<u>\$ 118,972</u>	<u>\$ 719,977</u>	<u>\$ 7,618,496</u>

See notes to consolidated financial statements.

**VORNADO REALTY TRUST**  
**CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY – CONTINUED**

(Amounts in thousands)

	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					
<b>Balance, December 31, 2014</b>	52,679	\$ 1,277,026	187,887	\$ 7,493	\$ 6,873,025	\$ (1,505,385)	\$ 93,267	\$ 743,956	\$ 7,489,382
Net income attributable to Vornado	—	—	—	—	—	760,434	—	—	760,434
Net income attributable to noncontrolling interests in consolidated subsidiaries	—	—	—	—	—	—	—	55,765	55,765
Distribution of Urban Edge Properties	—	—	—	—	—	(464,262)	—	(341)	(464,603)
Dividends on common shares	—	—	—	—	—	(474,751)	—	—	(474,751)
Dividends on preferred shares	—	—	—	—	—	(80,578)	—	—	(80,578)
Common shares issued:									
Upon redemption of Class A units, at redemption value	—	—	452	18	48,212	—	—	—	48,230
Under employees' share option plan	—	—	214	9	15,332	(2,579)	—	—	12,762
Under dividend reinvestment plan	—	—	14	1	1,437	—	—	—	1,438
Contributions:									
Real estate fund investments	—	—	—	—	—	—	—	51,725	51,725
Other	—	—	—	—	—	—	—	250	250
Distributions:									
Real estate fund investments	—	—	—	—	—	—	—	(72,114)	(72,114)
Other	—	—	—	—	—	—	—	(525)	(525)
Conversion of Series A preferred shares to common shares	(2)	(72)	4	1	71	—	—	—	—
Deferred compensation shares and options	—	—	6	1	2,438	(359)	—	—	2,080
Reduction in unrealized net gain on available-for-sale securities	—	—	—	—	—	—	(55,326)	—	(55,326)
Pro rata share of other comprehensive loss of nonconsolidated subsidiaries	—	—	—	—	—	—	(327)	—	(327)
Increase in value of interest rate swap	—	—	—	—	—	—	6,435	—	6,435
Adjustments to carry redeemable Class A units at redemption value	—	—	—	—	192,464	—	—	—	192,464
Redeemable noncontrolling interests' share of above adjustments	—	—	—	—	—	—	2,866	—	2,866
Other	—	—	—	(2)	—	700	6	(233)	471
<b>Balance, December 31, 2015</b>	<u>52,677</u>	<u>\$ 1,276,954</u>	<u>188,577</u>	<u>\$ 7,521</u>	<u>\$ 7,132,979</u>	<u>\$ (1,766,780)</u>	<u>\$ 46,921</u>	<u>\$ 778,483</u>	<u>\$ 7,476,078</u>

See notes to consolidated financial statements.

**VORNADO REALTY TRUST**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**

(Amounts in thousands)

	Year Ended December 31,		
	2017	2016	2015
<b>Cash Flows from Operating Activities:</b>			
Net income	\$ 264,128	\$ 981,922	\$ 859,430
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization (including amortization of deferred financing costs)	529,826	595,270	566,207
Return of capital from real estate fund investments	91,606	71,888	91,458
Distributions of income from partially owned entities	82,095	214,800	66,819
Amortization of below-market leases, net	(46,790)	(53,202)	(79,053)
Straight-lining of rents	(45,792)	(146,787)	(153,668)
Change in allowance for deferred tax assets	34,800	—	(90,030)
Equity in net (income) loss of partially owned entities	(15,635)	(165,389)	11,882
Net realized and unrealized losses (gains) on real estate fund investments	15,267	40,655	(57,752)
Net gains on sale of real estate and other	(3,489)	(5,074)	(65,396)
Net gains on disposition of wholly owned and partially owned assets	(501)	(175,735)	(251,821)
Net gain on extinguishment of Skyline properties debt	—	(487,877)	—
Real estate impairment losses	—	161,165	256
Other non-cash adjustments	56,480	39,406	37,721
Changes in operating assets and liabilities:			
Real estate fund investments	—	—	(95,010)
Tenant and other receivables, net	1,183	(4,271)	8,366
Prepaid assets	(12,292)	(7,893)	(16,836)
Other assets	(79,199)	(76,357)	(112,415)
Accounts payable and accrued expenses	3,760	13,278	(25,231)
Other liabilities	(15,305)	(719)	(22,836)
Net cash provided by operating activities	860,142	995,080	672,091
<b>Cash Flows from Investing Activities:</b>			
Distributions of capital from partially owned entities	366,155	196,635	36,017
Development costs and construction in progress	(355,852)	(606,565)	(475,819)
Additions to real estate	(271,308)	(387,545)	(301,413)
Proceeds from the repayment of JBG SMITH Properties loan receivable	115,630	—	—
Investments in partially owned entities	(40,537)	(127,608)	(235,439)
Acquisitions of real estate and other	(30,607)	(91,103)	(558,484)
Proceeds from sales of real estate and related investments	9,543	183,173	786,924
Proceeds from repayments of mortgage loans receivable	659	45	16,790
Net deconsolidation of 7 West 34th Street	—	(48,000)	—
Investments in loans receivable	—	(11,700)	(1,000)
Purchases of marketable securities	—	(4,379)	—
Proceeds from the sale of marketable securities	—	3,937	—
Net cash used in investing activities	(206,317)	(893,110)	(732,424)

See notes to consolidated financial statements.

**VORNADO REALTY TRUST**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS – CONTINUED**

(Amounts in thousands)

	Year Ended December 31,		
	2017	2016	2015
<b>Cash Flows from Financing Activities:</b>			
Proceeds from borrowings	\$ 1,055,872	\$ 2,403,898	\$ 4,468,872
Repayments of borrowings	(631,681)	(1,894,990)	(2,936,578)
Dividends paid on common shares	(496,490)	(475,961)	(474,751)
Cash and cash equivalents and restricted cash included in the spin-off of JBG SMITH Properties (\$275,000 plus The Bartlett financing proceeds less transaction costs and other mortgage items)	(416,237)	—	—
Proceeds from issuance of preferred shares	309,609	—	—
Distributions to noncontrolling interests	(109,697)	(130,590)	(102,866)
Dividends paid on preferred shares	(64,516)	(80,137)	(80,578)
Proceeds received from exercise of employee share options and other	29,712	8,269	16,779
Debt issuance costs	(12,325)	(42,157)	(66,554)
Debt prepayment and extinguishment costs	(3,217)	—	(15,000)
Contributions from noncontrolling interests	1,044	11,950	51,975
Repurchase of shares related to stock compensation agreements and related tax withholdings and other	(418)	(186)	(7,473)
Redemption of preferred shares	—	(246,250)	—
Cash and cash equivalents and restricted cash included in the spin-off of Urban Edge Properties	—	—	(234,967)
Net cash (used in) provided by financing activities	(338,344)	(446,154)	618,859
Net increase (decrease) in cash and cash equivalents and restricted cash	315,481	(344,184)	558,526
Cash and cash equivalents and restricted cash at beginning of period	1,599,331	1,943,515	1,384,989
Cash and cash equivalents and restricted cash at end of period	<u>\$ 1,914,812</u>	<u>\$ 1,599,331</u>	<u>\$ 1,943,515</u>
<b>Reconciliation of Cash and Cash Equivalents and Restricted Cash:</b>			
Cash and cash equivalents at beginning of period	\$ 1,501,027	\$ 1,835,707	\$ 1,198,477
Restricted cash at beginning of period	95,032	99,943	168,447
Restricted cash included in discontinued operations at beginning of period	3,272	7,865	18,065
Cash and cash equivalents and restricted cash at beginning of period	<u>\$ 1,599,331</u>	<u>\$ 1,943,515</u>	<u>\$ 1,384,989</u>
Cash and cash equivalents at end of period	1,817,655	1,501,027	1,835,707
Restricted cash at end of period	97,157	95,032	99,943
Restricted cash included in discontinued operations at end of period	—	3,272	7,865
Cash and cash equivalents and restricted cash at end of period	<u>\$ 1,914,812</u>	<u>\$ 1,599,331</u>	<u>\$ 1,943,515</u>

See notes to consolidated financial statements.

**VORNADO REALTY TRUST**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS – CONTINUED**

(Amounts in thousands)

	Year Ended December 31,		
	2017	2016	2015
<b>Supplemental Disclosure of Cash Flow Information:</b>			
Cash payments for interest, excluding capitalized interest of \$43,071, \$29,584 and \$48,539	\$ 338,983	\$ 368,762	\$ 376,620
Cash payments for income taxes	\$ 6,727	\$ 9,716	\$ 8,287
<b>Non-Cash Investing and Financing Activities:</b>			
Non-cash distribution to JBG SMITH Properties:			
Assets	\$ 3,432,738	\$ —	\$ —
Liabilities	(1,414,186)	—	—
Equity	(2,018,552)	—	—
Reclassification of Series G and Series I cumulative redeemable preferred shares to liabilities upon call for redemption	455,514	—	—
Adjustments to carry redeemable Class A units at redemption value	268,494	(26,251)	192,464
Loan receivable established upon the spin-off of JBG SMITH Properties	115,630	—	—
Accrued capital expenditures included in accounts payable and accrued expenses	102,976	120,564	122,711
Write-off of fully depreciated assets	(58,810)	(305,679)	(167,250)
(Reduction) increase in unrealized net gain on available-for-sale securities	(20,951)	52,057	(55,326)
Decrease in assets and liabilities resulting from the disposition of Skyline properties:			
Real estate, net	—	(189,284)	—
Mortgage payable, net	—	(690,263)	—
Decrease in assets and liabilities resulting from the deconsolidation of investments that were previously consolidated:			
Real estate, net	—	(122,047)	—
Mortgage payable, net	—	(290,418)	—
Non-cash distribution of Urban Edge Properties:			
Assets	—	—	1,699,289
Liabilities	—	—	(1,469,659)
Equity	—	—	(229,630)
Transfer of interest in real estate to Pennsylvania Real Estate Investment Trust	—	—	(145,313)
Class A units issued in connection with acquisition	—	—	80,000
Financing assumed in acquisition	—	—	62,000

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, 2017 and 2016, 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, 2017, and the related notes and the schedules 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, 2017 and 2016, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2017, 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, 2017, 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 12, 2018, 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 U.S. 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.

/s/ DELOITTE & TOUCHE LLP

Parsippany, New Jersey  
February 12, 2018

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

**VORNADO REALTY L.P.**  
**CONSOLIDATED BALANCE SHEETS**

(Amounts in thousands, except unit amounts)	<b>December 31, 2017</b>	<b>December 31, 2016</b>
<b>ASSETS</b>		
Real estate, at cost:		
Land	\$ 3,143,648	\$ 3,130,825
Buildings and improvements	9,898,605	9,684,144
Development costs and construction in progress	1,615,101	1,278,941
Leasehold improvements and equipment	98,941	93,910
Total	14,756,295	14,187,820
Less accumulated depreciation and amortization	(2,885,283)	(2,581,514)
Real estate, net	11,871,012	11,606,306
Cash and cash equivalents	1,817,655	1,501,027
Restricted cash	97,157	95,032
Marketable securities	182,752	203,704
Tenant and other receivables, net of allowance for doubtful accounts of \$5,526 and \$6,708	58,700	61,069
Investments in partially owned entities	1,056,829	1,378,254
Real estate fund investments	354,804	462,132
Receivable arising from the straight-lining of rents, net of allowance of \$954 and \$1,913	926,711	885,167
Deferred leasing costs, net of accumulated amortization of \$191,827 and \$170,952	403,492	354,997
Identified intangible assets, net of accumulated amortization of \$150,837 and \$194,422	159,260	189,668
Assets related to discontinued operations	1,357	3,568,613
Other assets	468,205	508,878
	<u>\$ 17,397,934</u>	<u>\$ 20,814,847</u>
<b>LIABILITIES, REDEEMABLE PARTNERSHIP UNITS AND EQUITY</b>		
Mortgages payable, net	\$ 8,137,139	\$ 8,113,248
Senior unsecured notes, net	843,614	845,577
Unsecured term loan, net	748,734	372,215
Unsecured revolving credit facilities	—	115,630
Accounts payable and accrued expenses	415,794	397,134
Deferred revenue	227,069	276,276
Deferred compensation plan	109,177	121,183
Liabilities related to discontinued operations	3,620	1,259,443
Preferred units to be redeemed on January 4 and 11, 2018	455,514	—
Other liabilities	464,635	417,199
Total liabilities	11,405,296	11,917,905
Commitments and contingencies		
Redeemable partnership units:		
Class A units - 12,528,899 and 12,197,162 units outstanding	979,509	1,273,018
Series D cumulative redeemable preferred units - 177,101 units outstanding	5,428	5,428
Total redeemable partnership units	984,937	1,278,446
Equity:		
Partners' capital	8,392,223	8,198,929
Earnings less than distributions	(4,183,253)	(1,419,382)
Accumulated other comprehensive income	128,682	118,972
Total Vornado Realty L.P. equity	4,337,652	6,898,519
Noncontrolling interests in consolidated subsidiaries	670,049	719,977
Total equity	<u>5,007,701</u>	<u>7,618,496</u>
	<u>\$ 17,397,934</u>	<u>\$ 20,814,847</u>

See notes to the consolidated financial statements.

**VORNADO REALTY L.P.**  
**CONSOLIDATED STATEMENTS OF INCOME**

(Amounts in thousands, except per unit amounts)

	Year Ended December 31,		
	2017	2016	2015
<b>REVENUES:</b>			
Property rentals	\$ 1,714,952	\$ 1,662,093	\$ 1,626,866
Tenant expense reimbursements	233,424	221,563	218,739
Fee and other income	135,750	120,086	139,890
Total revenues	<u>2,084,126</u>	<u>2,003,742</u>	<u>1,985,495</u>
<b>EXPENSES:</b>			
Operating	886,596	844,566	824,511
Depreciation and amortization	429,389	421,023	379,803
General and administrative	158,999	149,550	149,256
Acquisition and transaction related costs	1,776	9,451	12,511
Total expenses	<u>1,476,760</u>	<u>1,424,590</u>	<u>1,366,081</u>
Operating income	607,366	579,152	619,414
Income (loss) from partially owned entities	15,200	168,948	(9,947)
Income (loss) from real estate fund investments	3,240	(23,602)	74,081
Interest and other investment income, net	37,793	29,548	27,240
Interest and debt expense	(345,654)	(330,240)	(309,298)
Net gains on disposition of wholly owned and partially owned assets	501	160,433	149,417
Income before income taxes	318,446	584,239	550,907
Income tax (expense) benefit	(41,090)	(7,229)	85,012
Income from continuing operations	277,356	577,010	635,919
(Loss) income from discontinued operations	(13,228)	404,912	223,511
Net income	264,128	981,922	859,430
Less net income attributable to noncontrolling interests in consolidated subsidiaries	(25,802)	(21,351)	(55,765)
Net income attributable to Vornado Realty L.P.	238,326	960,571	803,665
Preferred unit distributions	(65,593)	(76,097)	(80,736)
Preferred unit issuance costs (Series J redemption)	—	(7,408)	—
<b>NET INCOME attributable to Class A unitholders</b>	<u>\$ 172,733</u>	<u>\$ 877,066</u>	<u>\$ 722,929</u>
<b>INCOME PER CLASS A UNIT - BASIC:</b>			
Income from continuing operations, net	\$ 0.91	\$ 2.34	\$ 2.49
(Loss) income from discontinued operations, net	(0.07)	2.02	1.12
Net income per Class A unit	<u>\$ 0.84</u>	<u>\$ 4.36</u>	<u>\$ 3.61</u>
Weighted average units outstanding	<u>201,214</u>	<u>200,350</u>	<u>199,309</u>
<b>INCOME PER CLASS A UNIT - DILUTED:</b>			
Income from continuing operations, net	\$ 0.90	\$ 2.32	\$ 2.46
(Loss) income from discontinued operations, net	(0.07)	2.00	1.11
Net income per Class A unit	<u>\$ 0.83</u>	<u>\$ 4.32</u>	<u>\$ 3.57</u>
Weighted average units outstanding	<u>203,300</u>	<u>202,017</u>	<u>201,158</u>

See notes to consolidated financial statements.

**VORNADO REALTY L.P.**  
**CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME**

(Amounts in thousands)

	<b>Year Ended December 31,</b>		
	<b>2017</b>	<b>2016</b>	<b>2015</b>
Net income	\$ 264,128	\$ 981,922	\$ 859,430
Other comprehensive (loss) income:			
(Reduction) increase in unrealized net gain on available-for-sale securities	(20,951)	52,057	(55,326)
Pro rata share of amounts reclassified from accumulated other comprehensive income of a nonconsolidated subsidiary	14,402	—	—
Pro rata share of other comprehensive income (loss) of nonconsolidated subsidiaries	1,425	(2,739)	(327)
Increase in value of interest rate swaps and other	15,477	27,432	6,441
Comprehensive income	274,481	1,058,672	810,218
Less comprehensive income attributable to noncontrolling interests	(25,802)	(21,351)	(55,765)
Comprehensive income attributable to Vornado	<u>\$ 248,679</u>	<u>\$ 1,037,321</u>	<u>\$ 754,453</u>

See notes to consolidated financial statements.

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

(Amounts in thousands)

	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				
<b>Balance, December 31, 2016</b>	42,825	\$ 1,038,055	189,101	\$ 7,160,874	\$ (1,419,382)	\$ 118,972	\$ 719,977	\$ 7,618,496
Net income attributable to Vornado Realty L.P.	—	—	—	—	238,326	—	—	238,326
Net income attributable to redeemable partnership units	—	—	—	—	(10,910)	—	—	(10,910)
Net income attributable to noncontrolling interests in consolidated subsidiaries	—	—	—	—	—	—	25,802	25,802
Distributions to Vornado	—	—	—	—	(496,490)	—	—	(496,490)
Distributions to preferred unitholders	—	—	—	—	(65,399)	—	—	(65,399)
Class A Units issued to Vornado:								
Upon redemption of redeemable Class A units, at redemption value	—	—	403	38,747	—	—	—	38,747
Under Vornado's employees' share option plan	—	—	449	28,253	—	—	—	28,253
Under Vornado's dividend reinvestment plan	—	—	17	1,459	—	—	—	1,459
Contributions	—	—	—	—	—	—	1,044	1,044
Distributions:								
JBG SMITH Properties	—	—	—	—	(2,428,345)	—	—	(2,428,345)
Real estate fund investments	—	—	—	—	—	—	(73,850)	(73,850)
Other	—	—	—	—	—	—	(2,618)	(2,618)
Conversion of Series A preferred units to Class A units	(5)	(162)	10	162	—	—	—	—
Deferred compensation units and options	—	—	—	2,246	(418)	—	—	1,828
Reduction in unrealized net gain on available-for-sale securities	—	—	—	—	—	(20,951)	—	(20,951)
Pro rata share of amounts reclassified related to a nonconsolidated subsidiary	—	—	—	—	—	14,402	—	14,402
Pro rata share of other comprehensive income of nonconsolidated subsidiaries	—	—	—	—	—	1,425	—	1,425
Increase in value of interest rate swaps	—	—	—	—	—	15,476	—	15,476
Adjustments to carry redeemable Class A units at redemption value	—	—	—	268,494	—	—	—	268,494
Preferred units issuance	12,780	309,609	—	—	—	—	—	309,609
Cumulative redeemable preferred units called for redemption	(18,800)	(455,514)	—	—	—	—	—	(455,514)
Redeemable partnership units' share of above adjustments	—	—	—	—	—	(642)	—	(642)
Other	—	—	4	—	(635)	—	(306)	(941)
<b>Balance, December 31, 2017</b>	<u>36,800</u>	<u>\$ 891,988</u>	<u>189,984</u>	<u>\$ 7,500,235</u>	<u>\$ (4,183,253)</u>	<u>\$ 128,682</u>	<u>\$ 670,049</u>	<u>\$ 5,007,701</u>

See notes to consolidated financial statements.

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

(Amounts in thousands)

	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				
<b>Balance, December 31, 2015</b>	52,677	\$ 1,276,954	188,577	\$ 7,140,500	\$ (1,766,780)	\$ 46,921	\$ 778,483	\$ 7,476,078
Net income attributable to Vornado Realty L.P.	—	—	—	—	960,571	—	—	960,571
Net income attributable to redeemable partnership units	—	—	—	—	(53,654)	—	—	(53,654)
Net income attributable to noncontrolling interests in consolidated subsidiaries	—	—	—	—	—	—	21,351	21,351
Distributions to Vornado	—	—	—	—	(475,961)	—	—	(475,961)
Distributions to preferred unitholders	—	—	—	—	(75,903)	—	—	(75,903)
Redemption of Series J preferred units	(9,850)	(238,842)	—	—	(7,408)	—	—	(246,250)
Class A Units issued to Vornado:								
Upon redemption of redeemable Class A units, at redemption value	—	—	376	36,510	—	—	—	36,510
Under Vornado's employees' share option plan	—	—	123	6,825	—	—	—	6,825
Under Vornado's dividend reinvestment plan	—	—	16	1,444	—	—	—	1,444
Contributions	—	—	—	—	—	—	19,749	19,749
Distributions:								
Real estate fund investments	—	—	—	—	—	—	(62,444)	(62,444)
Other	—	—	—	—	—	—	(36,804)	(36,804)
Conversion of Series A preferred units to Class A units	(2)	(56)	3	56	—	—	—	—
Deferred compensation units and options	—	—	7	1,788	(186)	—	—	1,602
Increase in unrealized net gain on available-for-sale securities	—	—	—	—	—	52,057	—	52,057
Pro rata share of other comprehensive loss of unconsolidated subsidiaries	—	—	—	—	—	(2,739)	—	(2,739)
Increase in value of interest rate swap	—	—	—	—	—	27,434	—	27,434
Adjustments to carry redeemable Class A units at redemption value	—	—	—	(26,251)	—	—	—	(26,251)
Redeemable partnership units' share of above adjustments	—	—	—	—	—	(4,699)	—	(4,699)
Other	—	(1)	(1)	2	(61)	(2)	(358)	(420)
<b>Balance, December 31, 2016</b>	<u>42,825</u>	<u>\$ 1,038,055</u>	<u>189,101</u>	<u>\$ 7,160,874</u>	<u>\$ (1,419,382)</u>	<u>\$ 118,972</u>	<u>\$ 719,977</u>	<u>\$ 7,618,496</u>

See notes to consolidated financial statements.

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

(Amounts in thousands)

	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				
<b>Balance, December 31, 2014</b>	52,679	\$ 1,277,026	187,887	\$ 6,880,518	\$ (1,505,385)	\$ 93,267	\$ 743,956	\$ 7,489,382
Net income attributable to Vornado Realty L.P.	—	—	—	—	803,665	—	—	803,665
Net income attributable to redeemable partnership units	—	—	—	—	(43,231)	—	—	(43,231)
Net income attributable to noncontrolling interests in consolidated subsidiaries	—	—	—	—	—	—	55,765	55,765
Distribution of Urban Edge Properties	—	—	—	—	(464,262)	—	(341)	(464,603)
Distributions to Vornado	—	—	—	—	(474,751)	—	—	(474,751)
Distributions to preferred unitholders	—	—	—	—	(80,578)	—	—	(80,578)
Class A Units issued to Vornado:								
Upon redemption of redeemable Class A units, at redemption value	—	—	452	48,230	—	—	—	48,230
Under Vornado's employees' share option plan	—	—	214	15,341	(2,579)	—	—	12,762
Under Vornado's dividend reinvestment plan	—	—	14	1,438	—	—	—	1,438
Contributions:								
Real estate fund investments	—	—	—	—	—	—	51,725	51,725
Other	—	—	—	—	—	—	250	250
Distributions:								
Real estate fund investments	—	—	—	—	—	—	(72,114)	(72,114)
Other	—	—	—	—	—	—	(525)	(525)
Conversion of Series A preferred units to Class A units	(2)	(72)	4	72	—	—	—	—
Deferred compensation units and options	—	—	6	2,439	(359)	—	—	2,080
Reduction in unrealized net gain on available-for-sale securities	—	—	—	—	—	(55,326)	—	(55,326)
Pro rata share of other comprehensive loss of nonconsolidated subsidiaries	—	—	—	—	—	(327)	—	(327)
Increase in value of interest rate swap	—	—	—	—	—	6,435	—	6,435
Adjustments to carry redeemable Class A units at redemption value	—	—	—	192,464	—	—	—	192,464
Redeemable partnership units' share of above adjustments	—	—	—	—	—	2,866	—	2,866
Other	—	—	—	(2)	700	6	(233)	471
<b>Balance, December 31, 2015</b>	<u>52,677</u>	<u>\$ 1,276,954</u>	<u>188,577</u>	<u>\$ 7,140,500</u>	<u>\$ (1,766,780)</u>	<u>\$ 46,921</u>	<u>\$ 778,483</u>	<u>\$ 7,476,078</u>

See notes to consolidated financial statements.

**VORNADO REALTY L.P.**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**

(Amounts in thousands)

	Year Ended December 31,		
	2017	2016	2015
<b>Cash Flows from Operating Activities:</b>			
Net income	\$ 264,128	\$ 981,922	\$ 859,430
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization (including amortization of deferred financing costs)	529,826	595,270	566,207
Return of capital from real estate fund investments	91,606	71,888	91,458
Distributions of income from partially owned entities	82,095	214,800	66,819
Amortization of below-market leases, net	(46,790)	(53,202)	(79,053)
Straight-lining of rents	(45,792)	(146,787)	(153,668)
Change in allowance for deferred tax assets	34,800	—	(90,030)
Equity in net (income) loss of partially owned entities	(15,635)	(165,389)	11,882
Net realized and unrealized losses (gains) on real estate fund investments	15,267	40,655	(57,752)
Net gains on sale of real estate and other	(3,489)	(5,074)	(65,396)
Net gains on disposition of wholly owned and partially owned assets	(501)	(175,735)	(251,821)
Net gain on extinguishment of Skyline properties debt	—	(487,877)	—
Real estate impairment losses	—	161,165	256
Other non-cash adjustments	56,480	39,406	37,721
Changes in operating assets and liabilities:			
Real estate fund investments	—	—	(95,010)
Tenant and other receivables, net	1,183	(4,271)	8,366
Prepaid assets	(12,292)	(7,893)	(16,836)
Other assets	(79,199)	(76,357)	(112,415)
Accounts payable and accrued expenses	3,760	13,278	(25,231)
Other liabilities	(15,305)	(719)	(22,836)
Net cash provided by operating activities	860,142	995,080	672,091
<b>Cash Flows from Investing Activities:</b>			
Distributions of capital from partially owned entities	366,155	196,635	36,017
Development costs and construction in progress	(355,852)	(606,565)	(475,819)
Additions to real estate	(271,308)	(387,545)	(301,413)
Proceeds from the repayment of JBG SMITH Properties loan receivable	115,630	—	—
Investments in partially owned entities	(40,537)	(127,608)	(235,439)
Acquisitions of real estate and other	(30,607)	(91,103)	(558,484)
Proceeds from sales of real estate and related investments	9,543	183,173	786,924
Proceeds from repayments of mortgage loans receivable	659	45	16,790
Net deconsolidation of 7 West 34th Street	—	(48,000)	—
Investments in loans receivable	—	(11,700)	(1,000)
Purchases of marketable securities	—	(4,379)	—
Proceeds from the sale of marketable securities	—	3,937	—
Net cash used in investing activities	(206,317)	(893,110)	(732,424)

See notes to consolidated financial statements.



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

(Amounts in thousands)

	Year Ended December 31,		
	2017	2016	2015
<b>Cash Flows from Financing Activities:</b>			
Proceeds from borrowings	\$ 1,055,872	\$ 2,403,898	\$ 4,468,872
Repayments of borrowings	(631,681)	(1,894,990)	(2,936,578)
Distributions to Vornado	(496,490)	(475,961)	(474,751)
Cash and cash equivalents and restricted cash included in the spin-off of JBG SMITH Properties (\$275,000 plus The Bartlett financing proceeds less transaction costs and other mortgage items)	(416,237)	—	—
Proceeds from issuance of preferred units	309,609	—	—
Distributions to redeemable security holders and noncontrolling interests in consolidated subsidiaries	(109,697)	(130,590)	(102,866)
Distributions to preferred unitholders	(64,516)	(80,137)	(80,578)
Proceeds received from exercise of Vornado stock options and other	29,712	8,269	16,779
Debt issuance costs	(12,325)	(42,157)	(66,554)
Debt prepayment and extinguishment costs	(3,217)	—	(15,000)
Contributions from noncontrolling interests in consolidated subsidiaries	1,044	11,950	51,975
Repurchase of Class A units related to stock compensation agreements and related tax withholdings and other	(418)	(186)	(7,473)
Redemption of preferred units	—	(246,250)	—
Cash and cash equivalents and restricted cash included in the spin-off of Urban Edge Properties	—	—	(234,967)
Net cash (used in) provided by financing activities	<u>(338,344)</u>	<u>(446,154)</u>	<u>618,859</u>
Net increase (decrease) in cash and cash equivalents and restricted cash	315,481	(344,184)	558,526
Cash and cash equivalents and restricted cash at beginning of period	1,599,331	1,943,515	1,384,989
Cash and cash equivalents and restricted cash at end of period	<u>\$ 1,914,812</u>	<u>\$ 1,599,331</u>	<u>\$ 1,943,515</u>
<b>Reconciliation of Cash and Cash Equivalents and Restricted Cash:</b>			
Cash and cash equivalents at beginning of period	\$ 1,501,027	\$ 1,835,707	\$ 1,198,477
Restricted cash at beginning of period	95,032	99,943	168,447
Restricted cash included in discontinued operations at beginning of period	3,272	7,865	18,065
Cash and cash equivalents and restricted cash at beginning of period	<u>\$ 1,599,331</u>	<u>\$ 1,943,515</u>	<u>\$ 1,384,989</u>
Cash and cash equivalents at end of period	1,817,655	1,501,027	1,835,707
Restricted cash at end of period	97,157	95,032	99,943
Restricted cash included in discontinued operations at end of period	—	3,272	7,865
Cash and cash equivalents and restricted cash at end of period	<u>\$ 1,914,812</u>	<u>\$ 1,599,331</u>	<u>\$ 1,943,515</u>

See notes to consolidated financial statements.

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

(Amounts in thousands)

	Year Ended December 31,		
	2017	2016	2015
<b>Supplemental Disclosure of Cash Flow Information:</b>			
Cash payments for interest, excluding capitalized interest of \$43,071, \$29,584 and \$48,539	\$ 338,983	\$ 368,762	\$ 376,620
Cash payments for income taxes	\$ 6,727	\$ 9,716	\$ 8,287
<b>Non-Cash Investing and Financing Activities:</b>			
Non-cash distribution to JBG SMITH Properties:			
Assets	\$ 3,432,738	\$ —	\$ —
Liabilities	(1,414,186)	—	—
Equity	(2,018,552)	—	—
Reclassification of Series G and Series I cumulative redeemable preferred units to liabilities upon call for redemption	455,514	—	—
Adjustments to carry redeemable Class A units at redemption value	268,494	(26,251)	192,464
Loan receivable established upon the spin-off of JBG SMITH Properties	115,630	—	—
Accrued capital expenditures included in accounts payable and accrued expenses	102,976	120,564	122,711
Write-off of fully depreciated assets	(58,810)	(305,679)	(167,250)
(Reduction) increase in unrealized net gain on available-for-sale securities	(20,951)	52,057	(55,326)
Decrease in assets and liabilities resulting from the disposition of Skyline properties:			
Real estate, net	—	(189,284)	—
Mortgage payable, net	—	(690,263)	—
Decrease in assets and liabilities resulting from the deconsolidation of investments that were previously consolidated:			
Real estate, net	—	(122,047)	—
Mortgage payable, net	—	(290,418)	—
Non-cash distribution of Urban Edge Properties:			
Assets	—	—	1,699,289
Liabilities	—	—	(1,469,659)
Equity	—	—	(229,630)
Transfer of interest in real estate to Pennsylvania Real Estate Investment Trust	—	—	(145,313)
Class A units issued in connection with acquisition	—	—	80,000
Financing assumed in acquisition	—	—	62,000

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 is 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 93.5% of the common limited partnership interest in the Operating Partnership as of December 31, 2017. All references to the “Company,” “we,” “us” and “our” mean, collectively, Vornado, the Operating Partnership and those entities/ subsidiaries consolidated by Vornado.

We currently own all or portions of:

**New York:**

- 20.3 million square feet of Manhattan office in 36 properties;
- 2.7 million square feet of Manhattan street retail in 71 properties;
- 2,009 units in twelve residential properties;
- The 1,700 room Hotel Pennsylvania located on Seventh Avenue at 33rd Street in the heart of the Penn Plaza district; and
- 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.

**Other Real Estate and Related 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, known as the Bank of America Center;
- A 25.0% interest in Vornado Capital Partners, our real estate fund. We are the general partner and investment manager of the fund;
- A 32.5% interest in Toys “R” Us, Inc. (“Toys”), which is in Chapter 11 bankruptcy and carried at zero in our consolidated balance sheets; and
- Other real estate and other investments.

## 2. 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.

### *Recently Issued Accounting Literature*

In May 2014, the Financial Accounting Standards Board (“FASB”) issued an update (“ASU 2014-09”) establishing Accounting Standards Codification (“ASC”) Topic 606, *Revenue from Contracts with Customers* (“ASC 606”). ASU 2014-09, as amended by subsequent ASUs on the topic, establishes a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and supersedes most of the existing revenue recognition guidance. This standard, which is effective for interim and annual reporting periods in fiscal years that begin after December 15, 2017, requires an entity to recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services and also requires certain additional disclosures. We adopted this standard effective January 1, 2018 using the modified retrospective approach, which requires applying the new standard to all existing contracts not yet completed as of the effective date and recording a cumulative-effect adjustment to retained earnings as of the beginning of the fiscal year of adoption. We have completed our evaluation of the standard’s impact on our revenue streams. The adoption of this standard is not expected to have a material impact on our consolidated financial statements.

In January 2016, the FASB issued an update (“ASU 2016-01”) *Recognition and Measurement of Financial Assets and Financial Liabilities* to ASC Topic 825, *Financial Instruments*. ASU 2016-01 amends certain aspects of recognition, measurement, presentation and disclosure of financial instruments. ASU 2016-01 is effective for interim and annual reporting periods in fiscal years beginning after December 15, 2017. We adopted this standard effective January 1, 2018 using the modified retrospective approach. While the adoption of this standard requires us to continue to measure “marketable securities” at fair value at each reporting date, the changes in fair value will be recognized in current period earnings as opposed to “other comprehensive income (loss).” As a result, on January 1, 2018 we will record an increase to retained earnings of \$109,553,000 to recognize the unrealized gains previously recorded within “accumulated other comprehensive income”. Subsequent changes in the fair value of our marketable securities will be recorded to “interest and other investment income, net”.

**2. Basis of Presentation and Significant Accounting Policies – continued**

*Recently Issued Accounting Literature - continued*

In February 2016, the FASB issued an update ("ASU 2016-02") to ASC Topic 842, *Leases*, which sets out the principles for the recognition, measurement, presentation and disclosure of leases for both lessees and lessors. ASU 2016-02 requires lessees to apply a dual approach, classifying leases as either finance or operating leases based on the principle of whether or not the lease is effectively a financed purchase. Lessees are required to record a right-of-use asset and a lease liability for all leases with a term greater than 12 months. Leases with a term of 12 months or less will be accounted for similar to existing guidance for operating leases. Lessees will recognize expense based on the effective interest method for finance leases or on a straight-line basis for operating leases. The accounting applied by the lessor is largely unchanged from that applied under the existing lease standard. We are currently evaluating the overall impact of the adoption of ASU 2016-02 on our consolidated financial statements and believe that the standard will more significantly impact the accounting for leases in which we are a lessee. We have a number of ground leases for which we will be required to record a right-of-use asset and lease liability equal to the present value of the remaining minimum lease payments, and will continue to recognize expense on a straight-line basis upon adoption of this standard. Under ASU 2016-02, initial direct costs for both lessees and lessors would include only those costs that are incremental to the arrangement and would not have been incurred if the lease had not been obtained. As a result, we may no longer be able to capitalize internal leasing costs and instead may be required to expense these costs as incurred. ASU 2016-02 is effective for interim and annual reporting periods in fiscal years that begin after December 15, 2018, with early adoption permitted. We will adopt this standard effective January 1, 2019 using the modified retrospective approach and will elect to use the practical expedients provided by this standard.

In March 2016, the FASB issued an update ("ASU 2016-09") *Improvements to Employee Share-Based Payment Accounting* to ASC Topic 718, *Compensation - Stock Compensation*. ASU 2016-09 amends several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. ASU 2016-09 was effective for interim and annual reporting periods in fiscal years beginning after December 15, 2016. The adoption of this update as of January 1, 2017 did not have a material impact on our consolidated financial statements.

In August 2016, the FASB issued an update ("ASU 2016-15") *Classification of Certain Cash Receipts and Cash Payments* to ASC Topic 230, *Statement of Cash Flows*. ASU 2016-15 clarifies guidance on the classification of certain cash receipts and payments in the statement of cash flows to reduce diversity in practice with respect to (i) debt prepayment or debt extinguishment costs, (ii) settlement of zero-coupon debt instruments or other debt instruments with coupon interest rates that are insignificant in relation to the effective interest rate of the borrowing, (iii) contingent consideration payments made after a business combination, (iv) proceeds from the settlement of insurance claims, (v) proceeds from the settlement of corporate-owned life insurance policies, including bank-owned life insurance policies, (vi) distributions received from equity method investees, (vii) beneficial interests in securitization transactions, and (viii) separately identifiable cash flows and application of the predominance principle. ASU 2016-15 is effective for interim and annual reporting periods in fiscal years beginning after December 15, 2017, with early adoption permitted. We elected to early adopt ASU 2016-15 effective January 1, 2017, with retrospective application to our consolidated statements of cash flows. The adoption of ASU 2016-15 impacted our classification of distributions received from equity method investees and debt extinguishment costs. We selected the nature of earnings approach for classifying distributions. Under this approach, the distributions from equity method investees are classified on the basis of the nature of the activity of the investee that generated the distribution. The retrospective application of ASU 2016-15 resulted in (i) the reclassification of certain distributions between distributions of income from partially owned entities and distributions of capital from partially owned entities, and (ii) the reclassification of debt extinguishment costs as a financing cash outflow, which reduced net cash provided by operating activities and net cash used in investing activities by \$2,668,000 for the year ended December 31, 2016 and increased net cash provided by operating activities by \$1,801,000, reduced net cash used in investing activities by \$13,199,000 and reduced net cash provided by financing activities by \$15,000,000 for the year ended December 31, 2015.

In November 2016, the FASB issued an update ("ASU 2016-18") *Restricted Cash* to ASC Topic 230, *Statement of Cash Flows*. ASU 2016-18 requires that a statement of cash flows explain the change during the period in the total of cash, cash equivalents and amounts generally described as restricted cash or restricted cash equivalents. Restricted cash and restricted cash equivalents will be included with cash and cash equivalents when reconciling the beginning of period and end of period balances on the statement of cash flows upon adoption of this standard. ASU 2016-18 is effective for interim and annual reporting periods in fiscal years beginning after December 15, 2017, with early adoption permitted. We elected to early adopt ASU 2016-18 effective January 1, 2017, with retrospective application to our consolidated statements of cash flows. Accordingly, the consolidated statements of cash flows present a reconciliation of the changes in cash and cash equivalents and restricted cash. Restricted cash primarily 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 for debt service, real estate taxes, property insurance and capital improvements.

**2. Basis of Presentation and Significant Accounting Policies – continued**

*Recently Issued Accounting Literature - continued*

In February 2017, the FASB issued an update (“ASU 2017-05”) *Clarifying the Scope of Asset Derecognition Guidance and Accounting for Partial Sales of Nonfinancial Assets* to ASC Subtopic 610-20, *Other Income-Gains and Losses from the Derecognition of Nonfinancial Assets*. ASU 2017-05 clarifies the scope of recently established guidance on nonfinancial asset derecognition, as well as the accounting for partial sales of nonfinancial assets. This update conforms the derecognition guidance on nonfinancial assets with the model for transactions in ASC 606. ASU 2017-05 is effective for interim and annual reporting periods in fiscal years beginning after December 15, 2017. The adoption of this standard on January 1, 2018 is not expected to have an impact on our consolidated financial statements.

In May 2017, the FASB issued an update (“ASU 2017-09”) *Scope of Modification Accounting* to ASC 718. ASU 2017-09 provides guidance about which changes to the terms and conditions of a share-based payment award require an entity to apply modification accounting in ASC 718. ASU 2017-09 is effective for interim and annual reporting periods in fiscal years beginning after December 15, 2017. The adoption of this standard on January 1, 2018 is not expected to have an impact on our consolidated financial statements.

In August 2017, the FASB issued an update (“ASU 2017-12”) *Targeted Improvements to Accounting for Hedging Activities* to ASC Topic 815, *Derivatives and Hedging* (“ASC 815”). ASU 2017-12 amends the hedge accounting recognition and presentation requirements in ASC 815. The update is intended to more closely align hedge accounting with companies’ risk management strategies, simplify the application of hedge accounting and increase transparency as to the scope and results of hedge programs. ASU 2017-12 is effective for interim and annual reporting periods in fiscal years beginning after December 15, 2018, with early adoption permitted. We are currently evaluating the impact of the adoption of ASU 2017-12 on our consolidated financial statements, but do not believe the adoption of this standard will have a material impact on our consolidated financial statements.

2. Basis of Presentation and Significant Accounting Policies – continued

*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 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. Additions to real estate include interest and debt expense capitalized during construction of \$48,231,000 and \$30,343,000 for the years ended December 31, 2017 and 2016, respectively.

Upon the acquisition of real estate that meets the criteria of a business under ASC Topic 805, *Business Combinations* (“ASC 805”), 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 record acquired intangible assets (including acquired above-market leases, acquired in-place leases and tenant relationships) and acquired intangible liabilities (including below-market leases) at their estimated fair value separate and apart from goodwill. 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 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 projected 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. The evaluation of anticipated cash flows is subjective and is based, in part, on assumptions regarding future occupancy, rental rates and capital requirements that could differ materially from actual results. Plans to hold properties over longer periods decrease the likelihood of recording impairment losses.

2. **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 whether the entity is a variable interest entity (“VIE”) and whether we are the primary beneficiary. 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 entity is not considered a VIE and 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 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 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 and available information at the time the analyses are prepared. In the years ended December 31, 2017, 2016 and 2015, we recognized non-cash impairment losses on investments in partially owned entities aggregating \$44,465,000, \$20,290,000 and \$21,260,000, respectively.

**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 (“CDARS”).

**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 for debt service, real estate taxes, property insurance and capital improvements.

**Allowance for Doubtful Accounts:** We periodically evaluate the collectability of amounts due from tenants and maintain an allowance for doubtful accounts for estimated losses resulting from the inability of tenants to make required payments under the lease agreements. We also maintain an allowance for receivables arising from the straight-lining of rents. These receivables arise from earnings recognized in excess of amounts currently due under the lease agreements. Management exercises judgment in establishing these allowances and considers payment history and current credit status in developing these estimates. As of December 31, 2017 and 2016, we had \$5,526,000 and \$6,708,000, respectively, in allowances for doubtful accounts. In addition, as of December 31, 2017 and 2016, we had \$954,000 and \$1,913,000, respectively, in allowances for receivables arising from the straight-lining of rents.



## 2. Basis of Presentation and Significant Accounting Policies – continued

### *Significant Accounting Policies - continued*

**Deferred Charges:** Direct financing costs are deferred and amortized over the terms of the related agreements as a component of interest expense. Direct 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.

**Revenue Recognition:** We have the following revenue sources and revenue recognition policies:

- **Base Rent** — income arising from tenant leases. These rents are recognized over the non-cancelable term of the related leases on a straight-line basis which includes the effects of rent steps and rent abatements under the leases. We commence rental revenue recognition when the tenant takes possession of the leased space and the leased space is substantially ready for its intended use. In addition, in circumstances where we provide a tenant improvement allowance for improvements that are owned by the tenant, we recognize the allowance as a reduction of rental revenue on a straight-line basis over the term of the lease.
- **Percentage Rent** — income arising from retail tenant leases that is contingent upon tenant sales exceeding defined thresholds. These rents are recognized only after the contingency has been removed (i.e., when tenant sales thresholds have been achieved).
- **Hotel Revenue** — income arising from the operation of the Hotel Pennsylvania which consists of rooms revenue, food and beverage revenue, and banquet revenue. Income is recognized when rooms are occupied. Food and beverage and banquet revenue are recognized when the services have been rendered.
- **Trade Shows Revenue** — income arising from the operation of trade shows, including rentals of booths. This revenue is recognized when the trade shows have occurred.
- **Expense Reimbursements** — revenue arising from tenant leases which provide for the recovery of all or a portion of the operating expenses and real estate taxes of the respective property. This revenue is recognized in the same periods as the expenses are incurred.
- **Management, Leasing and Other Fees** — income arising from contractual agreements with third parties or with partially owned entities. This revenue is recognized as the related services are performed under the respective agreements.

**Derivative Instruments and Hedging Activities:** ASC 815, *Derivatives and Hedging*, as amended, establishes accounting and reporting standards for derivative instruments, including certain derivative instruments embedded in other contracts, and for hedging activities. As of December 31, 2017 and 2016, our derivative instruments consisted of three interest rate swaps. We record all derivatives on the balance sheet at fair value. The accounting for changes in the fair value of derivatives depends on the intended use of the derivative and the resulting designation. Derivatives used to hedge the exposure to changes in the fair value of an asset, liability, or firm commitment attributable to a particular risk, such as interest rate risk, are considered fair value hedges. Derivatives used to hedge the exposure to variability in expected future cash flows, or other types of forecasted transactions, are considered cash flow hedges.

For derivatives designated as fair value hedges, changes in the fair value of the derivative and the hedged item related to the hedged risk are recognized in earnings. For derivatives designated as cash flow hedges, the effective portion of changes in the fair value of the derivative is initially reported in other comprehensive income (loss) (outside of earnings) and subsequently reclassified to earnings when the hedged transaction affects earnings, and the ineffective portion of changes in the fair value of the derivative is recognized directly in earnings. We assess the effectiveness of each hedging relationship by comparing the changes in fair value or cash flows of the derivative hedging instrument with the changes in fair value or cash flows of the designated hedged item or transaction. For derivatives not designated as hedges, changes in fair value are recognized in earnings.

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

**2. 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 taxable income and therefore, no provision for Federal income taxes is required. Dividends distributed for the year ended December 31, 2017, were characterized, for federal income tax purposes, as ordinary income. Dividends distributed for the year ended December 31, 2016, were characterized, for federal income tax purposes, as 83.5% ordinary income and 16.5% long-term capital gain. Dividends distributed for the year ended December 31, 2015, were characterized, for federal income tax purposes, as long-term capital gain income.

The Operating Partnership's partners are required to report their respective share of taxable income on their individual tax returns. 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 taxable REIT subsidiaries had a combined current income tax expense of approximately \$7,202,000, \$7,946,000 and \$8,322,000 for the years ended December 31, 2017, 2016 and 2015, respectively, and have immaterial differences between the financial reporting and tax basis of assets and liabilities.

At December 31, 2017 and 2016, our taxable REIT subsidiaries had deferred tax assets related to net operating loss carryforwards of \$66,535,000 and \$98,013,000, respectively, which are included in "other assets" on our consolidated balance sheets. Prior to the quarter ended June 30, 2015, there was a full valuation allowance against these deferred tax assets because we had not determined that it is more-likely-than-not that we would use the net operating loss carryforwards to offset future taxable income. In our quarter ended June 30, 2015, based upon residential condominium unit sales, among other factors, we concluded that it was more-likely-than-not that we will generate sufficient taxable income to realize these deferred tax assets. Accordingly, in the year ended December 31, 2015, we reversed \$90,030,000 of the allowance for deferred tax assets and recognized an income tax benefit in our consolidated statements of income. On December 22, 2017, the Tax Cuts and Jobs Act (the "Act") was signed into law. The Act includes numerous changes in existing tax law, including a permanent reduction in the federal corporate income tax rate from 35% to 21%. The rate reduction takes effect on January 1, 2018. As a result of the reduction of federal corporate income tax rates, we decreased the value of our taxable REIT subsidiaries' deferred tax assets which resulted in additional income tax expense of \$34,800,000 in the year ended December 31, 2017.

The following table reconciles net income attributable to Vornado common shareholders to estimated taxable income for the years ended December 31, 2017, 2016 and 2015.

	For the Year Ended December 31,		
	2017	2016	2015
Net income attributable to Vornado common shareholders	\$ 162,017	\$ 823,606	\$ 679,856
Book to tax differences (unaudited):			
Depreciation and amortization	213,083	302,092	227,297
Impairment losses	49,062	170,332	20,281
Straight-line rent adjustments	(36,696)	(137,941)	(144,727)
Tax expense related to the reduction of the value of our taxable REIT subsidiaries' deferred tax assets	32,663	—	(84,862)
Sale of real estate and other capital transactions	11,991	(39,109)	320,326
Vornado stock options	(6,383)	(3,593)	(8,278)
Earnings of partially owned entities	(3,054)	(149,094)	(5,299)
Net gain on extinguishment of Skyline properties debt	—	(457,970)	—
Tangible property regulations	—	—	(575,618) <sup>(1)</sup>
Other, net	25,057	9,121	58,748
Estimated taxable income (unaudited)	<u>\$ 447,740</u>	<u>\$ 517,444</u>	<u>\$ 487,724</u>

(1) Represents one-time deductions pursuant to the implementation of the tangible property regulations issued by the Internal Revenue Service.

The net basis of Vornado's assets and liabilities for tax reporting purposes is approximately \$2.0 billion lower than the amounts reported in Vornado's consolidated balance sheet at December 31, 2017.

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

**3. 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. On January 29, 2018, by unanimous consent of the Fund's limited partners, the Fund's term was extended to February 2023. The Fund had a three-year investment period that ended in July 2013. During the investment period, the Fund was our exclusive investment vehicle for all investments that fit within its investment parameters, as defined. 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 also 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.

At December 31, 2017, we had five real estate fund investments through the Fund and the Crowne Plaza Joint Venture with an aggregate fair value of \$354,804,000, or \$98,189,000 in excess of cost, and had remaining unfunded commitments of \$117,872,000, of which our share was \$34,502,000. At December 31, 2016, we had six real estate fund investments with an aggregate fair value of \$462,132,000.

Below is a summary of (loss) income from the Fund and the Crowne Plaza Joint Venture for the years ended December 31, 2017, 2016 and 2015.

	For the Year Ended December 31,		
	2017	2016	2015
(Amounts in thousands)			
Net investment income	\$ 18,507	\$ 17,053	\$ 16,329
Net realized gains on exited investments	36,078	14,761	26,036
Previously recorded unrealized gain on exited investments	(25,538)	(14,254)	(23,279)
Net unrealized (loss) gain on held investments	(25,807)	(41,162)	54,995
Income (loss) from real estate fund investments	3,240	(23,602)	74,081
Less (income) loss attributable to noncontrolling interests in consolidated subsidiaries	(14,044)	2,560	(40,117)
(Loss) income from real estate fund investments attributable to the Operating Partnership <sup>(1)</sup>	(10,804)	(21,042)	33,964
Less loss (income) attributable to noncontrolling interests in the Operating Partnership	673	1,270	(2,011)
(Loss) income from real estate fund investments attributable to Vornado	<u>\$ (10,131)</u>	<u>\$ (19,772)</u>	<u>\$ 31,953</u>

(1) Excludes \$4,091, \$3,831, and \$2,939 of management and leasing fees in the years ended December 31, 2017, 2016 and 2015, respectively, which are included as a component of “fee and other income” on our consolidated statements of income.

On September 29, 2017, the Fund completed the sale of 800 Corporate Pointe in Culver City, CA for \$148,000,000. From the inception of this investment through its disposition, the Fund realized a \$35,620,000 net gain.

On July 27, 2017, the Fund completed a \$100,000,000 loan facility for the refinancing of 1100 Lincoln Road, a 130,000 square foot retail and theater property in Miami, Florida. The loan is interest-only at LIBOR plus 2.40% (3.76% at December 31, 2017), matures in July 2020 with two one-year extension options. At closing, the fund drew \$82,750,000, and subject to property performance, may borrow up to \$17,250,000 of additional proceeds within the first 18 months of the loan term. The property was previously encumbered by a \$66,000,000 interest-only mortgage at LIBOR plus 2.25% which was scheduled to mature in August 2017.

On March 25, 2015, the Fund completed the sale of 520 Broadway in Santa Monica, CA for \$91,650,000. The Fund realized a \$23,768,000 net gain over the holding period.

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

**4. Marketable Securities**

Our portfolio of marketable securities is comprised of equity securities that are classified as available-for-sale. Available-for-sale securities are presented on our consolidated balance sheets at fair value. Unrealized gains and losses resulting from the mark-to-market of these securities are included in “other comprehensive income (loss).” We adopted ASU 2016-01 effective January 1, 2018. While the adoption of ASU 2016-01 requires us to continue to measure “marketable securities” at fair value at each reporting date, the changes in fair value will be recognized in current period earnings as opposed to “other comprehensive income (loss).” As a result, on January 1, 2018 we will record an increase to retained earnings of \$109,553,000 to recognize the unrealized gains previously recorded within “accumulated other comprehensive income”. Subsequent changes in the fair value of our marketable securities will be recorded to “interest and other investment income, net”.

We evaluate our portfolio of marketable securities for impairment each reporting period. For each of the securities in our portfolio with unrealized losses, we review the underlying cause of the decline in value and the estimated recovery period, as well as the severity and duration of the decline. In our evaluation, we consider our ability and intent to hold these investments for a reasonable period of time sufficient for us to recover our cost basis. We also evaluate the near-term prospects for each of these investments in relation to the severity and duration of the decline.

Below is a summary of our marketable securities portfolio as of December 31, 2017 and 2016.

(Amounts in thousands)

	As of December 31, 2017			As of December 31, 2016		
	Fair Value	GAAP Cost	Unrealized Gain	Fair Value	GAAP Cost	Unrealized Gain
Equity securities:						
Lexington Realty Trust	\$ 178,226	\$ 72,549	\$ 105,677	\$ 199,465	\$ 72,549	\$ 126,916
Other	4,526	650	3,876	4,239	650	3,589
	\$ 182,752	\$ 73,199	\$ 109,553	\$ 203,704	\$ 73,199	\$ 130,505

## 5. Investments in Partially Owned Entities

### *Alexander's*

As of December 31, 2017, 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, 2017 and 2016, Alexander's owed us an aggregate of \$2,490,000 and \$1,070,000, respectively, pursuant to such agreements.

As of December 31, 2017 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, 2017 closing share price of \$395.85, was \$654,763,000, or \$528,363,000 in excess of the carrying amount on our consolidated balance sheet. As of December 31, 2017, 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 \$39,367,000. 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. The basis difference related to the land will be recognized upon disposition of our investment.

On June 1, 2017, Alexander's completed a \$500,000,000 refinancing of the office portion of 731 Lexington Avenue. The interest-only loan is at LIBOR plus 0.90% (2.38% at December 31, 2017) and matures in June 2020 with four one-year extension options. In connection therewith, Alexander's purchased an interest rate cap with a notional amount of \$500,000,000 that caps LIBOR at a rate of 6.00%. The property was previously encumbered by a \$300,000,000 interest-only mortgage at LIBOR plus 0.95% which was scheduled to mature in March 2021.

### 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) \$306,000, 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.

Building Maintenance Services ("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, 2017, 2016 and 2015, we recognized \$2,678,000, \$2,583,000 and \$2,221,000 of income, respectively, for these services.

**5. Investments in Partially Owned Entities – continued**

*Urban Edge Properties (“UE”) (NYSE: UE)*

As of December 31, 2017, we own 5,717,184 UE operating partnership units, representing a 4.5% ownership interest in UE. We account for our investment in UE under the equity method and record our share of UE’s net income or loss on a one-quarter lag basis. In 2017 and 2016, we provided UE with information technology support. UE is providing us with leasing and property management services for (i) certain small retail properties that we plan to sell, and (ii) our affiliate, Alexander’s, Rego Park retail assets. As of December 31, 2017, the fair value of our investment in UE, based on UE’s December 31, 2017 closing share price of \$25.49, was \$145,731,000, or \$99,579,000 in excess of the carrying amount on our consolidated balance sheet.

In 2017, UE issued approximately 20,250,000 operating partnership units related to property acquisitions and public offerings of its common stock. As a result, our ownership interest in UE decreased to 4.5% from 5.4%. In accordance with ASC 323-10-40-1, we account for a unit issuance by an equity method investee as if we had sold a proportionate share of our investment. Accordingly, in 2017, we recorded \$21,100,000 of net gains in connection with these issuances which are included in “income (loss) from partially owned entities” on our consolidated statements of income.

*Pennsylvania Real Estate Investment Trust (“PREIT”) (NYSE: PEI)*

As of December 31, 2017, we own 6,250,000 PREIT operating partnership units, representing an 8.0% interest in PREIT. We account for our investment in PREIT under the equity method and record our share of PREIT’s net income or loss on a one-quarter lag basis.

Based on PREIT’s September 29, 2017 quarter ended closing share price of \$10.49, the market value (“fair value” pursuant to ASC 820) of our investment in PREIT was \$65,563,000 or \$44,465,000 below our carrying amount as of September 30, 2017. We concluded that our investment in PREIT was “other-than-temporarily” impaired and recorded a \$44,465,000 non-cash impairment loss on our consolidated statements of income. Our conclusion was based on a sustained trading value of PREIT stock below our carrying amount and our inability to forecast a recovery in the near-term.

As of December 31, 2017, the fair value of our investment in PREIT, based on PREIT’s December 31, 2017 closing share price of \$11.89, was \$74,313,000, or \$7,741,000 in excess of the carrying amount on our consolidated balance sheet. As of December 31, 2017, the carrying amount of our investment in PREIT exceeds our share of the equity in the net assets of PREIT by approximately \$34,205,000. The majority of this basis difference resulted from the excess of the fair value of the PREIT operating units received over our share of the book value of PREIT’s net assets. Substantially all of this basis difference was allocated, based on our estimates of the fair values of PREIT’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 PREIT’s net loss. The basis difference related to the land will be recognized upon disposition of our investment.

*Moynihan Office Building*

In September 2016, our 50.1% joint venture with the Related Companies (“Related”) was designated by Empire State Development (“ESD”), an entity of New York State, to redevelop the historic Farley Post Office building. The building will include a new Moynihan Train Hall and approximately 850,000 rentable square feet of commercial space, comprised of approximately 730,000 square feet of office space and approximately 120,000 square feet of retail space. On June 15, 2017, the joint venture closed a 99-year, triple-net lease with ESD for the commercial space at the Moynihan Office Building and made a \$230,000,000 upfront contribution, of which our share is \$115,230,000, towards the construction of the train hall. The lease calls for annual rent payments of \$5,000,000 plus payments in lieu of real estate taxes. Simultaneously, the joint venture completed a \$271,000,000 loan facility, of which \$210,269,000 is outstanding at December 31, 2017. The interest-only loan is at LIBOR plus 3.25% (4.64% at December 31, 2017) and matures in June 2019 with two one-year extension options.

The joint venture has also entered into a development agreement with ESD and a design-build contract with Skanska Moynihan Train Hall Builders. Under the development agreement with ESD, the joint venture is obligated to build the Moynihan Train Hall, with Vornado and Related each guaranteeing the joint venture’s obligations. Under the design-build agreement, Skanska Moynihan Train Hall Builders is obligated to fulfill all of the joint venture’s obligations. The obligations of Skanska Moynihan Train Hall Builders have been bonded by Skanska USA and bear a full guaranty from Skanska AB.

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

**5. Investments in Partially Owned Entities – continued**

*Mezzanine Loan – New York*

On May 9, 2017, a \$150,000,000 mezzanine loan owned by a joint venture in which we had a 33.3% ownership interest was repaid at its maturity and we received our \$50,000,000 share. The mezzanine loan earned interest at LIBOR plus 9.42%.

*Sterling Suffolk Racecourse, LLC (“Suffolk Downs JV”)*

On May 26, 2017, Suffolk Downs JV, a joint venture in which we have a 21.2% equity interest, sold the property comprising the Suffolk Downs racetrack in East Boston, Massachusetts (“Suffolk Downs”) for \$155,000,000, which resulted in net proceeds and a net gain to us of \$15,314,000. In addition, we were repaid \$29,318,000 of principal and \$6,129,000 of accrued interest on our debt investments in Suffolk Downs JV, resulting in a net gain of \$11,373,000.

*330 Madison Avenue*

On July 19, 2017, the joint venture, in which we have a 25.0% interest, completed a \$500,000,000 refinancing of 330 Madison Avenue, an 845,000 square foot Manhattan office building. The seven-year interest-only loan matures in August 2024 and has a fixed rate of 3.43%. Our share of net proceeds, after repayment of the existing \$150,000,000 LIBOR plus 1.30% mortgage and closing costs, was approximately \$85,000,000.

*280 Park Avenue*

On August 23, 2017, the joint venture, in which we have a 50.0% interest, completed a \$1.2 billion refinancing of 280 Park Avenue, a 1,250,000 square foot Manhattan office building. The loan is interest-only at LIBOR plus 1.73% (3.16% at December 31, 2017) and matures in September 2019 with five one-year extension options. Our share of net proceeds, after repayment of the existing \$900,000,000 LIBOR plus 2.00% mortgage and closing costs, was approximately \$140,000,000.

*Toys “R” Us, Inc. (“Toys”)*

We own 32.5% of Toys. On September 18, 2017, Toys filed a voluntary petition under Chapter 11 of the United States Bankruptcy Code. We carry our Toys investment at zero. Further, we do not hold any debt of Toys and do not guarantee any of Toys’ obligations. For income tax purposes, we carry our investment in Toys at approximately \$420,000,000 which could result in a tax deduction in future periods.

*50 West 57th Street*

On December 13, 2017, the joint venture, in which we have a 50.0% interest, completed a \$20,000,000 refinancing of 50 West 57th Street, an 81,000 square foot Manhattan office building. The loan is interest-only at LIBOR plus 1.60% (3.06% at December 31, 2017) and matures in December 2022. The new loan replaced the existing \$20,000,000 mortgage which had a fixed rate of 3.50%.

*India Real Estate Ventures*

During 2017, India Property Fund, in which we had a 36.5% interest, sold its investments. Our share of the aggregate sales price was approximately \$23,895,000 which resulted in a financial statement loss of \$533,000. In addition, on December 28, 2017, we sold our 25% interest in TCG Urban Infrastructure Holdings Private Limited for \$18,742,000 which resulted in a financial statement gain of \$1,885,000, which substantially completes the disposition of our investments in India.

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

**5. Investments in Partially Owned Entities – continued**

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

(Amounts in thousands)

	Percentage Ownership at December 31, 2017	As of December 31,	
		2017	2016
<b>Investments:</b>			
Partially owned office buildings/land <sup>(1)</sup>	Various	\$ 504,393	\$ 681,265
Alexander's	32.4%	126,400	129,324
PREIT	8.0%	66,572	122,883
UE	4.5%	46,152	24,523
Other investments <sup>(2)</sup>	Various	313,312	420,259
		<u>\$ 1,056,829</u>	<u>\$ 1,378,254</u>
330 Madison Avenue <sup>(3)</sup>	25.0%	\$ (53,999)	\$ —
7 West 34th Street <sup>(4)</sup>	53.0%	(47,369)	(43,022)
		<u>\$ (101,368)</u>	<u>\$ (43,022)</u>

- (1) Includes interests in 280 Park Avenue, 650 Madison Avenue, One Park Avenue, 330 Madison Avenue (in 2016 only - see (3) below), 512 West 22nd Street, 85 Tenth Avenue, 61 Ninth Avenue and others.
- (2) Includes interests in Independence Plaza, Fashion Centre Mall/Washington Tower, Rosslyn Plaza, 50-70 West 93rd Street, Moynihan Office Building, Toys (which has a carrying amount of zero), 666 Fifth Avenue Office Condominium and others.
- (3) Our negative basis resulted from a refinancing distribution and is included in "other liabilities" on our consolidated balance sheets (in 2017 only).
- (4) Our negative basis results from a deferred gain from the sale of a 47.0% ownership interest in the property on May 27, 2016 and is included in "other liabilities" on our consolidated balance sheets.



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

**5. Investments in Partially Owned Entities – continued**

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

(Amounts in thousands)	Percentage Ownership at December 31, 2017	As of December 31,		
		2017	2016	2015
<b>Our Share of Net Income (Loss):</b>				
PREIT (see page 126 for details):				
Non-cash impairment loss	8.0%	\$ (44,465)	\$ —	\$ —
Equity in net loss		(8,860)	(5,213)	(7,450)
		<u>(53,325)</u>	<u>(5,213)</u>	<u>(7,450)</u>
Alexander's (see page 125 for details):				
Equity in net income	32.4%	25,820	27,470	24,209
Management, leasing and development fees		6,033	6,770	6,869
		<u>31,853</u>	<u>34,240</u>	<u>31,078</u>
UE (see page 126 for details):				
Net gain resulting from UE operating partnership unit issuances	4.5%	21,100	—	—
Equity in net income		5,558	5,003	2,430
Management fees		670	836	1,964
		<u>27,328</u>	<u>5,839</u>	<u>4,394</u>
Partially owned office buildings <sup>(1)</sup>	Various	2,020	5,773	19,808
Other investments <sup>(2)</sup>	Various	7,324	128,309	(57,777)
		<u>\$ 15,200</u>	<u>\$ 168,948</u>	<u>\$ (9,947)</u>

(1) Includes interests in 280 Park Avenue, 650 Madison Avenue, One Park Avenue, 7 West 34th Street (in 2017 and 2016 only), 330 Madison Avenue, 512 West 22nd Street, 85 Tenth Avenue (in 2017 only) and others. In 2015, we recognized our \$12,800 share of a write-off of a below-market lease liability related to a tenant vacating at 650 Madison Avenue.

(2) Includes interests in Independence Plaza, Fashion Centre Mall/Washington Tower, Rosslyn Plaza, 50-70 West 93rd Street, 85 Tenth Avenue (in 2016 and 2015 only), 666 Fifth Avenue Office Condominium, India real estate ventures and others. In 2017, we recognized \$26,687 of net gains, comprised of \$15,314 representing our share of a net gain on the sale of Suffolk Downs and \$11,373 representing the net gain on repayment of our debt investments in Suffolk Downs JV (see page 127 for details). In 2017, 2016 and 2015, we recognized net losses of \$25,414, \$41,532 and \$37,495, respectively, from our 666 Fifth Avenue Office Condominium joint venture as a result of our share of depreciation expense. In 2016, the owner of 85 Tenth Avenue completed a 10-year, 4.55% \$625,000 refinancing of the property and we received net proceeds of \$191,779 in repayment of our existing loans and preferred equity investments. We recognized \$160,843 of income and no tax gain as a result of this transaction. In 2016 and 2015, we recognized \$13,962 and \$14,806, respectively, of non-cash impairment losses related to India real estate ventures.

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

**5. Investments in Partially Owned Entities – continued**

Below is a summary of the debt of our partially owned entities as of December 31, 2017 and 2016.

(Amounts in thousands)	Percentage Ownership at December 31, 2017	Maturity	Interest Rate at December 31, 2017	100% Partially Owned Entities' Debt at December 31, <sup>(1)</sup>	
				2017	2016
Partially owned office buildings <sup>(2)</sup> :					
Mortgages payable	Various	2019-2026	3.76%	3,934,894	3,227,053
PREIT:					
Mortgages payable	8.0%	2018-2025	3.61%	1,586,045	1,747,543
UE:					
Mortgages payable	4.5%	2018-2034	4.11%	1,415,806	1,209,994
Alexander's:					
Mortgages payable	32.4%	2018-2024	2.61%	1,252,440	1,056,147
Other <sup>(3)</sup> :					
Mortgages payable and other	Various	2018-2023	7.73%	8,601,383	8,540,710

(1) All amounts are non-recourse to us except the \$300,000 mortgage loan on 7 West 34th Street which we guaranteed in connection with the sale of a 47.0% equity interest in May 2016.

(2) Includes 280 Park Avenue, 650 Madison Avenue, One Park Avenue, 7 West 34th Street, 330 Madison Avenue, 512 West 22nd Street, 85 Tenth Avenue and others.

(3) Includes Independence Plaza, Fashion Centre Mall/Washington Tower, 50-70 West 93rd Street, Toys, 666 Fifth Avenue Office Condominium, Moynihan Office Building 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 \$5,288,276,000 and \$4,895,497,000 as of December 31, 2017 and 2016, respectively.

*Summary of Condensed Combined Financial Information*

The following is a summary of condensed combined financial information for all of our partially owned entities, including Toys and Alexander's, as of December 31, 2017 and 2016 and for the years ended December 31, 2017, 2016 and 2015.

(Amounts in thousands)	Balance as of December 31,		
	2017	2016	
<b>Balance Sheet:</b>			
Assets	\$ 24,812,000	\$ 24,926,000	
Liabilities	22,739,000	21,357,000	
Noncontrolling interests	140,000	265,000	
Equity	1,933,000	3,304,000	
(Amounts in thousands)	For the Year Ended December 31,		
	2017	2016	2015
<b>Income Statement:</b>			
Total revenue	\$ 12,991,000	\$ 13,600,000	\$ 13,423,000
Net loss	(542,000)	(65,000)	(224,000)

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

**6. Dispositions**

*New York*

On December 22, 2015, we completed the sale of 20 Broad Street, a 473,000 square foot office building in Manhattan for an aggregate consideration of \$200,000,000. The total income from this transaction was approximately \$157,000,000 comprised of approximately \$142,000,000 from the gain on sale and \$15,000,000 of lease termination income set forth in Note 14 – *Fee and Other Income*.

*Discontinued Operations*

*Washington, DC*

On June 20, 2017, we completed a \$220,000,000 financing of The Bartlett residential building. The five-year interest-only loan is at LIBOR plus 1.70% and matures in June 2022. On July 17, 2017, the property, the loan and the \$217,000,000 of net proceeds were transferred to JBG SMITH Properties ("JBGS") in connection with the tax-free spin-off of our Washington, DC segment.

On July 17, 2017, prior to completion of the tax-free spin-off of our Washington, DC segment, we repaid the \$43,581,000 LIBOR plus 1.25% mortgage encumbering 1700 and 1730 M Street which was scheduled to mature in August 2017. The unencumbered property was then transferred to JBGS in connection with the tax-free spin-off of our Washington, DC segment.

On July 17, 2017, we completed the spin-off of our Washington, DC segment comprised of (i) 37 office properties totaling over 11.1 million square feet, five multifamily properties with 3,133 units and five other assets totaling approximately 406,000 square feet and (ii) 18 future development assets totaling over 10.4 million square feet of estimated potential development density, and (iii) \$412.5 million of cash (\$275.0 million plus The Bartlett financing proceeds less transaction costs and other mortgage items) to JBGS. On July 18, 2017, JBGS was combined with the management business and certain Washington, DC assets of The JBG Companies ("JBG"), a Washington, DC real estate company. Steven Roth, the Chairman of the Board of Trustees and Chief Executive Officer of Vornado, is the Chairman of the Board of Trustees of JBGS. Mitchell Schear, former President of our Washington, DC business, is a member of the Board of Trustees of JBGS. We are providing transition services to JBGS initially including information technology, financial reporting and payroll services. The spin-off was effected through a tax-free distribution by Vornado to the holders of Vornado common shares of all of the common shares of JBGS at the rate of one JBGS common share for every two common shares of Vornado and the distribution by the Operating Partnership to the holders of its common units of all of the outstanding common units of JBG SMITH Properties LP ("JBGSLP") at the rate of one JBGSLP common unit for every two common units of VRLP held of record. See JBGS' Amendment No. 3 on Form 10 (File No. 1-37994) filed with the Securities and Exchange Commission on June 9, 2017 for additional information. Beginning in the third quarter of 2017, the historical financial results of our Washington, DC segment are reflected in our consolidated financial statements as discontinued operations for all periods presented.

On March 15, 2016, we notified the servicer of the \$678,000,000 non-recourse mortgage loan on the Skyline properties located in Fairfax, Virginia, that cash flow would be insufficient to service the debt and pay other property related costs and expenses and that we were not willing to fund additional cash shortfalls. Accordingly, at our request, the loan was transferred to the special servicer. Consequently, based on the shortened holding period for the underlying assets, we concluded that the excess of carrying amount over our estimate of fair value was not recoverable and recognized a \$160,700,000 non-cash impairment loss in the first quarter of 2016. The Company's estimate of fair value was derived from a discounted cash flow model based upon market conditions and expectations of growth and utilized unobservable quantitative inputs including a capitalization rate of 8.0% and a discount rate of 8.2%. In the second quarter of 2016, cash flow became insufficient to service the debt and we ceased making debt service payments. Pursuant to the loan agreement, the loan was in default, and was subject to incremental default interest which increased the weighted average interest rate from 2.97% to 4.51% while the outstanding balance remains unpaid. For the year ended December 31, 2016, we recognized \$7,823,000 of default interest expense. On August 24, 2016, the Skyline properties were placed in receivership. On December 21, 2016, the disposition of the Skyline properties was completed by the receiver. In connection therewith, the Skyline properties' assets (approximately \$236,535,000) and liabilities (approximately aggregating \$724,412,000), were removed from our consolidated balance sheet which resulted in a net gain of \$487,877,000. There was no taxable income related to this transaction.

On September 9, 2015, we completed the sale of 1750 Pennsylvania Avenue, NW, a 278,000 square foot office building in Washington, DC for \$182,000,000, resulting in a net gain of approximately \$102,000,000 which is included in "(loss) income from discontinued operations" on our consolidated statements of income. The tax gain of approximately \$137,000,000 was deferred as part of a like-kind exchange.

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

**6. Dispositions – continued**

*Discontinued Operations - continued*

*Retail*

On January 15, 2015, we completed the spin-off of substantially all of our retail segment comprised of 79 strip shopping centers, three malls, a warehouse park and \$225,000,000 of cash to UE. In addition, we completed the following retail property sales, substantially completing the exit of the retail strips and malls business.

On March 13, 2015, we sold our Geary Street, CA lease for \$34,189,000, which resulted in a net gain of \$21,376,000.

On March 31, 2015, we transferred the redeveloped Springfield Town Center, a 1,350,000 square foot mall located in Springfield, Fairfax County, Virginia, to PREIT in exchange for \$485,313,000, comprised of \$340,000,000 of cash and 6,250,000 of PREIT operating partnership units (valued at \$145,313,000 or \$23.25 per PREIT unit). The financial statement gain was \$7,823,000, of which \$7,192,000 was recognized in the first quarter of 2015 and the remaining \$631,000 was deferred based on our ownership interest in PREIT. On March 31, 2018, we will be entitled to additional consideration of 50% of the increase in the value of Springfield Town Center, if any, over \$465,000,000, calculated utilizing a 5.5% capitalization rate.

On August 6, 2015, we sold our 50% interest in the Monmouth Mall in Eatontown, NJ to our joint venture partner for \$38,000,000, valuing the property at approximately \$229,000,000, which resulted in a net gain of \$33,153,000.

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

**6. Dispositions – continued**

*Discontinued Operations - continued*

In accordance with the provisions of ASC 360, *Property, Plant, and Equipment*, we have reclassified the revenues and expenses of our former Washington, DC segment which was spun off on July 17, 2017, our strip shopping center and mall business which was spun off to UE on January 15, 2015 and other related retail assets that were sold or are currently held for sale to “(loss) income from discontinued operations” and the related assets and liabilities to “assets related to discontinued operations” and “liabilities related to discontinued operations” for all of the periods presented in the accompanying financial statements. The net gains resulting from the sale of certain of these properties are included in “(loss) income from discontinued operations” on our consolidated statements of income. The tables below set forth the assets and liabilities related to discontinued operations as of December 31, 2017 and 2016, and their combined results of operations and cash flows for the years ended December 31, 2017, 2016 and 2015.

(Amounts in thousands)

	<b>Balance as of December 31,</b>	
	<b>2017</b>	<b>2016</b>
<b>Assets related to discontinued operations:</b>		
Real estate, net	\$ —	\$ 3,222,720
Investments in partially owned entities	—	49,765
Other assets	1,357	296,128
	<u>\$ 1,357</u>	<u>\$ 3,568,613</u>
<b>Liabilities related to discontinued operations:</b>		
Mortgages payable, net	\$ —	\$ 1,165,015
Other liabilities	3,620	94,428
	<u>\$ 3,620</u>	<u>\$ 1,259,443</u>

(Amounts in thousands)

	<b>For the Year Ended December 31,</b>		
	<b>2017</b>	<b>2016</b>	<b>2015</b>
<b>Income from discontinued operations:</b>			
Total revenues	\$ 261,290	\$ 521,084	\$ 558,663
Total expenses	212,169	442,032	477,299
	49,121	79,052	81,364
JBGS spin-off transaction costs	(68,662)	(16,586)	—
Net gains on sale of real estate, a lease position and other	6,605	5,074	167,801
Income (loss) from partially owned assets	435	(3,559)	(2,022)
Net gain on early extinguishment of debt	—	487,877	—
Impairment losses	—	(161,165)	(256)
Net gain on sale of our 20% interest in Fairfax Square	—	15,302	—
UE spin-off transaction related costs	—	—	(22,972)
Pretax (loss) income from discontinued operations	(12,501)	405,995	223,915
Income tax expense	(727)	(1,083)	(404)
(Loss) income from discontinued operations	<u>\$ (13,228)</u>	<u>\$ 404,912</u>	<u>\$ 223,511</u>
<b>Cash flows related to discontinued operations:</b>			
Cash flows from operating activities	\$ 42,578	\$ 157,484	\$ 155,686
Cash flows from investing activities	(48,377)	(216,125)	315,432

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

**7. Identified Intangible Assets and Liabilities**

The following summarizes our identified intangible assets (primarily above-market leases) and liabilities (primarily below-market leases) as of December 31, 2017 and 2016.

(Amounts in thousands)	Balance as of December 31,	
	2017	2016
<b>Identified intangible assets:</b>		
Gross amount	\$ 310,097	\$ 384,090
Accumulated amortization	(150,837)	(194,422)
Total, net	<u>\$ 159,260</u>	<u>\$ 189,668</u>
<b>Identified intangible liabilities (included in deferred revenue):</b>		
Gross amount	\$ 530,497	\$ 550,454
Accumulated amortization	(324,897)	(298,238)
Total, net	<u>\$ 205,600</u>	<u>\$ 252,216</u>

Amortization of acquired below-market leases, net of acquired above-market leases, resulted in an increase to rental income of \$46,103,000, \$51,849,000 and \$75,952,000 for the years ended December 31, 2017, 2016 and 2015, 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, 2018 is as follows:

(Amounts in thousands)	
2018	\$ 41,969
2019	30,543
2020	22,260
2021	17,489
2022	14,306

Amortization of all other identified intangible assets (a component of depreciation and amortization expense) was \$25,057,000, \$28,897,000 and \$34,995,000 for the years ended December 31, 2017, 2016 and 2015, respectively. Estimated annual amortization of all other identified intangible assets including acquired in-place leases, customer relationships, and third party contracts for each of the five succeeding years commencing January 1, 2018 is as follows:

(Amounts in thousands)	
2018	\$ 19,449
2019	15,169
2020	11,960
2021	10,981
2022	9,425

We are a tenant under ground leases at certain properties. Amortization of these acquired below-market leases, net of above-market leases, resulted in an increase to rent expense (a component of operating expense) of \$1,747,000 for each of the years ended December 31, 2017, 2016 and 2015. Estimated annual amortization of these below-market leases, net of above-market leases, for each of the five succeeding years commencing January 1, 2018 is as follows:

(Amounts in thousands)	
2018	\$ 1,747
2019	1,747
2020	1,747
2021	1,747
2022	1,747

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

**8. Debt**

*Unsecured Revolving Credit Facility*

On October 17, 2017, we extended one of our two \$1.25 billion unsecured revolving credit facilities from November 2018 to January 2022 with two six-month extension options. The interest rate on the extended facility was lowered from LIBOR plus 1.05% to LIBOR plus 1.00%. The interest rate and facility fees are the same as our other \$1.25 billion unsecured revolving credit facility, which matures in February 2021 with two six-month extension options.

*Senior Unsecured Notes*

On December 27, 2017, we completed a public offering of \$450,000,000 3.50% senior unsecured notes due January 15, 2025. The interest rate on the senior unsecured notes will be payable semi-annually on January 15 and July 15, commencing July 15, 2018. The notes were sold at 99.596% of their face amount to yield 3.565%.

On December 27, 2017, we redeemed all of the \$450,000,000 principal amount of our outstanding 2.50% senior unsecured notes which were scheduled to mature on June 30, 2019, at a redemption price of approximately 100.71% of the principal amount plus accrued interest through the date of redemption. In connection therewith, we expensed \$4,836,000 of debt prepayment costs and wrote-off unamortized deferred financing costs which are included in "interest and debt expense" on our consolidated statements of income.

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

**8. Debt – continued**

The following is a summary of our debt:

(Amounts in thousands)	<b>Weighted Average Interest Rate at December 31, 2017</b>	<b>Balance at December 31,</b>	
		<b>2017</b>	<b>2016</b>
<b>Mortgages Payable:</b>			
Fixed rate	3.65%	\$ 5,461,706	\$ 5,479,547
Variable rate	3.33%	2,742,133	2,727,133
Total	3.54%	8,203,839	8,206,680
Deferred financing costs, net and other		(66,700)	(93,432)
Total, net		<u>\$ 8,137,139</u>	<u>\$ 8,113,248</u>
<b>Unsecured Debt:</b>			
Senior unsecured notes	4.21%	\$ 850,000	\$ 850,000
Deferred financing costs, net and other		(6,386)	(4,423)
Senior unsecured notes, net		<u>843,614</u>	<u>845,577</u>
Unsecured term loan	2.68%	750,000	375,000
Deferred financing costs, net and other		(1,266)	(2,785)
Unsecured term loan, net		<u>748,734</u>	<u>372,215</u>
Unsecured revolving credit facilities	—%	—	115,630
Total, net		<u>\$ 1,592,348</u>	<u>\$ 1,333,422</u>

The net carrying amount of properties collateralizing the mortgages payable amounted to \$9.8 billion at December 31, 2017. As of December 31, 2017, the principal repayments required for the next five years and thereafter are as follows:

(Amounts in thousands)	<b>Mortgages Payable</b>	<b>Senior Unsecured Debt and Unsecured Revolving Credit Unsecured Facilities</b>
<b>Year Ended December 31,</b>		
2018	\$ 2,009,030	\$ 750,000
2019	973,294	—
2020	1,867,567	—
2021	1,613,948	—
2022	950,000	400,000
Thereafter	790,000	450,000



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

**9. Redeemable Noncontrolling Interests/Redeemable 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.

Below are the details of redeemable noncontrolling interests/redeemable partnership units as of December 31, 2017 and 2016.

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

Unit Series	Balance as of December 31,		Units Outstanding at December 31,		Per Unit Liquidation Preference	Preferred or Annual Distribution Rate
	2017	2016	2017	2016		
Common:						
Class A units held by third parties	\$ 979,509	\$ 1,273,018	12,528,899	12,197,162	n/a	\$ 2.62
Perpetual Preferred/Redeemable Preferred <sup>(1)</sup> :						
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	\$ 4,428	\$ 4,428	177,100	177,100	\$ 25.00	\$ 0.8125

(1) 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 interests/redeemable partnership units.

(Amounts in thousands)

<b>Balance, December 31, 2015</b>	\$ 1,229,221
Net income	53,654
Other comprehensive income	4,699
Distributions	(31,342)
Redemption of Class A units for Vornado common shares, at redemption value	(36,510)
Adjustments to carry redeemable Class A units at redemption value	26,251
Other, net	32,473
<b>Balance, December 31, 2016</b>	1,278,446
Net income	10,910
Other comprehensive income	643
Distributions	(33,229)
Redemption of Class A units for Vornado common shares, at redemption value	(38,747)
Adjustments to carry redeemable Class A units at redemption value (including \$224,069 attributable to the spin-off of JBGS)	(268,494)
Other, net	35,408
<b>Balance, December 31, 2017</b>	\$ 984,937

**9. Redeemable Noncontrolling Interests/Redeemable Partnership Units – continued**

Redeemable noncontrolling interests/redeemable 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 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 \$50,561,000 as of December 31, 2017 and 2016. Changes in the value from period to period, if any, are charged to “interest and debt expense” on our consolidated statements of income.

**10. Shareholders’ Equity/Partners’ Capital**

*Common Shares (Vornado Realty Trust)*

As of December 31, 2017, there were 189,983,858 common shares outstanding. During 2017, we paid an aggregate of \$496,490,000 of common dividends comprised of quarterly common dividends of \$0.71 per share in the first and second quarter and \$0.60 per share in the third and fourth quarter. The third and fourth quarter dividends were after the July 17, 2017 spin-off of JBGS. JBGS' third and fourth quarter dividend amounts to \$0.1125 per common share, adjusted for the 1:2 distribution to Vornado shareholders.

*Class A Units (Vornado Realty L.P.)*

As of December 31, 2017, there were 189,983,858 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, 2017, there were 12,528,899 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 9 – *Redeemable Noncontrolling Interests/Redeemable Partnership Units*). During 2017, the Operating Partnership paid an aggregate of \$496,490,000 of distributions to Vornado comprised of quarterly common distributions of \$0.71 per unit in the first and second quarter and \$0.60 per unit in the third and fourth quarter. The third and fourth quarter distributions were after the July 17, 2017 spin-off of JBGS. JBGS' third and fourth quarter distribution amounts to \$0.1125 per unit, adjusted for the 1:2 distribution to Vornado shareholders.

*Preferred Share/Preferred Units*

On September 1, 2016, we redeemed all of the outstanding 6.875% Series J cumulative redeemable preferred shares/units at their redemption price of \$25.00 per share/unit, or \$246,250,000 in the aggregate, plus accrued and unpaid dividends/distributions through the date of redemption. In connection therewith, we expensed \$7,408,000 of issuance costs, which reduced net income attributable to common shareholders and net income attributable to Class A unitholders in the twelve months ended December 31, 2016. These costs had been initially recorded as a reduction of shareholders’ equity and partners’ capital.

In December 2017, we sold 12,780,000 5.25% Series M cumulative redeemable preferred shares at a price of \$25.00 per share in an underwritten public offering pursuant to an effective registration statement. We received aggregate net proceeds of \$309,609,000, after underwriters’ discounts and issuance costs and contributed the net proceeds to the Operating Partnership in exchange for 12,780,000 5.25% Series M preferred units (with economic terms that mirror those of the Series M preferred shares). Dividends on the Series M preferred shares/units are cumulative and payable quarterly in arrears. The Series M 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), we may redeem the Series M preferred shares/units at a redemption price of \$25.00 per share, plus accrued and unpaid dividends through the date of redemption. The Series M preferred shares/units have no maturity date and will remain outstanding indefinitely unless redeemed by us.

In December 2017, we called for redemption of all of the outstanding 6.625% Series G and 6.625% Series I cumulative redeemable preferred shares/units. As a result, as of December 31, 2017, we reclassified the 6.625% Series G and 6.625% Series I cumulative redeemable preferred shares/units from shareholder's equity/partner's capital to liabilities on our consolidated balance sheets. On January 4, 2018, we redeemed all of the outstanding 6.625% Series G cumulative redeemable preferred shares/units at their redemption price of \$25.00 per share/unit, or \$200,000,000 in the aggregate, plus accrued and unpaid dividends/distributions through the date of redemption. On January 4 and 11, 2018, we redeemed 6,000,000 shares/units and 4,800,000 shares/units, respectively, representing all of the outstanding 6.625% Series I cumulative redeemable preferred shares/units at their redemption price of \$25.00 per share/unit, or \$270,000,000 in the aggregate, plus accrued and unpaid dividends/distributions through the date of redemption. Upon redemption of both series, we expensed \$14,486,000 of issuance costs, which will be included in the quarter ended March 31, 2018 consolidated statements of income.

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

**10. Shareholders' Equity/Partners' Capital – 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, 2017 and 2016.

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

Preferred Shares/Units	Balance as of December 31,		Shares/Units Outstanding at December 31,		Per Share/Unit	
	2017	2016	2017	2016	Liquidation Preference	Annual Dividend/ Distribution <sup>(1)</sup>
Convertible Preferred:						
6.5% Series A: authorized 83,977 shares/units <sup>(2)</sup>	\$ 1,102	\$ 1,264	19,573	24,829	\$ 50.00	\$ 3.25
Cumulative Redeemable Preferred:						
6.625% Series G: authorized 8,000,000 shares/units <sup>(3)(4)</sup>	—	193,135	—	8,000,000	25.00	1.65625
6.625% Series I: authorized 10,800,000 shares/units <sup>(3)(4)</sup>	—	262,379	—	10,800,000	25.00	1.65625
5.70% Series K: authorized 12,000,000 shares/units <sup>(3)</sup>	290,971	290,971	12,000,000	12,000,000	25.00	1.425
5.40% Series L: authorized 12,000,000 shares/units <sup>(3)</sup>	290,306	290,306	12,000,000	12,000,000	25.00	1.35
5.25% Series M: authorized 12,780,000 shares/units <sup>(3)</sup>	309,609	—	12,780,000	—	25.00	1.3125 <sup>(5)</sup>
	<u>\$ 891,988</u>	<u>\$ 1,038,055</u>	<u>36,799,573</u>	<u>42,824,829</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) In December 2017, we called for redemption all of the outstanding 6.625% Series G and 6.625% Series I cumulative redeemable preferred shares/units. These shares were redeemed on January 4 and 11, 2018. As a result, we reclassified to liabilities all of the outstanding shares/units with the aggregate amount of \$455,514 on our consolidated balance sheets as of December 31, 2017.
- (5) Annual dividend/distribution rate commencing in December 2017.

*Accumulated Other Comprehensive Income (Loss)*

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

(Amounts in thousands)

	For the Year Ended December 31, 2017				
	Total	Securities available- for-sale	Pro rata share of nonconsolidated subsidiaries' OCI	Interest rate swap	Other
Balance as of December 31, 2016	\$ 118,972	\$ 130,505	\$ (12,058)	\$ 8,066	\$ (7,541)
OCI before classifications	(4,692)	(20,951)	1,425	15,476	(642)
Amounts reclassified from AOCI	14,402	—	14,402	—	—
Balance as of December 31, 2017	<u>\$ 128,682</u>	<u>\$ 109,554</u>	<u>\$ 3,769</u>	<u>\$ 23,542</u>	<u>\$ (8,183)</u>

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

**11. Variable Interest Entities**

*Unconsolidated VIEs*

As of December 31, 2017 and 2016, 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 5 – *Investments in Partially Owned Entities*). As of December 31, 2017 and 2016, the net carrying amount of our investments in these entities was \$352,925,000 and \$392,150,000, respectively, and our maximum exposure to loss in these entities, is limited to our investments.

*Consolidated VIEs*

Our most significant consolidated VIEs are the Operating Partnership (for Vornado), real estate fund investments, 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, 2017, the total assets and liabilities of our consolidated VIEs, excluding the Operating Partnership, were \$3,561,062,000 and \$1,753,798,000 respectively. As of December 31, 2016, the total assets and liabilities of our consolidated VIEs, excluding the Operating Partnership, were \$3,638,483,000 and \$1,762,322,000, respectively.

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

**12. 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) interest rate swaps and (v) mandatorily redeemable instruments (Series G-1 through G-4 convertible preferred units, Series D-13 cumulative redeemable preferred units, and 6.625% Series G and 6.625% Series I cumulative redeemable preferred shares). The tables below aggregate the fair values of these financial assets and liabilities by their levels in the fair value hierarchy at December 31, 2017 and 2016, respectively.

(Amounts in thousands)

	As of December 31, 2017			
	Total	Level 1	Level 2	Level 3
Marketable securities	\$ 182,752	\$ 182,752	\$ —	\$ —
Real estate fund investments	354,804	—	—	354,804
Deferred compensation plan assets (\$11,545 included in restricted cash and \$97,633 in other assets)	109,178	69,050	—	40,128
Interest rate swaps (included in other assets)	27,472	—	27,472	—
<b>Total assets</b>	<b>\$ 674,206</b>	<b>\$ 251,802</b>	<b>\$ 27,472</b>	<b>\$ 394,932</b>
Mandatorily redeemable instruments (included in other liabilities)	\$ 520,561	\$ 520,561	\$ —	\$ —
Interest rate swaps (included in other liabilities)	1,052	—	1,052	—
<b>Total liabilities</b>	<b>\$ 521,613</b>	<b>\$ 520,561</b>	<b>\$ 1,052</b>	<b>\$ —</b>

(Amounts in thousands)

	As of December 31, 2016			
	Total	Level 1	Level 2	Level 3
Marketable securities	\$ 203,704	\$ 203,704	\$ —	\$ —
Real estate fund investments	462,132	—	—	462,132
Deferred compensation plan assets (\$4,187 included in restricted cash and \$117,187 in other assets)	121,374	63,930	—	57,444
Interest rate swaps (included in other assets)	21,816	—	21,816	—
<b>Total assets</b>	<b>\$ 809,026</b>	<b>\$ 267,634</b>	<b>\$ 21,816</b>	<b>\$ 519,576</b>
Mandatorily redeemable instruments (included in other liabilities)	\$ 50,561	\$ 50,561	\$ —	\$ —
Interest rate swaps (included in other liabilities)	10,122	—	10,122	—
<b>Total liabilities</b>	<b>\$ 60,683</b>	<b>\$ 50,561</b>	<b>\$ 10,122</b>	<b>\$ —</b>

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

**12. Fair Value Measurements – continued**

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

Real Estate Fund Investments

At December 31, 2017, we had five real estate fund investments with an aggregate fair value of \$354,804,000, or \$98,189,000 in excess of cost. These investments are classified as Level 3. We use a discounted cash flow valuation technique to estimate the fair value of each of these investments, which is updated quarterly by personnel responsible for the management of each investment and reviewed by senior management at each reporting period. The discounted cash flow valuation technique requires us to estimate cash flows for each investment over the anticipated holding period, which currently ranges from 0.3 years to 5.0 years. Cash flows are derived from property rental revenue (base rents plus reimbursements) less operating expenses, real estate taxes and capital and other costs, plus projected sales proceeds in the year of exit. Property rental revenue is based on leases currently in place and our estimates for future leasing activity, which are based on current market rents for similar space plus a projected growth factor. Similarly, estimated operating expenses and real estate taxes are based on amounts incurred in the current period plus a projected growth factor for future periods. Anticipated sales proceeds at the end of an investment's expected holding period are determined based on the net cash flow of the investment in the year of exit, divided by a terminal capitalization rate, less estimated selling costs.

The fair value of each property is calculated by discounting the future cash flows (including the projected sales proceeds), using an appropriate discount rate and then reduced by the property's outstanding debt, if any, to determine the fair value of the equity in each investment. 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, and 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 at December 31, 2017 and 2016.

Unobservable Quantitative Input	Range		Weighted Average (based on fair value of investments)	
	December 31, 2017	December 31, 2016	December 31, 2017	December 31, 2016
	Discount rates	2.0% to 14.9%	10.0% to 14.9%	11.9%
Terminal capitalization rates	4.7% to 6.7%	4.3% to 5.8%	5.5%	5.3%

The above inputs 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, for the years ended December 31, 2017 and 2016.

(Amounts in thousands)	For the Year Ended December 31,	
	2017	2016
Beginning balance	\$ 462,132	\$ 574,761
Dispositions/distributions	(91,606)	(71,888)
Net unrealized loss on held investments	(25,807)	(41,162)
Net realized gains on exited investments	36,078	14,761
Previously recorded unrealized gains on exited investments	(25,538)	(14,254)
Other, net	(455)	(86)
Ending balance	<u>\$ 354,804</u>	<u>\$ 462,132</u>

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

**12. Fair Value Measurements – continued**

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

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 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, for the years ended December 31, 2017 and 2016.

(Amounts in thousands)	<b>For the Year Ended December 31,</b>	
	<b>2017</b>	<b>2016</b>
Beginning balance	\$ 57,444	\$ 59,186
Purchases	5,786	5,355
Sales	(27,715)	(9,354)
Realized and unrealized gains	2,519	344
Other, net	2,094	1,913
Ending balance	<u>\$ 40,128</u>	<u>\$ 57,444</u>

*Fair Value Measurements on a Nonrecurring Basis*

There were no assets measured at fair value on a nonrecurring basis on our consolidated balance sheets at December 31, 2017 and 2016.

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

**12. Fair Value Measurements – continued**

*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 as of December 31, 2017 and 2016.

(Amounts in thousands)	As of December 31, 2017		As of December 31, 2016	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
Cash equivalents	\$ 1,500,227	\$ 1,500,000	\$ 1,307,105	\$ 1,307,000
Debt:				
Mortgages payable	\$ 8,203,839	\$ 8,194,000	\$ 8,206,680	\$ 8,163,000
Senior unsecured notes	850,000	878,000	850,000	899,000
Unsecured term loan	750,000	750,000	375,000	375,000
Unsecured revolving credit facilities	—	—	115,630	116,000
Total	\$ 9,803,839 <sup>(1)</sup>	\$ 9,822,000	\$ 9,547,310 <sup>(1)</sup>	\$ 9,553,000

(1) Excludes \$74,352 and \$100,640 of deferred financing costs, net and other as of December 31, 2017 and 2016, respectively.



### **13. Stock-based Compensation**

Vornado's 2010 Omnibus Share Plan (the "Plan") provides the Compensation Committee of Vornado's Board of Trustees (the "Committee") the ability to grant incentive and non-qualified Vornado stock options, restricted stock, restricted Operating Partnership units and out-performance plan awards to certain of our employees and officers. Under the Plan, awards may be granted up to a maximum of 6,000,000 Vornado shares, if all awards granted are Full Value Awards, as defined, and up to 12,000,000 Vornado shares, if all of the awards granted are Not Full Value Awards, as defined, plus shares in respect of awards forfeited after May 2010 that were issued pursuant to Vornado's 2002 Omnibus Share Plan. Full Value Awards are awards of securities, such as Vornado 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 Vornado stock options, that do require the payment of an exercise price or strike price. This means, for example, if the Committee were to award only Vornado restricted shares, it could award up to 6,000,000 Vornado restricted shares. On the other hand, if the Committee were to award only Vornado stock options, it could award options to purchase up to 12,000,000 Vornado common shares (at the applicable exercise price). The Committee may also issue any combination of awards under the Plan, with reductions in availability of future awards made in accordance with the above limitations. As of December 31, 2017, Vornado has approximately 2,353,000 shares available for future grants under the Plan, if all awards granted are Full Value Awards, as defined.

In the years ended December 31, 2017, 2016 and 2015, we recognized an aggregate of \$32,829,000, \$33,980,000 and \$39,846,000, respectively, of stock-based compensation expense, which is included as a component of "general and administrative" expenses on our consolidated statements of income. The year ended December 31, 2015 includes \$7,834,000 from the acceleration of the recognition of compensation expense related to 2013-2015 Out-Performance Plans due to the modification of the vesting criteria of awards such that they will fully vest at age 65. The details of the various components of our stock-based compensation are discussed on the following pages.

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

**13. Stock-based Compensation – continued**

*Out-Performance Plans (the "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 outperform the market with respect to a relative TSR in any year during the requisite performance periods as described below. OPP units, if earned, become convertible into Class A units of the Operating Partnership (and ultimately into Vornado common shares) following vesting.

Awards under the 2014 OPP have been 99.5% earned. Awards under the 2016 OPP may be earned if Vornado (i) achieves a TSR level greater than 7% per annum, or 21% over the 3-year performance measurement periods (the "Absolute Component"), and/or (ii) achieves a TSR above that of the SNL US REIT Index ("Index") over the 3-year performance measurement periods (the "Relative Component"). To the extent awards would be earned under the Absolute Component of each of the OPPs, but Vornado underperforms the Index, such awards would be reduced (and potentially fully negated) based on the degree to which Vornado underperforms the Index. In certain circumstances, in the event Vornado outperforms the Index but awards would not otherwise be fully earned under the Absolute Component, awards may still be earned or increased under the Relative Component. To the extent awards would otherwise be earned under the Relative Component but Vornado fails to achieve at least a 6% per annum absolute TSR, such awards earned under the Relative Component would be reduced based on Vornado's absolute TSR, with no awards being earned in the event Vornado's TSR during the applicable measurement period is 0% or negative, irrespective of the degree to which Vornado may outperform the Index. Dividends on awards issued and distributions on awards earned accrue during the performance period.

If the designated performance objectives are achieved, OPP units are also subject to time-based vesting requirements. Awards earned under the OPPs vest 33.33% in each of years three, four and five. Vornado's senior executive officers are required to hold earned 2017, 2016 and 2015 OPP awards (or related equity) for at least one year following vesting.

Below is the summary of the OPP units granted during the years December 31, 2017, 2016 and 2015.

Plan Year	Total Plan Notional Amount	Percentage of Notional Amount Granted	Grant Date Fair Value <sup>(1)</sup>	OPP Units Earned
2017	\$ 35,000,000	86.6%	\$ 10,800,000	To be determined in 2020
2016	40,000,000	86.7%	11,800,000	To be determined in 2019
2015	40,000,000	84.5%	9,120,000	Not earned

(1) Such amounts are being amortized into expense over a 5-year period from the date of grant, using a graded vesting attribution model. In the years ended December 31, 2017, 2016 and 2015, we recognized \$10,723,000, \$11,055,000 and \$15,531,000, respectively, of compensation expense related to OPPs. As of December 31, 2017, there was \$4,159,000 of total unrecognized compensation cost related to the OPPs, which will be recognized over a weighted-average period of 1.7 years.

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

**13. 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. In the years ended December 31, 2017, 2016 and 2015, we recognized \$747,000, \$937,000 and \$1,298,000, respectively, of compensation expense related to Vornado stock options that vested during each year. As of December 31, 2017, there was \$865,000 of total unrecognized compensation cost related to unvested stock options, which is expected to be recognized over a weighted-average period of 1.7 years.

Below is a summary of Vornado’s stock option activity for the year ended December 31, 2017.

	Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term	Aggregate Intrinsic Value
Outstanding at January 1, 2017	3,322,069	\$ 49.81		
Granted	29,867	85.78		
Exercised	(449,386)	62.89		
Cancelled or expired	(78,650)	102.96		
Outstanding at December 31, 2017	<u>2,823,900</u>	<u>\$ 46.62</u>	<u>2.2</u>	<u>\$ 89,382,838</u>
Options vested and expected to vest at December 31, 2017	<u>2,881,202</u>	<u>\$ 46.98</u>	<u>2.2</u>	<u>\$ 90,218,230</u>
Options exercisable at December 31, 2017	<u>2,762,728</u>	<u>\$ 45.86</u>	<u>2.1</u>	<u>\$ 89,274,127</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, 2017, 2016 and 2015.

	December 31,		
	2017	2016	2015
Expected volatility	35%	35%	35%
Expected life	5.0 years	5.0 years	5.0 years
Risk free interest rate	1.95%	1.76%	1.56%
Expected dividend yield	3.0%	3.2%	3.3%

The weighted average grant date fair value of options granted during the years ended December 31, 2017, 2016 and 2015 was \$25.84, \$22.14 and \$28.85, respectively. Cash received from option exercises for the years ended December 31, 2017, 2016 and 2015 was \$28,253,000, \$6,825,000 and \$15,343,000, respectively. The total intrinsic value of options exercised during the years ended December 31, 2017, 2016 and 2015 was \$9,178,000, \$5,519,000 and \$3,873,000, respectively.

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

**13. Stock-based Compensation – continued**

*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. In the years ended December 31, 2017, 2016 and 2015, we recognized \$729,000, \$851,000 and \$837,000, respectively, of compensation expense related to Vornado restricted stock awards that vested during each year. As of December 31, 2017, there was \$860,000 of total unrecognized compensation cost related to unvested Vornado restricted stock, which is expected to be recognized over a weighted-average period of 1.7 years. Dividends paid on unvested Vornado restricted stock are charged directly to retained earnings and amounted to \$46,000, \$56,000 and \$58,000 for the years ended December 31, 2017, 2016 and 2015, respectively.

Below is a summary of Vornado’s restricted stock activity under the Plan for the year ended December 31, 2017.

Unvested Shares	Shares	Weighted-Average Grant-Date Fair Value
Unvested at January 1, 2017	23,597	\$ 55.03
Granted	7,419	81.06
Vested	(14,662)	43.97
Cancelled or expired	(1,509)	34.42
Unvested at December 31, 2017	14,845	81.05

Vornado restricted stock awards granted in 2017, 2016 and 2015 had a fair value of \$601,000, \$927,000 and \$906,000, respectively. The fair value of restricted stock that vested during the years ended December 31, 2017, 2016 and 2015 was \$645,000, \$641,000 and \$882,000, respectively.

*Restricted Operating Partnership Units (“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. In the years ended December 31, 2017, 2016 and 2015, we recognized \$20,630,000, \$21,136,000 and \$22,180,000, respectively, of compensation expense related to OP Units that vested during each year. As of December 31, 2017, there was \$18,229,000 of total unrecognized compensation cost related to unvested OP Units, which is expected to be recognized over a weighted-average period of 1.8 years. Distributions paid on unvested OP Units are charged to “net 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 \$2,310,000, \$1,968,000 and \$2,414,000 in the years ended December 31, 2017, 2016 and 2015, respectively.

Below is a summary of restricted OP unit activity under the Plan for the year ended December 31, 2017.

Unvested Units	Units	Weighted-Average Grant-Date Fair Value
Unvested at January 1, 2017	627,709	\$ 70.11
Granted	312,554	79.75
Vested	(309,030)	67.64
Cancelled or expired	(2,271)	68.16
Unvested at December 31, 2017	628,962	76.13

OP Units granted in 2017, 2016 and 2015 had a fair value of \$24,927,000, \$18,492,000 and \$20,293,000, respectively. The fair value of OP Units that vested during the years ended December 31, 2017, 2016 and 2015 was \$20,903,000, \$22,701,000 and \$20,072,000, respectively.

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

**14. Fee and Other Income**

The following table sets forth the details of fee and other income:

(Amounts in thousands)	For the Year Ended December 31,		
	2017	2016	2015
BMS cleaning fees	\$ 104,143	\$ 93,425	\$ 96,880
Management and leasing fees	10,087	8,243	6,288
Lease termination fees <sup>(1)</sup>	8,171	8,770	23,369
Other income	13,349	9,648	13,353
	<u>\$ 135,750</u>	<u>\$ 120,086</u>	<u>\$ 139,890</u>

(1) 2015 includes \$15,000 related to the New York Stock Exchange lease termination at 20 Broad Street.

The above table excludes fee income from partially owned entities, which is included in "income (loss) from partially owned entities" (see Note 5 – *Investments in Partially Owned Entities*).

**15. Interest and Other Investment Income, Net**

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

(Amounts in thousands)	For the Year Ended December 31,		
	2017	2016	2015
Dividends on marketable securities	\$ 13,276	\$ 13,135	\$ 12,836
Mark-to-market income of investments in our deferred compensation plan <sup>(1)</sup>	6,932	5,213	111
Interest on loans receivable	4,352	3,890	6,371
Other, net	13,233	7,310	7,922
	<u>\$ 37,793</u>	<u>\$ 29,548</u>	<u>\$ 27,240</u>

(1) This income is entirely offset by the expense resulting from the mark-to-market of the deferred compensation plan liability, which is included in "general and administrative" expense.

**16. 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,		
	2017	2016	2015
Interest expense	\$ 359,819	\$ 328,398	\$ 333,388
Amortization of deferred financing costs	34,066	32,185	29,335
Capitalized interest and debt expense	(48,231)	(30,343)	(53,425)
	<u>\$ 345,654</u>	<u>\$ 330,240</u>	<u>\$ 309,298</u>

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

**17. Income Per Share/Income Per Class A Unit**

***Vornado Realty Trust***

The following table provides a reconciliation of both net income and the number of common shares used in the computation of (i) basic income per common share - which includes the weighted average number of common shares outstanding without regard to dilutive potential common shares, and (ii) diluted income per common share - which includes the weighted average common shares and dilutive share equivalents. Dilutive share equivalents may include our Series A convertible preferred shares, employee stock options, restricted stock awards and Out-Performance Plan awards.

(Amounts in thousands, except per share amounts)

	<b>Year Ended December 31,</b>		
	<b>2017</b>	<b>2016</b>	<b>2015</b>
<b>Numerator:</b>			
Income from continuing operations, net of income attributable to noncontrolling interests	\$ 239,824	\$ 526,686	\$ 550,240
(Loss) income from discontinued operations, net of income attributable to noncontrolling interest	(12,408)	380,231	210,194
Net income attributable to Vornado	227,416	906,917	760,434
Preferred share dividends	(65,399)	(75,903)	(80,578)
Preferred share issuance costs (Series J redemption)	—	(7,408)	—
Net income attributable to common shareholders	162,017	823,606	679,856
Earnings allocated to unvested participating securities	(46)	(96)	(81)
Numerator for basic income per share	161,971	823,510	679,775
<b>Impact of assumed conversions:</b>			
Earnings allocated to Out-Performance Plan units	230	806	—
Convertible preferred share dividends	—	86	91
Numerator for diluted income per share	<u>\$ 162,201</u>	<u>\$ 824,402</u>	<u>\$ 679,866</u>
<b>Denominator:</b>			
Denominator for basic income per share – weighted average shares	189,526	188,837	188,353
<b>Effect of dilutive securities <sup>(1)</sup>:</b>			
Employee stock options and restricted share awards	1,448	1,064	1,166
Out-Performance Plan units	284	230	—
Convertible preferred shares	—	42	45
Denominator for diluted income per share – weighted average shares and assumed conversions	<u>191,258</u>	<u>190,173</u>	<u>189,564</u>
<b>INCOME PER COMMON SHARE – BASIC:</b>			
Income from continuing operations, net	\$ 0.92	\$ 2.35	\$ 2.49
(Loss) income from discontinued operations, net	(0.07)	2.01	1.12
Net income per common share	<u>\$ 0.85</u>	<u>\$ 4.36</u>	<u>\$ 3.61</u>
<b>INCOME PER COMMON SHARE – DILUTED:</b>			
Income from continuing operations, net	\$ 0.91	\$ 2.34	\$ 2.48
(Loss) income from discontinued operations, net	(0.06)	2.00	1.11
Net income per common share	<u>\$ 0.85</u>	<u>\$ 4.34</u>	<u>\$ 3.59</u>

(1) The effect of dilutive securities in the years ended December 31, 2017, 2016 and 2015 excludes an aggregate of 12,165, 12,022 and 11,744 weighted average common share equivalents, respectively, as their effect was anti-dilutive.

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

**17. Income Per Share/Income Per Class A Unit – continued**

***Vornado Realty L.P.***

The following table provides a reconciliation of both net income and the number of Class A units used in the computation of (i) basic income per Class A unit - which includes the weighted average number of Class A units outstanding without regard to dilutive potential Class A units, and (ii) diluted income per Class A unit - which includes the weighted average Class A units and dilutive unit equivalents. Dilutive unit equivalents may include our Series A convertible preferred units, Vornado stock options, restricted unit awards and Out-Performance Plan awards.

(Amounts in thousands, except per unit amounts)

	<b>Year Ended December 31,</b>		
	<b>2017</b>	<b>2016</b>	<b>2015</b>
<b>Numerator:</b>			
Income from continuing operations, net of income attributable to noncontrolling interests	\$ 251,554	\$ 555,659	\$ 580,154
(Loss) income from discontinued operations	(13,228)	404,912	223,511
Net income attributable to Vornado Realty L.P.	238,326	960,571	803,665
Preferred unit distributions	(65,593)	(76,097)	(80,736)
Preferred unit issuance costs (Series J redemption)	—	(7,408)	—
Net income attributable to Class A unitholders	172,733	877,066	722,929
Earnings allocated to unvested participating securities	(3,232)	(4,177)	(4,092)
Numerator for basic income per Class A unit	169,501	872,889	718,837
Impact of assumed conversions:			
Convertible preferred unit distributions	—	86	92
Numerator for diluted income per Class A unit	\$ 169,501	\$ 872,975	\$ 718,929
<b>Denominator:</b>			
Denominator for basic income per Class A unit – weighted average units	201,214	200,350	199,309
Effect of dilutive securities <sup>(1)</sup> :			
Vornado stock options and restricted unit awards	2,086	1,625	1,804
Convertible preferred units	—	42	45
Denominator for diluted income per Class A unit – weighted average units and assumed conversions	203,300	202,017	201,158
<b>INCOME PER CLASS A UNIT – BASIC:</b>			
Income from continuing operations, net	\$ 0.91	\$ 2.34	\$ 2.49
(Loss) income from discontinued operations, net	(0.07)	2.02	1.12
Net income per Class A unit	0.84	4.36	3.61
<b>INCOME PER CLASS A UNIT – DILUTED:</b>			
Income from continuing operations, net	\$ 0.90	\$ 2.32	\$ 2.46
(Loss) income from discontinued operations, net	(0.07)	2.00	1.11
Net income per Class A unit	\$ 0.83	\$ 4.32	\$ 3.57

(1) The effect of dilutive securities in the years ended December 31, 2017, 2016 and 2015 excludes an aggregate of 124, 178 and 150 weighted average Class A unit equivalents, respectively, as their effect was anti-dilutive.

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

**18. Leases**

*As lessor:*

We lease space to tenants under operating leases. Most of the leases provide for the payment of fixed base rentals payable monthly in advance. Office building leases generally require the 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 the tenant's share of real estate taxes, insurance and maintenance. Certain leases also provide for the payment by the lessee of additional rent based on a percentage of the tenants' sales. As of December 31, 2017, future base rental revenue under non-cancelable operating leases, excluding rents for leases with an original term of less than one year and rents resulting from the exercise of renewal options, are as follows:

(Amounts in thousands)

<b>Year Ending December 31:</b>	
2018	\$ 1,469,201
2019	1,441,139
2020	1,369,636
2021	1,298,798
2022	1,230,172
Thereafter	5,841,213

These amounts do not include percentage rentals based on tenants' sales. These percentage rents approximated \$4,062,000, \$3,590,000 and \$1,575,000, for the years ended December 31, 2017, 2016 and 2015, respectively.

None of our tenants accounted for more than 10% of total revenues in any of the years ended December 31, 2017, 2016 and 2015.

*As lessee:*

We are a tenant under operating leases for certain properties. These leases have terms that expire during the next thirty years. Future minimum lease payments under operating leases at December 31, 2017 are as follows:

(Amounts in thousands)

<b>Year Ending December 31:</b>	
2018	\$ 33,703
2019	34,301
2020	34,779
2021	35,295
2022	36,319
Thereafter	1,113,171

Rent expense, a component of "operating" expenses on our consolidated statements of income, was \$40,219,000, \$40,170,000 and \$37,575,000 for the years ended December 31, 2017, 2016 and 2015, respectively.



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

**18. Leases – continued**

*1535 Broadway*

We are a lessee under a long-term capital lease for the retail and signage components of the Marriott Marquis Times Square Hotel at 1535 Broadway. At inception of the lease in 2012, we recorded a \$240,000,000 capital lease asset and liability on our consolidated balance sheet based on the present value of future minimum lease payments. The capital lease asset is being depreciated on a straight-line basis over the estimated life of the asset and the related expense is included in “depreciation and amortization” on our consolidated statements of income. During 2017, we substantially completed the redevelopment of the leased space, as required under the lease, at a total redevelopment cost of approximately \$197,209,000. The lease contains a put/call purchase option under which the lessor may exercise its “put” on predetermined dates after March 31, 2018 and we may exercise our “call” at any time after July 30, 2027 and before January 3, 2032.

As of December 31, 2017, future minimum lease payments under this capital lease are as follows:

(Amounts in thousands)

**Year Ending December 31:**

2018	\$	13,508
2019		12,508
2020		12,508
2021		12,508
2022		12,508
Thereafter		297,330
<b>Total minimum obligations</b>		<b>360,870</b>
Interest portion		(120,870)
<b>Present value of net minimum payments</b>	<b>\$</b>	<b>240,000</b>

As of December 31, 2017, the gross carrying amount of the property leased under the capital lease was \$436,984,000, which is a component of “buildings and improvements” on our consolidated balance sheets.

## 19. 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, 2017, our subsidiaries’ participation in these plans was not significant to our consolidated financial statements.

In the years ended December 31, 2017, 2016 and 2015, our subsidiaries contributed \$10,113,000, \$9,479,000 and \$10,878,000, 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, 2017, 2016 and 2015.

### *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, 2017, 2016 and 2015, our subsidiaries contributed \$29,549,000, \$32,998,000 and \$29,269,000, respectively, towards these plans, which is included as a component of “operating” expenses on our consolidated statements of income.

## 20. Commitments and Contingencies

### *Insurance*

We maintain general liability insurance with limits of \$300,000,000 per occurrence and per property, and 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. Our California properties have earthquake insurance with coverage of \$180,000,000 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 terrorism acts with limits of \$4.0 billion per occurrence and in the aggregate, and \$2.0 billion per occurrence and in the aggregate for terrorism involving nuclear, biological, chemical and radiological (“NBCR”) terrorism events, as defined by Terrorism Risk Insurance Program Reauthorization Act of 2015, which expires in December 2020.

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 \$1,976,000 (\$1,601,000 for 2018) and 17% (18% for 2018) 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.

We continue to monitor the state of the insurance market and the scope and costs of coverage for acts of terrorism. However, we cannot anticipate what coverage will be available on commercially reasonable terms in the future. We are responsible 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 which are non-recourse to us, 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 our properties and expand our portfolio.

## 20. Commitments and Contingencies – 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.

Generally, our mortgage loans are non-recourse to us. However, 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. As of December 31, 2017, the aggregate dollar amount of these guarantees and master leases is approximately \$668,000,000.

As of December 31, 2017, \$8,938,000 of letters of credit was 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.

In September 2016, our 50.1% joint venture with Related was designated by ESD, an entity of New York State, to redevelop the historic Farley Post Office Building (see page 126). The joint venture entered into a development agreement with ESD and a design-build contract with Skanska Moynihan Train Hall Builders. Under the development agreement with ESD, the joint venture is obligated to build the Moynihan Train Hall, with Vornado and Related each guaranteeing the joint venture's obligations. Under the design-build agreement, Skanska Moynihan Train Hall Builders is obligated to fulfill all of the joint venture's obligations. The obligations of Skanska Moynihan Train Hall Builders have been bonded by Skanska USA and bear a full guaranty from Skanska AB.

As of December 31, 2017, we expect to fund additional capital to certain of our partially owned entities aggregating approximately \$42,000,000.

As of December 31, 2017, we have construction commitments aggregating approximately \$422,000,000.

## 21. Related Party Transactions

### *Alexander's, Inc.*

We own 32.4% of Alexander's. Steven Roth, the Chairman of Vornado's Board of Trustees and its Chief Executive Officer is also the Chairman of the Board 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 5 - *Investments in Partially Owned Entities*.

### *Urban Edge Properties*

We own 4.5% of UE. In 2017 and 2016, we provided UE with information technology support. UE is providing us with leasing, development and property management services for (i) certain small retail properties that we plan to sell and (ii) our affiliate, Alexander's, Rego retail assets. Fees to UE for servicing the retail assets of Alexander's are similar to the fees that we are receiving from Alexander's as described in Note 5 - *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, are Interstate's two other general partners. As of December 31, 2017, Interstate and its partners beneficially owned an aggregate of approximately 7.2% of the common shares of beneficial interest of Vornado and 26.2% of Alexander's common stock.

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 1 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 \$501,000, \$521,000, and \$541,000 of management fees under the agreement for the years ended December 31, 2017, 2016 and 2015, respectively.

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

**22. Summary of Quarterly Results (Unaudited)**

***Vornado Realty Trust***

The following summary represents the results of operations for each quarter in 2017 and 2016:

(Amounts in thousands, except per share amounts)

	Revenues	Net Income (Loss) Attributable to Common Shareholders <sup>(1)</sup>	Net Income (Loss) Per Common Share <sup>(2)</sup>	
			Basic	Diluted
<b>2017</b>				
December 31	\$ 536,226	\$ 27,319	\$ 0.14	\$ 0.14
September 30	528,755	(29,026)	(0.15)	(0.15)
June 30	511,087	115,972	0.61	0.61
March 31	508,058	47,752	0.25	0.25
<b>2016</b>				
December 31	\$ 513,974	\$ 651,181	\$ 3.44	\$ 3.43
September 30	502,753	66,125	0.35	0.35
June 30	498,098	220,463	1.17	1.16
March 31	488,917	(114,163)	(0.61)	(0.61)

(1) Fluctuations among quarters resulted primarily from non-cash impairment losses, net gains on extinguishment of debt, net gains on sale of real estate and other items and from seasonality of business operations.

(2) The total for the year may differ from the sum of the quarters as a result of weighting.

***Vornado Realty L.P.***

The following summary represents the results of operations for each quarter in 2017 and 2016:

(Amounts in thousands, except per unit amounts)

	Revenues	Net Income (Loss) Attributable to Class A Unitholders <sup>(1)</sup>	Net Income (Loss) Per Class A Unit <sup>(2)</sup>	
			Basic	Diluted
<b>2017</b>				
December 31	\$ 536,226	\$ 29,123	\$ 0.14	\$ 0.14
September 30	528,755	(30,952)	(0.16)	(0.16)
June 30	511,087	123,630	0.61	0.61
March 31	508,058	50,932	0.25	0.25
<b>2016</b>				
December 31	\$ 513,974	\$ 693,377	\$ 3.44	\$ 3.43
September 30	502,753	70,442	0.35	0.35
June 30	498,098	234,945	1.17	1.16
March 31	488,917	(121,698)	(0.61)	(0.61)

(1) Fluctuations among quarters resulted primarily from non-cash impairment losses, net gains on extinguishment of debt, net gains on sale of real estate and other items and from seasonality of business operations.

(2) The total for the year may differ from the sum of the quarters as a result of weighting.

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

**23. Segment Information**

On January 1, 2017, we classified our investment in 85 Tenth Avenue in the "New York" segment as a result of the December 1, 2016 receipt of a 49.9% ownership interest in the property and prior repayment of our mezzanine loans receivable. Previously our investment in the mezzanine loans was classified in the "Other" segment.

On July 17, 2017, we completed the spin-off of our Washington, DC segment. Beginning in the third quarter of 2017, the historical financial results of our former Washington, DC segment are reflected in our consolidated financial statements as discontinued operations for all periods presented and are included in the Other segment. Subsequent to the Washington, DC spin-off, we operate in two segments, New York and Other, which is based on how we manage our business.

We have reclassified our 49.5% interest in 666 Fifth Avenue Office Condominium from "New York" to "Other" in all periods presented because we do not intend to hold this asset on a long-term basis.

Net Operating Income ("NOI") represents total revenues less operating expenses. We consider NOI 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, we utilize this measure to make investment decisions as well as to compare the performance of our assets to that of our peers. NOI should not be considered a substitute for net income. NOI may not be comparable to similarly titled measures employed by other companies.

Below is a reconciliation of net income to NOI for the years ended December 31, 2017, 2016 and 2015.

(Amounts in thousands)

	<b>For the Year Ended December 31,</b>		
	<b>2017</b>	<b>2016</b>	<b>2015</b>
Net income	\$ 264,128	\$ 981,922	\$ 859,430
Deduct:			
Our share of (income) loss from partially owned entities	(15,200)	(168,948)	9,947
Our share of (income) loss from real estate fund investments	(3,240)	23,602	(74,081)
Interest and other investment income, net	(37,793)	(29,548)	(27,240)
Net gains on disposition of wholly owned and partially owned assets	(501)	(160,433)	(149,417)
Loss (income) from discontinued operations	13,228	(404,912)	(223,511)
NOI attributable to noncontrolling interests in consolidated subsidiaries	(65,311)	(66,182)	(64,859)
Add:			
Depreciation and amortization expense	429,389	421,023	379,803
General and administrative expense	158,999	149,550	149,256
Acquisition and transaction related costs	1,776	9,451	12,511
NOI from partially owned entities	269,164	271,114	245,750
Interest and debt expense	345,654	330,240	309,298
Income tax expense (benefit)	41,090	7,229	(85,012)
NOI at share	1,401,383	1,364,108	1,341,875
Non cash adjustments for straight-line rents, amortization of acquired below-market leases, net and other	(86,842)	(170,477)	(214,322)
NOI at share - cash basis	\$ 1,314,541	\$ 1,193,631	\$ 1,127,553

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

**23. Segment Information - continued**

Below is a summary of NOI and selected balance sheet data by segment for the years ended December 31, 2017, 2016 and 2015.

(Amounts in thousands)

	<b>For the Year Ended December 31, 2017</b>		
	<b>Total</b>	<b>New York</b>	<b>Other</b>
Total revenues	\$ 2,084,126	\$ 1,779,307	\$ 304,819
Operating expenses	886,596	756,670	129,926
NOI - consolidated	1,197,530	1,022,637	174,893
Deduct: NOI attributable to noncontrolling interests in consolidated subsidiaries	(65,311)	(45,899)	(19,412)
Add: Our share of NOI from partially owned entities	269,164	189,327	79,837
NOI at share	1,401,383	1,166,065	235,318
Non-cash adjustments for straight-line rents, amortization of acquired below-market leases, net and other	(86,842)	(79,202)	(7,640)
NOI at share - cash basis	<u>\$ 1,314,541</u>	<u>\$ 1,086,863</u>	<u>\$ 227,678</u>
<b>Balance Sheet Data:</b>			
Real estate, at cost	\$ 14,756,295	\$ 11,025,092	\$ 3,731,203
Investments in partially owned entities	1,056,829	861,430	195,399
Total assets	17,397,934	13,780,817	3,617,117

(Amounts in thousands)

	<b>For the Year Ended December 31, 2016</b>		
	<b>Total</b>	<b>New York</b>	<b>Other</b>
Total revenues	\$ 2,003,742	\$ 1,713,374	\$ 290,368
Operating expenses	844,566	716,754	127,812
NOI - consolidated	1,159,176	996,620	162,556
Deduct: NOI attributable to noncontrolling interests in consolidated subsidiaries	(66,182)	(47,480)	(18,702)
Add: Our share of NOI from partially owned entities	271,114	159,386	111,728
NOI at share	1,364,108	1,108,526	255,582
Non-cash adjustments for straight-line rents, amortization of acquired below-market leases, net and other	(170,477)	(143,239)	(27,238)
NOI at share - cash basis	<u>\$ 1,193,631</u>	<u>\$ 965,287</u>	<u>\$ 228,344</u>
<b>Balance Sheet Data:</b>			
Real estate, at cost	\$ 14,187,820	\$ 10,787,730	\$ 3,400,090
Investments in partially owned entities	1,378,254	1,026,793	351,461
Total assets	20,814,847	13,310,524	7,504,323

(Amounts in thousands)

	<b>For the Year Ended December 31, 2015</b>		
	<b>Total</b>	<b>New York</b>	<b>Other</b>
Total revenues	\$ 1,985,495	\$ 1,695,925	\$ 289,570
Operating expenses	824,511	694,228	130,283
NOI - consolidated	1,160,984	1,001,697	159,287
Deduct: NOI attributable to noncontrolling interests in consolidated subsidiaries	(64,859)	(42,905)	(21,954)
Add: Our share of NOI from partially owned entities	245,750	156,177	89,573
NOI at share	1,341,875	1,114,969	226,906
Non-cash adjustments for straight-line rents, amortization of acquired below-market leases, net and other	(214,322)	(186,781)	(27,541)
NOI at share - cash basis	<u>\$ 1,127,553</u>	<u>\$ 928,188</u>	<u>\$ 199,365</u>

## 24. Subsequent Event

### *Stock-based Compensation*

On January 12, 2018, the Compensation Committee approved the issuance of appreciation-only long-term incentive plan units, or “AO LTIP Units”, pursuant to the Plan to certain of our officers and employees. In connection with the approval of AO LTIP Units, Vornado, in its capacity as sole general partner of the Operating Partnership, amended the Second Amended and Restated Agreement of Limited Partnership of the Operating Partnership (the “Partnership Agreement”) in order to establish the terms of the new class of partnership interests known as 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 ten 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.

### *Other*

On January 4 and 11, 2018, we redeemed all of the outstanding 6.625% Series G and 6.625% Series I cumulative redeemable preferred shares/units at their redemption price of \$25.00 per share/unit, or \$470,000,000 in the aggregate, plus accrued and unpaid dividends/distributions through the date of redemption (see Note 10 - *Shareholder's Equity/Partners' Capital*).

On January 5, 2018, we completed a \$100,000,000 refinancing of 33-00 Northern Boulevard (Center Building), a 471,000 square foot office building in Long Island City, New York. The seven-year loan is at LIBOR plus 1.80%, which was swapped to a fixed rate of 4.14%. The loan is interest only for the first five years and includes principal amortization of \$1,800,000 per annum beginning in year six. We realized net proceeds of approximately \$37,200,000 after repayment of the existing 4.43% \$59,800,000 mortgage and closing costs.

On January 17, 2018, the Fund completed the sale of 11 East 68th Street, a property located on Madison Avenue and 68th Street, for \$82,000,000. From the inception of this investment through its disposition, the Fund realized a \$46,259,000 net gain.



**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, 2017, 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, 2017 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, 2017 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, 2017.

## 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, 2017, 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, 2017, 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, 2017, of the Company and our report dated February 12, 2018, 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

Parsippany, New Jersey  
February 12, 2018

## 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 and 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, 2017, 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, 2017 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, 2017 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, 2017.

## 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, 2017, 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, 2017, 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, 2017, of the Partnership and our report dated February 12, 2018, 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

Parsippany, New Jersey  
February 12, 2018

**ITEM 9B. OTHER INFORMATION**

None.

**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 under the caption "Election of 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, 2017, 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.

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.

<b>Name</b>	<b>Age</b>	<b>PRINCIPAL OCCUPATION, POSITION AND OFFICE (Current and during past five years with Vornado unless otherwise stated)</b>
Steven Roth	76	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 since May 2004.
David R. Greenbaum	66	President of the New York Division since April 1997 (date of our acquisition); President of Mendik Realty (the predecessor to the New York Office division) from 1990 until April 1997.
Michael J. Franco	49	Executive Vice President - Chief Investment Officer since April 2015; Executive Vice President - Head of Acquisitions and Capital Markets since November 2010; Managing Director (2003-2010) and Executive Director (2001-2003) of the Real Estate Investing Group of Morgan Stanley.
Joseph Macnow	72	Executive Vice President - Chief Financial Officer and Chief Administrative Officer since February 2017; Executive Vice President - Finance and Chief Administrative Officer from June 2013 to February 2017; Executive Vice President - Finance and Administration from January 1998 to June 2013, and Chief Financial Officer from March 2001 to June 2013; Treasurer since May 2017, and Executive Vice President and Chief Financial Officer from August 1995 to April 2017 of Alexander's Inc.

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. This Code is available on Vornado's website at [www.vno.com](http://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," under the caption "Executive Compensation" 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," under the caption "Principal Security Holders" and such information is incorporated herein by reference.

### *Equity compensation plan information*

The following table provides information as of December 31, 2017 regarding Vornado's equity compensation plans.

<u>Plan Category</u>	<u>Number of securities to be issued upon exercise of outstanding options, warrants and rights</u>	<u>Weighted-average exercise price of outstanding options, warrants and rights</u>	<u>Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in the second column)</u>
Equity compensation plans approved by security holders	4,988,139 <sup>(1)</sup>	\$ 46.62	2,353,493 <sup>(2)</sup>
Equity compensation awards not approved by security holders	—	—	—
<b>Total</b>	<b>4,988,139</b>	<b>\$ 46.62</b>	<b>2,353,493</b>

(1) Includes an aggregate of 2,164,239 shares/units, comprised of (i) 14,846 restricted Vornado common shares, (ii) 628,962 restricted Operating Partnership units and (iii) 1,520,431 Out-Performance Plan units, which do not have an exercise price.

(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 4,706,986.

## 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," under the caption "Certain Relationships and Related Transactions" 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 Selection of Independent Auditors" 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.

	<b>Pages in this Annual Report on Form 10-K</b>
II--Valuation and Qualifying Accounts--years ended December 31, 2017, 2016 and 2015	168
III--Real Estate and Accumulated Depreciation as of December 31, 2017, 2016 and 2015	169

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 II**  
**VALUATION AND QUALIFYING ACCOUNTS**  
**December 31, 2017**  
**(Amounts in Thousands)**

Column A	Column B	Column C	Column D	Column E
Description	Balance at Beginning of Year	Additions Charged Against Operations	Uncollectible Accounts Written-off	Balance at End of Year
<b>Year Ended December 31, 2017</b>				
Allowance for doubtful accounts	\$ 8,621	\$ 26	\$ (2,167)	\$ 6,480
<b>Year Ended December 31, 2016</b>				
Allowance for doubtful accounts	\$ 10,075	\$ 1,827	\$ (3,281)	\$ 8,621
<b>Year Ended December 31, 2015</b>				
Allowance for doubtful accounts	\$ 18,299	\$ (1,429)	\$ (6,795)	\$ 10,075



**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
	Encumbrances (2)	Initial cost to company (1)		Costs capitalized subsequent to acquisition	Gross amount at which carried at close of period			Accumulated depreciation and amortization	Date of construction (4)	Date acquired	Life on which depreciation in latest income statement
		Land	Buildings and improvements		Land	Buildings and improvements	Total (3)				
<i>New York</i>											
<b>Manhattan</b>											
1290 Avenue of the Americas	\$ 950,000	\$ 515,539	\$ 923,653	\$ 222,019	\$ 515,539	\$ 1,145,672	\$ 1,661,211	\$ 302,588	1963	2007	(5)
697-703 Fifth Avenue (St. Regis - retail)	450,000	152,825	584,230	212	152,825	584,442	737,267	46,409		2014	(5)
350 Park Avenue	400,000	265,889	363,381	47,714	265,889	411,095	676,984	118,948	1960	2006	(5)
666 Fifth Avenue (Retail Condo)	390,000	189,005	471,072	—	189,005	471,072	660,077	61,050		2012	(5)
One Penn Plaza	—	—	412,169	236,985	—	649,154	649,154	294,104	1972	1998	(5)
100 West 33rd Street	398,402	242,776	247,970	34,479	242,776	282,449	525,225	79,163	1911	2007	(5)
1535 Broadway (Marriott Marquis)	—	—	249,285	149,716	—	399,001	399,001	25,326		2012	(5)
150 West 34th Street	205,000	119,657	268,509	—	119,657	268,509	388,166	17,341	1900	2015	(5)
1540 Broadway	—	105,914	214,208	28,825	105,914	243,033	348,947	54,741		2006	(5)
655 Fifth Avenue	140,000	102,594	231,903	—	102,594	231,903	334,497	24,837		2013	(5)
Two Penn Plaza	575,000	53,615	164,903	106,557	52,689	272,386	325,075	156,678	1968	1997	(5)
90 Park Avenue	—	8,000	175,890	176,847	8,000	352,737	360,737	117,458	1964	1997	(5)
Manhattan Mall	181,598	88,595	113,473	71,579	88,595	185,052	273,647	60,036	2009	2007	(5)
770 Broadway	700,000	52,898	95,686	121,075	52,898	216,761	269,659	89,691	1907	1998	(5)
888 Seventh Avenue	375,000	—	117,269	141,655	—	258,924	258,924	116,203	1980	1998	(5)
Eleven Penn Plaza	450,000	40,333	85,259	105,575	40,333	190,834	231,167	69,613	1923	1997	(5)
640 Fifth Avenue	—	38,224	25,992	156,605	38,224	182,597	220,821	52,575	1950	1997	(5)
909 Third Avenue	350,000	—	120,723	98,723	—	219,446	219,446	92,000	1969	1999	(5)
150 East 58th Street	—	39,303	80,216	44,769	39,303	124,985	164,288	57,827	1969	1998	(5)
595 Madison Avenue	—	62,731	62,888	35,314	62,731	98,202	160,933	37,977	1968	1999	(5)
330 West 34th Street	—	—	8,599	142,977	—	151,576	151,576	21,734	1925	1998	(5)
828-850 Madison Avenue	80,000	107,937	28,261	134	107,937	28,395	136,332	8,952		2005	(5)
33-00 Northern Boulevard	59,721	46,505	86,226	4,689	46,505	90,915	137,420	7,338	1915	2015	(5)
715 Lexington Avenue	—	—	26,903	63,244	63,000	27,147	90,147	8,623	1923	2001	(5)
478-486 Broadway	—	30,000	20,063	34,835	30,000	54,898	84,898	12,393	2009	2007	(5)
4 Union Square South	114,028	24,079	55,220	2,971	24,079	58,191	82,270	19,464	1965/2004	1993	(5)
260 Eleventh Avenue	—	—	80,482	867	—	81,349	81,349	5,470	1911	2015	(5)
510 Fifth Avenue	—	34,602	18,728	34,922	48,379	39,873	88,252	8,128		2010	(5)
606 Broadway	38,458	—	54,399	23,163	—	77,562	77,562	—		2016	(5)
40 Fulton Street	—	15,732	26,388	15,493	15,732	41,881	57,613	20,130	1987	1998	(5)
689 Fifth Avenue	—	19,721	13,446	24,555	19,721	38,001	57,722	12,231	1925	1998	(5)
443 Broadway	—	11,187	41,186	—	11,187	41,186	52,373	4,779		2013	(5)
40 East 66th Street	—	13,616	34,635	159	13,616	34,794	48,410	10,521		2005	(5)

**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
	Encumbrances (2)	Initial cost to company (1)		Costs capitalized subsequent to acquisition	Gross amount at which carried at close of period			Accumulated depreciation and amortization	Date of construction (4)	Date acquired	Life on which depreciation in latest income statement
		Land	Buildings and improvements		Land	Buildings and improvements	Total (3)				
<i>New York - continued</i>											
<b>Manhattan - continued</b>											
155 Spring Street	\$ —	\$ 13,700	\$ 30,544	\$ 4,545	\$ 13,700	\$ 35,089	\$ 48,789	\$ 9,516		2007	(5)
435 Seventh Avenue	96,780	19,893	19,091	37	19,893	19,128	39,021	7,418	2002	1997	(5)
3040 M Street	—	7,830	27,490	3,583	7,830	31,073	38,903	9,923		2006	(5)
608 Fifth Avenue	—	—	—	38,829	—	38,829	38,829	8,859	1932	2012	(5)
692 Broadway	—	6,053	22,908	3,690	6,053	26,598	32,651	8,422		2005	(5)
131-135 West 33rd Street	—	8,315	21,312	24	8,315	21,336	29,651	879		2016	(5)
265 West 34th Street	—	28,500	—	23	28,500	23	28,523	—	1920	2015	(5)
304 Canal Street	—	3,511	12,905	11,115	3,511	24,020	27,531	160	1910	2014	(5)
677-679 Madison Avenue	—	13,070	9,640	413	13,070	10,053	23,123	2,913		2006	(5)
1131 Third Avenue	—	7,844	7,844	5,708	7,844	13,552	21,396	1,503		1997	(5)
486 Eighth Avenue	—	20,000	71	23	20,000	94	20,094	—	1928	2016	(5)
431 Seventh Avenue	—	16,700	2,751	—	16,700	2,751	19,451	739		2007	(5)
138-142 West 32nd Street	—	9,252	9,936	—	9,252	9,936	19,188	724	1920	2015	(5)
334 Canal Street	—	1,693	6,507	7,589	1,693	14,096	15,789	909		2011	(5)
267 West 34th Street	—	5,099	10,037	2	5,099	10,039	15,138	3,994		2013	(5)
1540 Broadway Garage	—	4,086	8,914	—	4,086	8,914	13,000	2,589	1990	2006	(5)
966 Third Avenue	—	8,869	3,631	—	8,869	3,631	12,500	393		2013	(5)
148 Spring Street	—	3,200	8,112	406	3,200	8,518	11,718	2,054		2008	(5)
150 Spring Street	—	3,200	5,822	294	3,200	6,116	9,316	1,501		2008	(5)
137 West 33rd Street	—	6,398	1,550	—	6,398	1,550	7,948	107	1932	2015	(5)
488 Eighth Avenue	—	10,650	1,767	(4,671)	6,859	887	7,746	223		2007	(5)
484 Eighth Avenue	—	3,856	762	485	3,856	1,247	5,103	526		1997	(5)
825 Seventh Avenue	—	1,483	697	33	1,483	730	2,213	380		1997	(5)
339 Greenwich	—	2,622	12,333	—	2,622	12,333	14,955	245		2017	(5)
Other (including signage)	—	80,762	14,895	114,889	80,762	129,784	210,546	33,136			
Total Manhattan	5,953,987	2,667,863	5,742,734	2,313,675	2,739,923	7,984,349	10,724,272	2,111,441			
<b>Other Properties</b>											
Hotel Pennsylvania	—	29,903	121,712	105,665	29,903	227,377	257,280	110,796	1919	1997	(5)
Paramus	—	—	—	25,176	1,036	24,140	25,176	15,188	1967	1987	(5)
Total Other Properties	—	29,903	121,712	130,841	30,939	251,517	282,456	125,984			
<b>Total New York</b>	5,953,987	2,697,766	5,864,446	2,444,516	2,770,862	8,235,866	11,006,728	2,237,425			

**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
	Encumbrances (2)	Initial cost to company (1)		Costs capitalized subsequent to acquisition	Gross amount at which carried at close of period			Accumulated depreciation and amortization	Date of construction (4)	Date acquired	Life on which depreciation in latest income statement
		Land	Buildings and improvements		Land	Buildings and improvements	Total (3)				
<b>Other</b>											
<b>theMART</b>											
<b>Illinois</b>											
theMART, Chicago	\$ 675,000	\$ 64,528	\$ 319,146	\$ 380,720	\$ 64,535	\$ 699,859	\$ 764,394	\$ 283,135	1930	1998	(5)
527 West Kinzie, Chicago	—	5,166	—	32	5,166	32	5,198	—		1998	
Total Illinois	<u>675,000</u>	<u>69,694</u>	<u>319,146</u>	<u>380,752</u>	<u>69,701</u>	<u>699,891</u>	<u>769,592</u>	<u>283,135</u>			
<b>New York</b>											
MMPI Piers	—	—	—	15,117	—	15,117	15,117	2,450		2008	(5)
Total theMART	<u>675,000</u>	<u>69,694</u>	<u>319,146</u>	<u>395,869</u>	<u>69,701</u>	<u>715,008</u>	<u>784,709</u>	<u>285,585</u>			
555 California Street	569,215	221,903	893,324	152,004	209,916	1,057,315	1,267,231	261,218	1922, 1969-1970	2007	(5)
220 Central Park South	950,000	115,720	16,420	1,265,899	—	1,398,039	1,398,039	—		2005	(5)
Borgata Land, Atlantic City, NJ	55,606	83,089	—	—	83,089	—	83,089	—		2010	(5)
40 East 66th Residential	—	29,199	85,798	(93,222)	8,454	13,321	21,775	3,662		2005	(5)
677-679 Madison	—	1,462	1,058	284	1,626	1,178	2,804	439		2006	(5)
Annapolis	—	—	9,652	—	—	9,652	9,652	3,709			
Wayne Towne Center	—	—	26,137	52,771	—	78,908	78,908	16,448			
Other	—	—	—	4,419	—	4,419	4,419	1,161		2005	(5)
<b>Total Other</b>	<u>2,249,821</u>	<u>521,067</u>	<u>1,351,535</u>	<u>1,778,024</u>	<u>372,786</u>	<u>3,277,840</u>	<u>3,650,626</u>	<u>572,222</u>			
Leasehold improvements equipment and other	—	—	—	98,941	—	98,941	98,941	75,636			
<b>Total December 31, 2017</b>	<u>\$ 8,203,808</u>	<u>\$ 3,218,833</u>	<u>\$ 7,215,981</u>	<u>\$ 4,321,481</u>	<u>\$ 3,143,648</u>	<u>\$ 11,612,647</u>	<u>\$ 14,756,295</u>	<u>\$ 2,885,283</u>			

- (1) Initial cost is cost as of January 30, 1982 (the date on which we commenced real estate operations) unless acquired subsequent to that date see Column H.  
(2) Represents the contractual debt obligations.  
(3) The net basis of Vornado's assets and liabilities for tax reporting purposes is approximately \$2.0 billion lower than the amounts reported for financial statement purposes.  
(4) Date of original construction — many properties have had substantial renovation or additional construction — see Column D.  
(5) Depreciation of the buildings and improvements are calculated over lives ranging from the life of the lease to forty years.

**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:

	<b>Year Ended December 31,</b>		
	<b>2017</b>	<b>2016</b>	<b>2015</b>
<b>Real Estate</b>			
Balance at beginning of period	\$ 14,187,820	\$ 13,545,295	\$ 12,438,940
Additions during the period:			
Land	21,298	30,805	281,048
Buildings & improvements	598,820	854,194	1,030,043
	<u>14,807,938</u>	<u>14,430,294</u>	<u>13,750,031</u>
Less: Assets sold, written-off and deconsolidated	51,643	242,474	204,736
Balance at end of period	<u>\$ 14,756,295</u>	<u>\$ 14,187,820</u>	<u>\$ 13,545,295</u>
<b>Accumulated Depreciation</b>			
Balance at beginning of period	\$ 2,581,514	\$ 2,356,728	\$ 2,209,778
Additions charged to operating expenses	360,391	346,755	309,306
	<u>2,941,905</u>	<u>2,703,483</u>	<u>2,519,084</u>
Less: Accumulated depreciation on assets sold, written-off and deconsolidated	56,622	121,969	162,356
Balance at end of period	<u>\$ 2,885,283</u>	<u>\$ 2,581,514</u>	<u>\$ 2,356,728</u>

**Item 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES - continued**

(b) Exhibits:

<u>Exhibit No.</u>		
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 March 2, 2000 - Incorporated by reference to Exhibit 3.12 to Vornado Realty Trust's Annual Report on Form 10-K for the year ended December 31, 1999 (File No. 001-11954), filed on Thursday, March 9, 2000
3.3	—	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
3.4	—	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
3.5	—	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
3.6	—	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
3.7	—	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
3.8	—	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
3.9	—	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
3.10	—	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
3.11	—	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
3.12	—	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

\* Incorporated by reference

- 3.13 — 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 \*
- 3.14 — 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 \*
- 3.15 — 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 \*
- 3.16 — 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 \*
- 3.17 — 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 \*
- 3.18 — 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 \*
- 3.19 — 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 \*
- 3.20 — 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 \*
- 3.21 — 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 \*
- 3.22 — 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 \*
- 3.23 — 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 \*
- 3.24 — 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 \*
- 3.25 — 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 \*
- 3.26 — 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 Friday, November 7, 2003 \*
- 3.27 — 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 Wednesday, March 3, 2004 \*

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\* Incorporated by reference

- 3.28 — 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 \*
- 3.29 — 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 Wednesday, January 26, 2005 \*
- 3.30 — 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 Wednesday, January 26, 2005 \*
- 3.31 — 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 \*
- 3.32 — 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 \*
- 3.33 — 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 \*
- 3.34 — 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 \*
- 3.35 — 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 \*
- 3.36 — 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 \*
- 3.37 — 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 \*
- 3.38 — 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 \*
- 3.39 — 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 Wednesday, May 3, 2006 \*
- 3.40 — 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 \*
- 3.41 — 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 \*

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\* Incorporated by reference

- 3.42 — 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 Wednesday, June 27, 2007 \*
- 3.43 — 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 Wednesday, June 27, 2007 \*
- 3.44 — 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 Wednesday, June 27, 2007 \*
- 3.45 — 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 Wednesday, June 27, 2007 \*
- 3.46 — 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 \*
- 3.47 — 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 \*
- 3.48 — 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 \*
- 3.49 — 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 Thursday, April 5, 2012 \*
- 3.50 — 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 \*
- 3.51 — 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 \*
- 3.52 — 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 Thursday, April 2, 2015 \*
- 3.53 — Forty-Eighth Amendment to Second Amended and Restated Agreement of Limited Partnership of Vornado Realty L.P. dated as of January 12, 2018 \*\*\*
- 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 \*

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\* Incorporated by reference

\*\*\* Filed herewith



4.2	—	<p>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</p> <p><i>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</i></p>	*
10.1	—	<p>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</p>	*
10.2	**	<p>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</p>	*
10.3	**	<p>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</p>	*
10.4	—	<p>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</p>	*
10.5	**	<p>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</p>	*
10.6	**	<p>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</p>	*
10.7	—	<p>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 for the quarter ended June 30, 2002 (File No. 001-06064), filed on August 7, 2002</p>	*
10.8	**	<p>Form of Vornado Realty Trust's 2002 Omnibus Share Plan - Incorporated by reference to Exhibit 4.2 to Vornado Realty Trust's Registration Statement on Form S-8 (File No. 333-102216), filed on December 26, 2002.</p>	*
10.9	**	<p>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</p>	*
10.10	**	<p>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</p>	*
	*	<hr style="width: 25%; margin-left: 0;"/> <p>Incorporated by reference</p>	
	**	<p>Management contract or compensatory agreement</p>	

10.11	**	—	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	*
10.12	**	—	Employment Agreement between Vornado Realty Trust and Mitchell Shear, as of April 19, 2007 – Incorporated by reference to Exhibit 10.46 to Vornado Realty Trust’s Quarterly Report on Form 10-Q for the quarter ended March 31, 2007 (File No. 001-11954), filed on May 1, 2007	*
10.13	**	—	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	*
10.14	**	—	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	*
10.15	**	—	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	*
10.16	**	—	Amendment to Employment Agreement between Vornado Realty Trust and Mitchell N. Shear, dated December 29, 2008. Incorporated by reference to Exhibit 10.51 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	*
10.17	**	—	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	*
10.18	**	—	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	*
10.19	**	—	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	*
10.20	**	—	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	*
10.21	**	—	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	*
	*		Incorporated by reference	
	**		Management contract or compensatory agreement	

10.22	**	—	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	*
10.23	**	—	Employment agreement between Vornado Realty Trust and Stephen W. Theriot dated June 1, 2013. Incorporated by reference to Exhibit 10.51 to Vornado Realty Trust's Quarterly Report on Form 10-Q for the quarter ended June 30, 2013 (File No. 001-11954), filed on August 5, 2013	*
10.24	**	—	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	*
10.25	**	—	Form of Vornado Realty Trust 2014 Outperformance Plan Award Agreement. Incorporated by reference to Exhibit 10.53 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	*
10.26		—	Amended and Restated Revolving Credit Agreement dated as of September 30, 2014, by and 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 10.54 to Vornado Realty Trust's Quarterly Report on Form 10-Q for the quarter ended September 30, 2014 (File No. 001-11954), filed on November 3, 2014	*
10.27	**	—	Form of Vornado Realty Trust 2016 Outperformance Plan Award 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 January 21, 2016	*
10.28		—	Term Loan Agreement dated as of October 30, 2015, by and 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 10.32 to Vornado Realty Trust's Annual Report on Form 10-K for the year ended December 31, 2015 (File No. 001-11954), filed on February 16, 2016	*
10.29		—	Amended and Restated Revolving Credit Agreement dated as of November 7, 2016, 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 10.29 to Vornado Realty Trust's Annual Report on Form 10-K for the year ended December 31, 2016 (File No. 001-11954), filed on February 13, 2017	*
10.30	**	—	Amendment to Employment Agreement, dated March 10, 2017, between Vornado Realty Trust and Mitchell Schear. Incorporated by reference to Exhibit 10.30 to Vornado Realty Trust's Quarterly Report on Form 10-Q for the quarter ended March 31, 2017 (File No. 001-11954), filed on May 1, 2017	*
10.31	**	—	Consulting Agreement, dated March 10, 2017, between JBG SMITH Properties and Mitchell Schear. Incorporated by reference to Exhibit 10.31 to Vornado Realty Trust's Quarterly Report on Form 10-Q for the quarter ended March 31, 2017 (File No. 001-11954), filed on May 1, 2017	*
	*		Incorporated by reference	
	**		Management contract or compensatory agreement	

- 10.32     \*\* —     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     \*
- 10.33     —     Amended and Restated Revolving Credit Agreement dated as of October 17, 2017, 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.     \*\*\*
- 10.34     \*\* —     Form of Vornado Realty Trust 2010 Omnibus Share Plan AO LTIP Unit Award Agreement dated as of January 12, 2018     \*\*\*
- 
- \*     Incorporated by reference  
\*\*     Management contract or compensatory agreement  
\*\*\*     Filed herewith

12.1	—	Computation of Ratios for Vornado Realty Trust	***
12.2	—	Computation of Ratios for Vornado Realty L.P.	***
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.INS	—	XBRL Instance Document of Vornado Realty Trust and Vornado Realty L.P.	***
101.SCH	—	XBRL Taxonomy Extension Schema of Vornado Realty Trust and Vornado Realty L.P.	***
101.CAL	—	XBRL Taxonomy Extension Calculation Linkbase of Vornado Realty Trust and Vornado Realty L.P.	***
101.DEF	—	XBRL Taxonomy Extension Definition Linkbase of Vornado Realty Trust and Vornado Realty L.P.	***
101.LAB	—	XBRL Taxonomy Extension Label Linkbase of Vornado Realty Trust and Vornado Realty L.P.	***
101.PRE	—	XBRL Taxonomy Extension Presentation Linkbase of Vornado Realty Trust and Vornado Realty L.P.	***

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\*\*\* Filed herewith

**ITEM 16. FORM 10-K SUMMARY**

None.

**SIGNATURES**

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

**VORNADO REALTY TRUST**

\_\_\_\_\_  
(Registrant)

Date: February 12, 2018

By:           /s/ Matthew Iocco          

\_\_\_\_\_  
Matthew Iocco, Chief Accounting Officer  
(duly authorized officer and principal officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated:

**SIGNATURES - continued**

<u>Signature</u>	<u>Title</u>	<u>Date</u>
By: <u>/s/Steven Roth</u> (Steven Roth)	Chairman of the Board of Trustees and Chief Executive Officer	February 12, 2018
By: <u>/s/Candace K. Beinecke</u> (Candace K. Beinecke)	Trustee	February 12, 2018
By: <u>/s/Michael D. Fascitelli</u> (Michael D. Fascitelli)	Trustee	February 12, 2018
By: <u>/s/Robert P. Kogod</u> (Robert P. Kogod)	Trustee	February 12, 2018
By: <u>/s/Michael Lynne</u> (Michael Lynne)	Trustee	February 12, 2018
By: <u>/s/David Mandelbaum</u> (David Mandelbaum)	Trustee	February 12, 2018
By: <u>/s/Mandakini Puri</u> (Mandakini Puri)	Trustee	February 12, 2018
By: <u>/s/Daniel R. Tisch</u> (Daniel R. Tisch)	Trustee	February 12, 2018
By: <u>/s/Richard R. West</u> (Richard R. West)	Trustee	February 12, 2018
By: <u>/s/Russell B. Wight</u> (Russell B. Wight, Jr.)	Trustee	February 12, 2018
By: <u>/s/Joseph Macnow</u> (Joseph Macnow)	Chief Financial Officer (Principal Financial and Accounting Officer)	February 12, 2018
By: <u>/s/Matthew Iocco</u> (Matthew Iocco)	Chief Accounting Officer (Principal Accounting Officer)	February 12, 2018

**SIGNATURES**

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

**VORNADO REALTY L.P.**

\_\_\_\_\_  
(Registrant)

Date: February 12, 2018

By:           /s/ Matthew Iocco          

\_\_\_\_\_  
Matthew Iocco, Chief Accounting Officer of Vornado Realty Trust, sole General Partner of Vornado Realty L.P. (duly authorized officer and principal accounting officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated:



**SIGNATURES - continued**

<b>Signature</b>	<b>Title</b>	<b>Date</b>
By: <u>/s/Steven Roth</u> (Steven Roth)	Chairman of the Board of Trustees and Chief Executive Officer of Vornado Realty Trust	February 12, 2018
By: <u>/s/Candace K. Beinecke</u> (Candace K. Beinecke)	Trustee of Vornado Realty Trust	February 12, 2018
By: <u>/s/Michael D. Fascitelli</u> (Michael D. Fascitelli)	Trustee of Vornado Realty Trust	February 12, 2018
By: <u>/s/Robert P. Kogod</u> (Robert P. Kogod)	Trustee of Vornado Realty Trust	February 12, 2018
By: <u>/s/Michael Lynne</u> (Michael Lynne)	Trustee of Vornado Realty Trust	February 12, 2018
By: <u>/s/David Mandelbaum</u> (David Mandelbaum)	Trustee of Vornado Realty Trust	February 12, 2018
By: <u>/s/Mandakini Puri</u> (Mandakini Puri)	Trustee of Vornado Realty Trust	February 12, 2018
By: <u>/s/Daniel R. Tisch</u> (Daniel R. Tisch)	Trustee of Vornado Realty Trust	February 12, 2018
By: <u>/s/Richard R. West</u> (Richard R. West)	Trustee of Vornado Realty Trust	February 12, 2018
By: <u>/s/Russell B. Wight</u> (Russell B. Wight, Jr.)	Trustee of Vornado Realty Trust	February 12, 2018
By: <u>/s/Joseph Macnow</u> (Joseph Macnow)	Chief Financial Officer of Vornado Realty Trust (Principal Financial and Accounting Officer)	February 12, 2018
By: <u>/s/Matthew Iocco</u> (Matthew Iocco)	Chief Accounting Officer of Vornado Realty Trust (Principal Accounting Officer)	February 12, 2018