**UNITED STATES**
**SECURITIES AND EXCHANGE COMMISSION**
**Washington, DC 20549**

# FORM 8-K

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

**Date of Report (Date of earliest event reported):**
**September 24, 2018**

**VORNADO REALTY TRUST**
**(Exact Name of Registrant as Specified in Charter)**

| **Maryland** | **No. 001-11954** | **No. 22-1657560** |
|---|---|---|
| (State or Other Jurisdiction of Incorporation) | (Commission File Number) | (IRS Employer Identification No.) |

**VORNADO REALTY L.P.**
**(Exact Name of Registrant as Specified in Charter)**

| **Delaware** | **No. 001-34482** | **No. 13-3925979** |
|---|---|---|
| (State or Other Jurisdiction of Incorporation) | (Commission File Number) | (IRS Employer Identification No.) |

| **888 Seventh Avenue New York, New York** | **10019** |
|---|---|
| (Address of Principal Executive offices) | (Zip Code) |

**Registrant's telephone number, including area code: (212) 894-7000**
**Former name or former address, if changed since last report: N/A**

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instructions A.2.):

o Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

o Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

o Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

o Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company o

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. o

**Item 7.01. Regulation FD Disclosure.**

On September 24, 2018, Vornado Realty Trust, the general partner of Vornado Realty L.P., posted an investor presentation to its website at www.vno.com on the "Investor Relations" page. A copy of the investor presentation is attached as Exhibit 99.1 to this Current Report on Form 8-K and is incorporated herein solely for purposes of this Item 7.01 disclosure.

Exhibit 99.1 hereto shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the Exchange Act), or otherwise subject to the liabilities under that Section and shall not be deemed to be incorporated by reference into any filing of Vornado Realty Trust or Vornado Realty L.P. under the Securities Act of 1933, as amended, or the Exchange Act.

**Item 9.01. Financial Statements and Exhibits.**

(d) Exhibits.

The following exhibit is being furnished as part of this Current Report on Form 8-K:

| | |
|---|---|
| 99.1 | Vornado Realty Trust investor presentation. |

## SIGNATURE

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 hereunto duly authorized.

**VORNADO REALTY TRUST**
(Registrant)

| | |
|---|---|
| By: | /s/ Matthew Iocco |
| Name: | Matthew Iocco |
| Title: | Chief Accounting Officer (duly authorized officer and principal accounting officer) |

Date: September 24, 2018

## SIGNATURE

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 hereunto duly authorized.

**VORNADO REALTY L.P.**
(Registrant)

| | |
|---|---|
| By: | VORNADO REALTY TRUST, Sole General Partner |
| By: | /s/ Matthew Iocco |
| Name: | Matthew Iocco |
| Title: | Chief Accounting Officer of Vornado Realty Trust, sole General Partner of Vornado Realty L.P. (duly authorized officer and principal accounting officer) |

Date: September 24, 2018





# VORNADO
REALTY TRUST

SEPTEMBER 2018

## FORWARD LOOKING STATEMENTS

VORNADO
REALTY TRUST

Certain statements contained in this investor presentation constitute forward-looking statements as such term is defined in Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Forward-looking statements are not guarantees of performance. They represent our intentions, plans, expectations and beliefs and are subject to numerous assumptions, risks and uncertainties. Consequently, the future results, financial condition and business of Vornado Realty Trust ("Vornado") 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 similar expressions in this presentation. We also note the following forward-looking statements: in the case of our development and redevelopment projects, the estimated completion date, estimated project cost, incremental rent, incremental revenue and NOI, yields, value created and cost to complete; and stabilized yields, 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. These factors include, among others: the timing of and costs associated with property improvements, financing commitments, and general competitive factors. For further discussion of factors that could materially affect the outcome of our forward-looking statements and other risks and uncertainties, see "Risk Factors" in Vornado's Annual Report on Form 10-K for the year ended December 31, 2017.

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. 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 presentation.

**Market Data**
Market data and industry forecasts are used in this presentation, including data obtained from publicly available sources. These sources generally state that the information they provide has been obtained from sources believed to be reliable but the accuracy and completeness of the information are not assured. Vornado has not independently verified any of such information.


NEW YORK CITY FOCUSED
PREMIER ASSETS
LEADING OPERATING PLATFORM
VORNADO REALTY TRUST
PENN DISTRICT OPPORTUNITY
FORTRESS BALANCE SHEET
TRACK RECORD OF VALUE CREATION

VORNADO REALTY TRUST

**Peerless NYC focused real estate company with premier office and street retail assets**

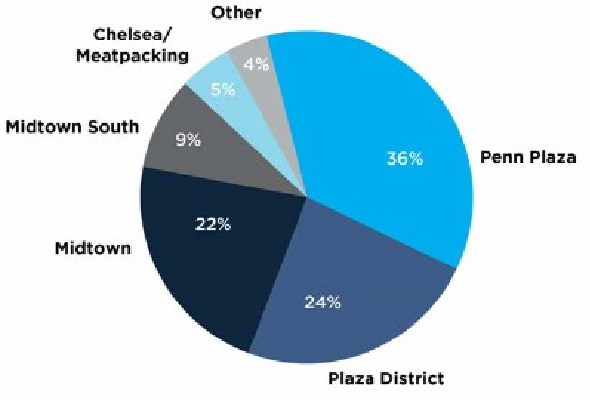
- Vornado RemainCo's 5 and 10-year same-store NOI growth is the best among blue chip REITs
- Vornado's portfolio consists of 39.5MM SF (30.2MM SF at share)
- New York focused company, with an irreplaceable NYC portfolio generating 88% of the Company's NOI - cash basis
- NYC office includes trophy assets in best submarkets with a blue chip tenant roster
  - Well positioned with over 50% of SF in fast growing west side of Manhattan
- NYC street retail is among the scarcest and most valuable real estate in the world
  - Over 50% of NOI - cash basis comes from Upper Fifth Avenue and Times Square (the two premier submarkets), leased for term with high quality tenants
- theMART and 555 California Street — the best assets in Chicago and San Francisco

**Components of NOI - cash basis[1]**

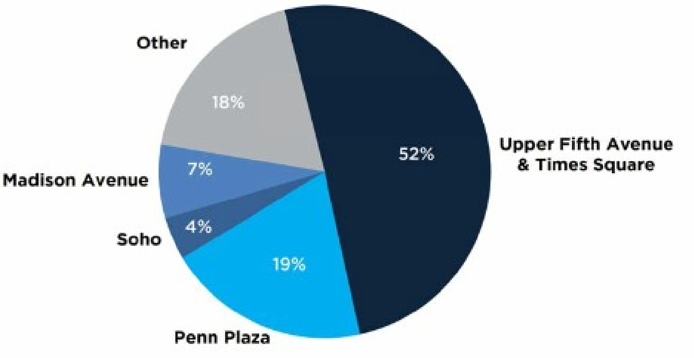

1. For the trailing twelve months ended June 30, 2018 excluding other investments (see page 37 for non-GAAP reconciliation)

## NEW YORK OFFICE & STREET RETAIL PORTFOLIOS BY SUBMARKET

NYC Office Submarket by Square Footage
As of 6/30/2018




NYC Retail Submarket by NOI - cash basis
for the Trailing Twelve Months Ended 6/30/2018



## NYC CONTINUES TO BE A MAGNET FOR TALENT/ NYC JOB GROWTH OUTPACES THE NATION



- New York is the gateway city with the strongest projected population growth
  - Population projected to increase on average 23,700 annually for the next three decades, surpassing 9 million by 2040 (NYC.gov)
- Diversified employment base
  - In 1990, 1 in 2 New York City jobs were in the financial services industry - today the ratio is 1 in 4
  - Today, 1 in 4 office jobs are TAMI, and half of office jobs are in professional business services
  - Second largest tech center outside of Silicon Valley
  - Growing footprint of healthcare systems and emergence of life sciences industry
- Resurgence of financial services sector
- Continuing corporate investment in New York
  - J.P. Morgan Chase building new 2.5 million SF corporate headquarters at 270 Park Avenue
  - Google acquisition of 1.2 million SF Chelsea Market building
  - Disney purchase of 4 Hudson Square leasehold to build new headquarters

**NYC Outpaces National Job Growth**


*Sources: U.S. Bureau of Labor Statistics, NYS Department of Labor, Non-Farm Employment, Seasonally Adjusted*

# MANHATTAN IS WELL-POSITIONED TO ABSORB UPCOMING OFFICE SUPPLY

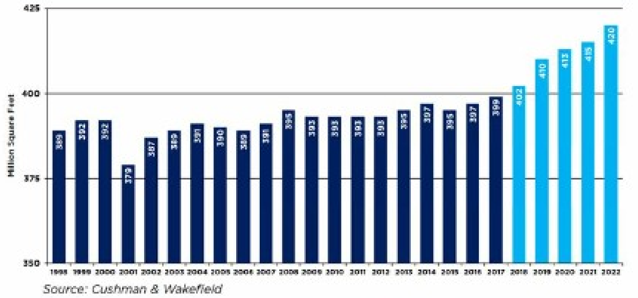
VORNADO
REALTY TRUST

- Manhattan has benefited from negligible net new supply over the past 20 years
- New York City office-using jobs have grown at an average of 34,000 per year over the past 8 years
- Average job growth of 15,120 per year will absorb the new supply

| | SF in Millions |
|---|---|
| Under Development (2018-2022) | 21.4 |
| Less: Pre-Leased to Date | 10.0 |
| Available to be Leased | 11.4 |
| Future vacancy in Midtown due to relocations to new construction | 7.5 |
| **Total Required New Leasing** | **18.9** |

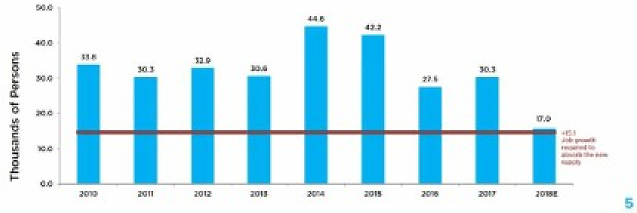
| | |
|---|---|
| Years to Complete | 5 |
| Estimated SF Per Person | 250 |
| Average Annual Job Growth Required to Absorb | 15,120 |

## Manhattan Office Inventory




*Source: Cushman & Wakefield*

## NYC Office-Using Job Growth




*Source: Cushman & Wakefield*

## CONSISTENT NYC TOURISM GROWTH SUPPORTS RETAIL SALES

VORNADO
REALTY TRUST


*Source: NYC +Co*

## CATALYSTS FOR SHAREHOLDER VALUE CREATION

- Trading at a significant discount to NAV
- Only significant way to invest in fast growing West Side of Manhattan
- Growth from creative-class new developments (895,000 SF at share)
  - 61 Ninth Avenue
  - 512 West 22nd Street
  - Farley Office Building
  - 260 Eleventh Avenue
  - 606 Broadway
- Penn Plaza Redevelopment – over 9 million SF existing portfolio with significant NOI upside and value creation
  - 6.6 million SF of office with average in-place rents of $63 PSF
  - PENN1 redevelopment to commence 4Q18
  - PENN2 redevelopment (1.8 million rentable SF)
  - Hotel Pennsylvania (2.8 million rentable SF of development)
  - Other development sites
- Internal growth over time from highly sought-after existing assets
- Fortress balance sheet with substantial cash and available liquidity (~$4 billion) to take advantage of market opportunities
  - Sale of $1 billion of non-core assets and sellout of 220 Central Park South luxury condominiums will generate significant additional dry powder
  - Closing of units in 220 Central Park South will begin 4Q2018
- Attractive common dividend yield of 3.4% - highest among peers

**For each $1 Billion invested at an assumed incremental return of 4% above cash yield**

- Earnings increase by $40MM
- FFO per share increases by $0.20
- FFO Multiple decreases by 1.0x
- Dividends per share increase by $0.20

*(unaudited and in millions, except square feet and per share amounts)*

| | Trailing Twelve Months Ended June 30, 2018 | | | As of December 31, 2017 | |
|---|---|---|---|---|---|
| | NOI - cash basis | Less: BMS | Pro-forma NOI - cash basis | Cap Rate[1] | Value[1] |
| New York - Office | $ 707 | $ (26) | $ 681 | 4.50% | $ 15,133 |
| New York - Retail | 324 | — | 324 | 4.25% | 7,624 |
| New York - Residential | 22 | — | 22 | 3.50% | 629 |
| theMART | 105 | — | 105 | 5.00% | 2,100 |
| 555 California Street | 49 | — | 49[2] | N/A | 1,260 |
| | $ 1,207 | $ (26) | $ 1,181 | | 26,746 |
| Less: Market management fee (28,469,000 square feet in service at share at $0.50 per square foot) at a 4.50% cap rate | | | | | 317 |
| | | | | | $ 26,429 |
| **Other Asset Values (as of June 30, 2018 except where indicated):** | | | | | |
| Cash, restricted cash and marketable securities | | | | | $ 1,378 |
| Incremental value from 220 CPS | | | | | 894 |
| ALX - 1,654,068 shares at $345.07 per share (as of September 21, 2018) | | | | | 571 |
| Hotel Pennsylvania | | | | | 500 |
| BMS (2018 NOI of $26 at a 7.0x multiple) | | | | | 182 |
| UE - 5,717,184 shares at $22.17 per share (as of September 21, 2018) | | | | | 127 |
| Real estate fund investments (VNO's share at fair value) | | | | | 108 |
| PEI - 6,250,000 shares at $9.55 per share (as of September 21, 2018) | | | | | 60 |
| Other assets | | | | | 977 |
| Other construction in progress (at 110% of book value) | | | | | 151 |
| | | | | | $ 4,948 |
| Liabilities (see following page) | | | | | $ 11,375 |
| NAV | | | | | $ 20,002 |
| NAV per share (203.6 million common shares outstanding on an OP basis as of June 30, 2018) | | | | | $ 98[3] |

*See notes on following page*

## COMPONENTS OF NET ASSET VALUE (AT SHARE)

VORNADO REALTY TRUST

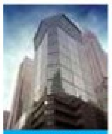
*(unaudited and in millions)*

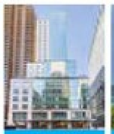
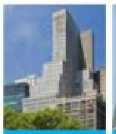
| | Liabilities | | | | | |
|---|---|---|---|---|---|---|
| | | Q2 2018 | | Adjustments | | Net |
| Consolidated contractual mortgage notes payable, net of noncontrolling interests' share | $ | 7,561 | $ | (950)[3] | $ | 6,611 |
| Non-consolidated real estate debt | | 2,925[4] | | (701)[5] | | 2,224 |
| Corporate unsecured debt | | 850 | | — | | 850 |
| Revolver/term loan | | 830 | | (750)[3] | | 80 |
| Other liabilities | | 685 | | — | | 685 |
| Perpetual preferred (at redemption value) | | 925 | | — | | 925 |
| Total Liabilities | | 13,776 | $ | (2,401) | $ | 11,375 |

1. *Capitalization Rate ("Cap Rate") means the rate applied to pro forma cash basis NOI to determine the fair value of our properties. The Cap Rates reflected in this presentation are based on management's estimates, which are inherently uncertain. These Cap Rates will be updated at year end in accordance with our policy. Other asset values are also estimates made by management, which are inherently uncertain. There can be no assurance that management's estimates accurately reflect the fair value of our assets, and actual value may differ materially.*
2. *Excludes incremental NOI from the lease-up of 345 Montgomery Street.*
3. *Debt related to 220 Central Park South.*
4. *Excludes our share of debt of ALX, UE, and PEI as they are presented on an equity basis in other asset values.*
5. *Debt related to 666 Fifth Avenue Office Condominium which was sold on August 3, 2018.*

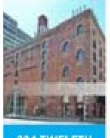
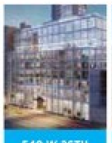
# IMPLIED VALUE OF VNO'S NYC OFFICE PORTFOLIO AT SUBSTANTIAL DISCOUNT TO PRIVATE MARKET SALES

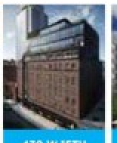
VORNADO
REALTY TRUST

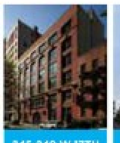
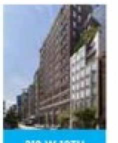



| | 425 LEXINGTON AVENUE | 1745 BROADWAY | 222 E 41ST STREET | 5 BRYANT PARK | 600 LEXINGTON AVENUE | 350 W 50TH STREET | 245 PARK AVENUE |
|---|---|---|---|---|---|---|---|
| Closing Date | Pending | 5/2018 | 4/2018 | 3/2018 | 1/2018 | 9/2017 | 5/2017 |
| Sale Price ($) | 705,000,000 | 595,800,000 | 332,500,000 | 640,000,000 | 305,000,000 | 1,725,000,000 | 2,210,000,000 |
| Price PSF ($) | 940 | 936 | 860 | 962 | 1,005 | 839 | 1,364 |
| Cap Rate | 4.5% | 3.8% | 4.0% | 4.0% | 4.3% | 5.0% | 4.9% |



| | 224 TWELFTH AVENUE | 540 W 26TH STREET | 10 HUDSON YARDS | 430 W 15TH STREET | 330 HUDSON STREET | 245-249 W 17TH STREET | 218 W 18TH STREET |
|---|---|---|---|---|---|---|---|
| Closing Date | Pending | 7/2018 | 5/2018 | 4/2018 | 1/2018 | 10/2017 | 10/2017 |
| Sale Price ($) | 900,000,000 | 260,000,000 | 2,180,000,000 | 159,000,000 | 385,000,000 | 339,400,000 | 174,700,000 |
| Price PSF ($) | 853 | 1,576 | 1,202 | 1,563 | 826 | 1,207 | 1,055 |
| Cap Rate | 1.9% | 5.1% | 4.5% | 4.8% | 4.7% | 4.9% | 4.4% |

Weighted Average Price per Square Foot of $1,043 and Cap Rate of 4.4%

At Vornado's stock price of $75.05 (9/21/18), our NYC Office implied Price per Square Foot is $603 and Cap Rate of 6.4%.[1]

1. Based on NOI and Cap Rates for other holdings per 12/31/2017 NAV Analysis

## FORTRESS BALANCE SHEET[1]

VORNADO REALTY TRUST

*(Amounts in millions)*

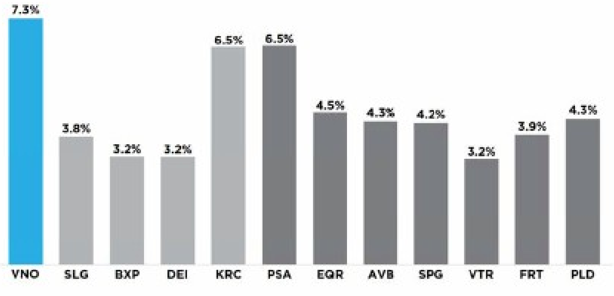
| AT 6/30/18 - PRO-FORMA FOR 8/03/18 SALE OF 666 FIFTH OFFICE CONDOMINIUM | | |
|---|---|---|
| Secured debt | $ | 8,164 |
| Unsecured debt | | 1,680 |
| Pro rata share of non-consolidated debt (excluding Toys R Us) | | 2,803 |
| Less: noncontrolling interests' share of consolidated debt | | (604) |
| **Total debt** | | **12,043** |
| 220 CPS (mortgage + term loan) | | (1,700) |
| Projected cash proceeds from 220 Central Park South in excess of the $1,700 debt repaid | | (892) |
| Cash, restricted cash and marketable securities | | (1,378) |
| **Net Debt** | **$** | **8,073** |
| | | |
| **TTM EBITDA, as adjusted[1]** | **$** | **1,285** |
| | | |
| **Net Debt/EBITDA, as adjusted** | | **6.3x** |

- Investment grade — Baa2/BBB
- $2.4 BN in revolver capacity
- $1.4 BN in cash
- Weighted average debt maturity — 4.2 years
- ~$11 BN of unencumbered assets

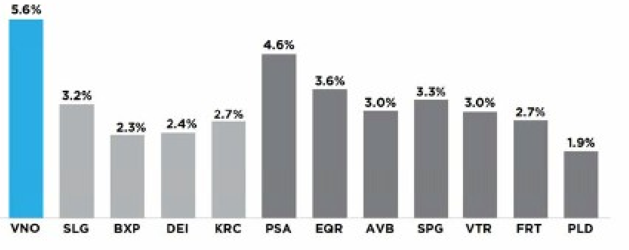
1. See page 37 for non-GAAP reconciliation

**Vornado has delivered superior same-store NOI - cash basis growth relative to blue chip peers on both a 5-year and 10-year basis**

5-Year Same-Store NOI - cash basis CAGR
(2012-2017)




10-Year Same-Store NOI - cash basis CAGR
(2007-2017)






*Source: Green Street Advisors*

# LEADER IN REPOSITIONING AND MODERNIZING PROPERTIES
# SELECT CASE STUDIES

VORNADO REALTY TRUST

*(Amounts in thousands)*

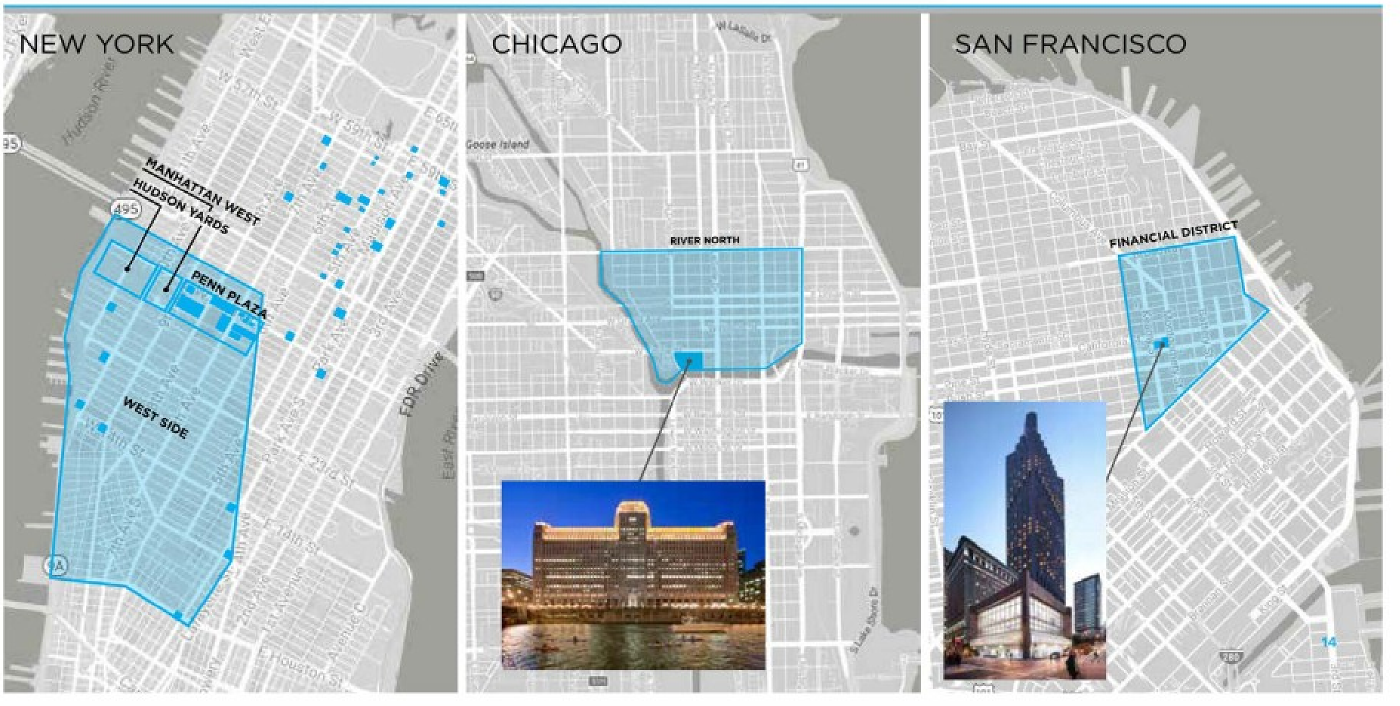



| | 1290 AVENUE OF THE AMERICAS 2,113,000 SF | 770 BROADWAY 1,183,000 SF | 330 WEST 34TH STREET 709,000 SF | 7 WEST 34TH STREET 479,000 SF |
|---|---|---|---|---|
| Incremental Stabilized Cash NOI | $ 38,500 | $ 37,300 | $ 21,200 | $ 15,700 |
| Capital Cost (Including TI/LC) | 221,300 | 240,000 | 142,700 | 77,200 |
| **Yield** | **17.4%** | **15.5%** | **14.9%** | **20.3%** |
| **Value Created[1]** | **$ 444,000[2]** | **$ 588,900** | **$ 328,400** | **$ 271,700[3]** |
| **Value Created Per Share** | **$ 2.18** | **$ 2.90** | **$ 1.62** | **$ 1.34** |

*1. Incremental NOI valued at 4.5% cap rate, less capital cost (including TI/LC)*
*2. Shown at 70% share*
*3. Shown at 100% share; Vornado monetized 47% of the value creation through sale of a partial interest*

## VORNADO'S OFFICE ASSETS LOCATED AT THE EPICENTER OF GROWTH

VORNADO REALTY TRUST



# SELECT NEW YORK CITY OFFICE PROPERTIES

## PLAZA DISTRICT


888 SEVENTH AVENUE

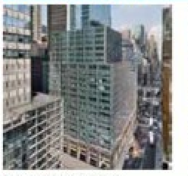

650 MADISON AVENUE

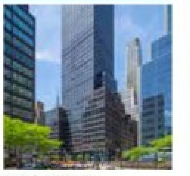

595 MADISON AVENUE


640 FIFTH AVENUE


689 FIFTH AVENUE

## GRAND CENTRAL


330 MADISON AVENUE

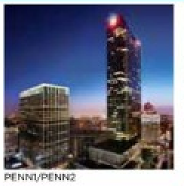

90 PARK AVENUE

## PENN PLAZA DISTRICT


7 WEST 34TH STREET


PENN11

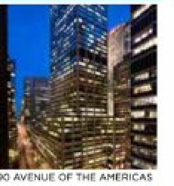

330 WEST 34TH STREET


PENN1/PENN2


FARLEY OFFICE BUILDING

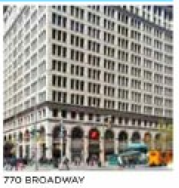
## MIDTOWN


731 LEXINGTON AVENUE


1290 AVENUE OF THE AMERICAS

## MIDTOWN SOUTH


ONE PARK AVENUE


770 BROADWAY

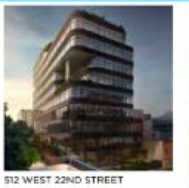
## PARK AVENUE

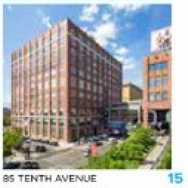

280 PARK AVENUE


350 PARK AVENUE

## CHELSEA / MEATPACKING


61 NINTH AVENUE


512 WEST 22ND STREET


85 TENTH AVENUE

## FINANCIAL

Bloomberg
Goldman Sachs
Bank of America
Capital One
UBS
NEUBERGER BERMAN
HSBC
M&T Bank
TPG
GLENCORE
pwc
Morgan Stanley
AB
WELLS FARGO
GUGGENHEIM
DODGE & COX FUNDS
FRANKLIN TEMPLETON INVESTMENTS
Castle Harlan, Inc.
INVESTCORP
McKinsey&Company
MFA FINANCIAL
FACTSET
KKR
Fidelity INVESTMENTS
PJT Partners
American Century Investments
GIC
THOMSON REUTERS

## TAMI

IPG
amazon
Deutsch
razorfish
facebook
yelp
Google
Microsoft
MSG
T-Mobile
AMC NETWORKS
CISCO
EMC²
Oath:
The McGraw-Hill Companies
PayPal
MOTOROLA
YAMAHA
SIEMENS
hachette BOOK GROUP
1871
Information Builders

## HEALTHCARE / INSURANCE

AXA
NEW YORK UNIVERSITY
COLUMBIA UNIVERSITY
aetna
Allscripts
Allstate
UnitedHealthcare
Memorial Sloan Kettering Cancer Center
BlueCross BlueShield
Allergan

## REAL ESTATE

JLL
CUSHMAN & WAKEFIELD
COHEN & STEERS
PARSONS BRINCKERHOFF
HomeAdvisor
RAMSA
STRUCTURETONE

## LEGAL

KIRKLAND & ELLIS LLP
ALSTON + BIRD LLP
FOLEY
FOLEY & LARDNER LLP
BRYAN CAVE
JONES DAY
Fenwick
FENWICK & WEST LLP
SIDLEY

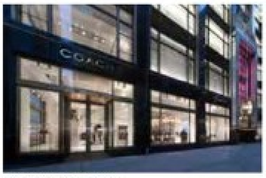
## OTHER

macy's
RALPH LAUREN
CONAGRA BRANDS
AMA American Management Association
Kellogg's
MoëtHennessy
OpenJar STUDIOS

# SELECT NEW YORK CITY STREET RETAIL PROPERTIES

VORNADO REALTY TRUST

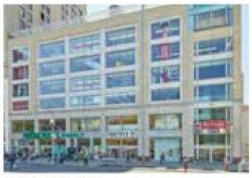
828-850 MADISON AVENUE



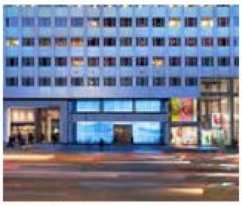
595 MADISON AVENUE

650 MADISON AVENUE

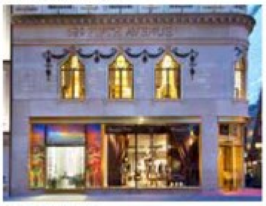

677 MADISON AVENUE



4 UNION SQUARE



666 FIFTH AVENUE



689 FIFTH AVENUE


1535 & 1540 BROADWAY

640 FIFTH AVENUE

510 FIFTH AVENUE

655 FIFTH AVENUE

697 FIFTH AVENUE

478-486 BROADWAY

435 SEVENTH AVENUE

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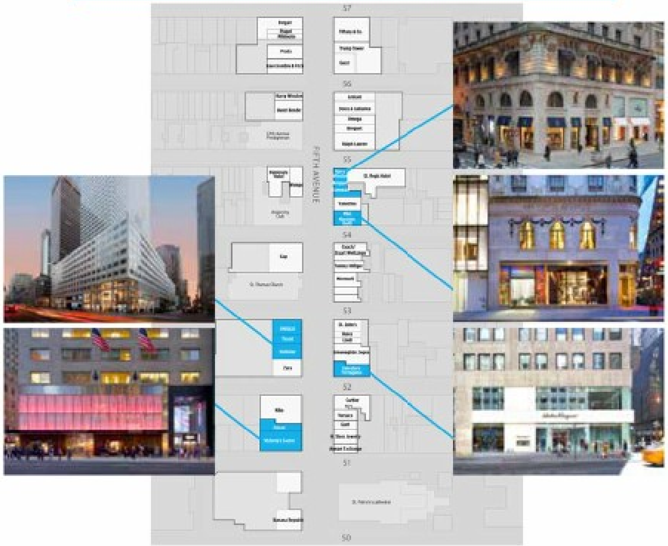
## Upper Fifth Avenue
## Own 23% of Frontage[1]



## Times Square
## Own Both Sides of the Bowtie


1. Excludes churches, clubs and retail owned by users

## BLUE-CHIP RETAIL TENANT ROSTER

HARRY WINSTON dyson SEPHORA Cartier CELINE Christofle

THE NORTH FACE EQUINOX TOPSHOP BLANCPAIN Levi's TOD'S

sunglass hut Salvatore Ferragamo Disney Berluti COACH

STARBUCKS RESERVE STARBUCKS VICTORIA'S SECRET amazon J.CREW

H&M INVICTA WHOLE FOODS MARKET FOREVER 21 Chloé Massimo Dutti MAC

HOLLISTER Madewell MONCLER UNIQLO TISSOT

T-Mobile swatch sandro john varvatos Breguet

## STREET RETAIL PORTFOLIO
## UPPER FIFTH & TIMES SQUARE BUTTONED UP FOR TERM

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**Over 50% of Vornado street retail NOI - cash basis comes from Upper Fifth Avenue and Times Square. Both are locked up for term with high quality tenants**

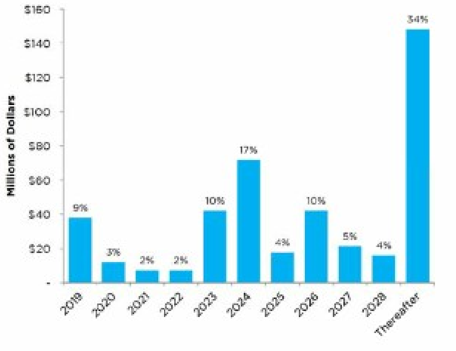
### UPPER FIFTH AVENUE

| Tenant | Year of Expiration |
|---|---|
| Zara | 2019 |
| MAC Cosmetics | 2024 |
| Hollister | 2024 |
| Uniqlo | 2026 |
| Tissot | 2026 |
| Dyson | 2027 |
| Ferragamo | 2028 |
| Swatch | 2031[1] |
| Harry Winston | 2031 |
| Victoria's Secret | 2032 |

### TIMES SQUARE

| Tenant | Year of Expiration |
|---|---|
| US Polo | 2023 |
| Sunglass Hut | 2023 |
| Planet Hollywood | 2023 |
| MAC Cosmetics | 2025 |
| T-Mobile | 2025 |
| Disney | 2026 |
| Invicta | 2028 |
| Sephora | 2029 |
| Swatch | 2030 |
| Levi's | 2030[2] |
| Forever 21 | 2031 |
| Nederlander Theater | 2050 |

**New York Retail Expirations by Revenue as of 6/30/2018**
**Weighted Average Lease Term: 8.0 Years**




1. Tenant has the right to cancel in 2023
2. Tenant has the right to cancel in 2024


theMART building (Chicago) – best example of contemporary office space outside of Silicon Valley. Transformed from a showroom building to the premier creative and tech hub in the Midwest, resulting in significant earnings growth and value creation

- **3,675,000 SF - 99.3% Occupancy at 6/30/2018**
- Located in River North, the hottest submarket in Chicago
- Between 2011 and 2Q18, converted over 950,000 SF in the building from showroom/trade show space to creative office space
- 3.1 million SF of total space leased since 2012
- 6/30/2018 TTM Cash NOI (non-GAAP)[1] of $103.6 million versus 2011 Cash NOI (non-GAAP)[1] of $54.3 million
- In-place escalated rents average $42.80 PSF as of 6/30/2018 (office $38.07, retail $50.03 and showroom $48.70)
- In conjunction with the City of Chicago, theMART will debut *Art on theMART* on September 29, 2018. This curated series of digital artworks will project the work of renowned artists across 2.5 acres of theMART's exterior river-façade, creating the largest permanent digital art projection in the world.

Major Tenants:

- Motorola Mobility (guaranteed by Google)
- ConAgra Foods Inc.
- 1871
- Kellogg's
- Allscripts Healthcare
- Yelp Inc.
- Paypal, Inc.
- Razorfish
- Allstate Insurance
- Caterpillar Inc.
- Steelcase
- Herman Miller



1. *See page 39 for non-GAAP reconciliation*






555 California Street – the franchise office building in San Francisco and arguably the most iconic building on the west coast – further NOI growth expected from redeveloped concourse and 315/345 Montgomery

- **1,805,000 SF – 97.3% Occupancy at 6/30/2018 at 100% share**
- 1.6 million SF of office space leased since 2012
- 6/30/2018 TTM Cash NOI (non-GAAP)[1] of $53.7 million at share (which does not include Cash NOI from approximately 110,000 SF of vacancy and space under redevelopment) versus 2012 Cash NOI (non-GAAP)[1] of $38.2 million at share
- In place escalated rents average $74.64 PSF as of 6/30/2018

Major Tenants:

- Bank of America
- Dodge & Cox
- Fenwick & West LLP
- Microsoft
- Jones Day
- Goldman Sachs
- Kirkland & Ellis LLP
- Morgan Stanley
- UBS
- Wells Fargo
- KKR
- McKinsey & Company Inc.



*1. See page 39 for non-GAAP reconciliation*

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GROWTH FROM DEVELOPMENT

## WELL-POSITIONED WITH EXISTING ASSETS AND NEW DEVELOPMENTS CONCENTRATED IN THE FAST GROWING WEST SIDE

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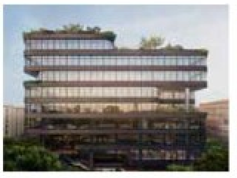
**61 Ninth Avenue (45.1%)**

170,000 SF
Delivered

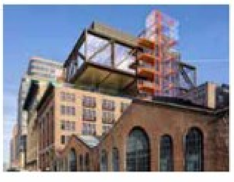


**512 West 22nd Street (55.05%)**

174,000 SF
Oct. 2018

**606 Broadway (50.0%)**

34,000 SF
4Q 2018



**260 Eleventh Avenue**

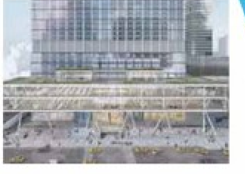
340,000 SF
TBD

**The Farley Building (50.1%)**

850,000 SF
3Q 2020

**PENN1**

2,535,000 SF
4Q 2020



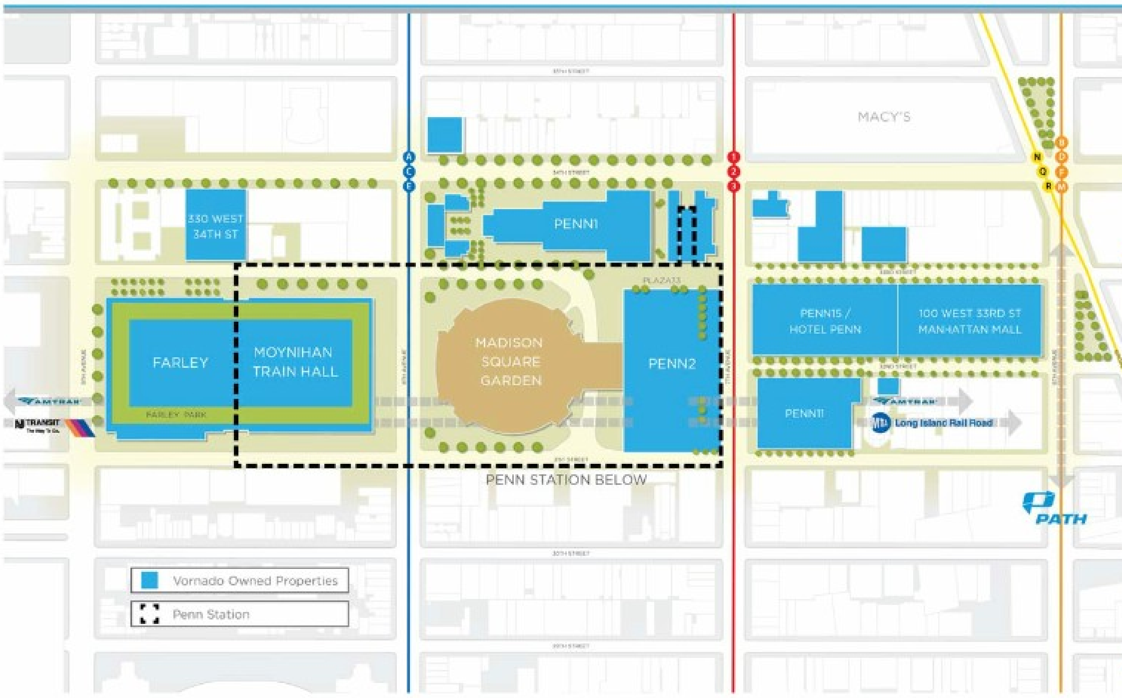
**PENN2**

1,800,000 SF
TBD

*As of 6/30/2018; square footage ("SF") shown at 100% share*


HUDSON YARDS
MANHATTAN WEST
PENN PLAZA

## PENN PLAZA | AN UNPRECEDENTED OPPORTUNITY




**Unique Value Creation Opportunity**

- Existing office leasable space of 6.6MM SF with average in-place rents of \$63 PSF[1]
- Hudson Yards to the west asking rents range from \$85-130 PSF[1]
- Transformation of the neighborhood will also substantially enhance the value of Vornado's Penn Plaza retail holdings

1. As of 6/30/18

## PENN PLAZA | BEST POSITIONED FROM TRANSIT STANDPOINT

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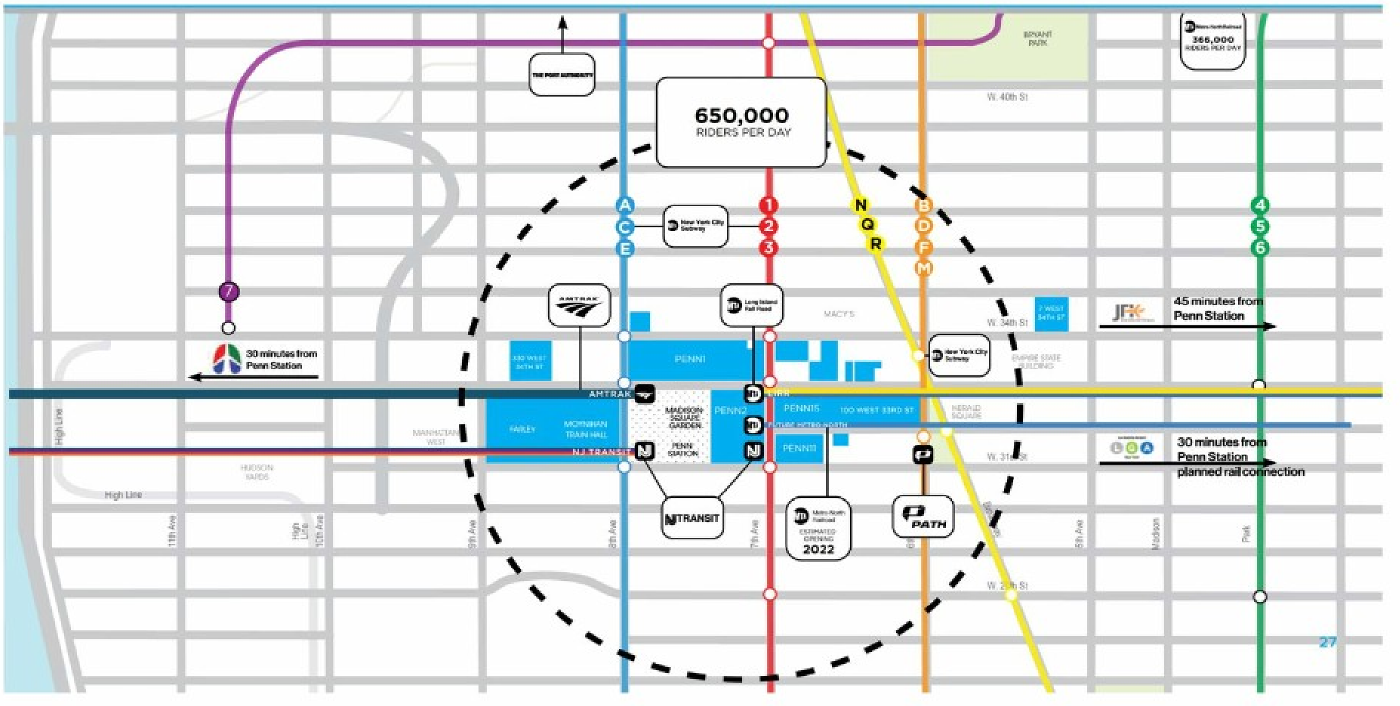

# CURRENT DEVELOPMENT PROJECTS[1]

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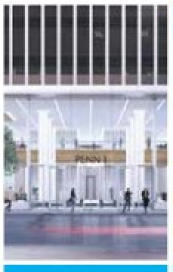
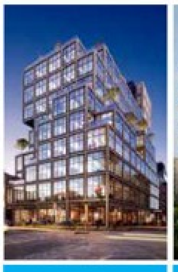
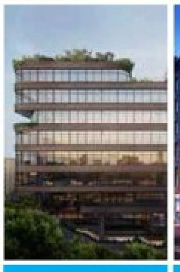
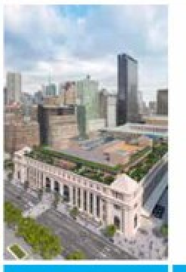
**OUR CURRENT DEVELOPMENT PIPELINE IS EXPECTED TO INCREASE CASH NOI BY ~$100MM (AT SHARE) UPON STABILIZATION**

*(Amounts in thousands)*



| | PENN1 2,535,000 SF | 61 NINTH AVENUE 170,000 SF | 512 WEST 22ND STREET 173,000 SF | 606 BROADWAY 34,000 SF | 345 MONTGOMERY STREET 78,000 SF | THE FARLEY BUILDING 850,000 SF | TOTAL CURRENT PROJECTS 3,826,000 SF |
|---|---|---|---|---|---|---|---|
| Full Quarter Stabilized Operations | N/A | Q2 2019 | Q1 2020 | Q2 2020 | Q3 2020 | Q2 2022 | |
| VNO Share | 100.0% | 45.1% | 55.0% | 50.0% | 70.0% | 50.1% | |
| Development Budget (at Share)[2] | | | | | | | |
| Amount Expended | $ 3,939 | $ 55,134 | $ 47,719 | $ 20,866 | $ 6,399 | $ 42,503 | **$ 176,560** |
| Remaining | $ 196,061 | $ 13,866 | $ 24,281 | $ 9,134 | $ 25,601 | $ 357,497 | **$ 626,440** |
| Total Incremental Budget | $ 200,000 | $ 69,000 | $ 72,000 | $ 30,000 | $ 32,000 | $ 400,000 | **$ 803,000** |

*1. Square footages shown at 100%; costs shown at share*
*2. Excludes land and acquisition costs*

## FUTURE DEVELOPMENT PIPELINE

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**FUTURE REDEVELOPMENT OPPORTUNITIES PROVIDE BUILT-IN SOURCE OF ADDITIONAL GROWTH**

**HOTEL PENNSYLVANIA**
**2,800,000 SF**

**PENN2**
**1,800,000 SF**

**260 ELEVENTH AVENUE**
**340,000 SF**



*Note: Shown at estimated rentable SF, subject to change*

- A 50/50 joint venture between Vornado and the Related Companies recently commenced the conversion of the Farley Post Office in Penn Plaza into the new Farley Office Building and Train Hall
- Total budget of $515 million at share
- The joint venture will develop 730,000 SF of unique creative office space and 120,000 SF of train hall retail
- Expected delivery 3Q 2020


SKYLIGHT SURROUNDED BY FARLEY OFFICE SPACE


70,000 SF OF PARK SPACE


MAIN OFFICE LOBBY DESIGN


INTERIOR CONCEPT DESIGN OF ANNEX FLOOR


FARLEY PARK - ROOF TERRACE PAVILION DESIGN


MOYNIHAN TRAIN HALL CONCOURSE

34TH STREET LOBBY ENTRY

34TH STREET LOBBY

34TH STREET LOBBY RECEPTION DESK

SECOND FLOOR LOUNGE

33RD STREET LOBBY

33RD STREET LOBBY LIBRARY

## PENN1 REDEVELOPMENT - PRELIMINARY PROJECTIONS

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| PENN1 | | 2.54MM SF |
|---|---|---|
| Development Cost | $ | 200MM |
| In-Place Office Rent | $ | 64 PSF |
| Average Market Rent After Development | $ | 84 PSF |
| Incremental Rent | $ | 20 PSF |
| Incremental NOI | $ | 48MM |
| **Yield on Capital** | | **24%** |
| **Value Created**[(1)] | $ | **867MM** |
| **Value Created Per Share** | $ | **4.25** |

Average remaining office lease term is 5.4 years

*1. Incremental NOI valued at 4.5% cap rate, less development costs excluding recurring TI/LCs that would have been incurred on re-tenanting the building irrespective of this capital project*

# 260 ELEVENTH AVENUE - DESIGNED BY RICHARD ROGERS

VORNADO REALTY TRUST

## NATIONALLY RECOGNIZED, INDUSTRY-LEADING SUSTAINABILITY PROGRAM

- 5-time Energy Star Partner of the Year, Sustained Excellence recipient 2018
- 23.6 million square feet of owned and managed LEED certified buildings
- Largest landlord of LEED certified buildings in New York City with over 17.9 million SF. All new commercial developments will be, at minimum, LEED Gold certified
- NAREIT Leader in the Light award 2017, 8th year in a row
- Global Real Estate Sustainability Benchmark (GRESB) "Green Star" since 2013; sector leader for North America's diversified category 2017
- 20% reduction in same-store greenhouse gas emission since 2009





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APPENDIX

## NON-GAAP FINANCIAL MEASURES

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This investor presentation contains certain non-GAAP financial measures, including net operating income ("NOI") and earnings before interest, taxes, depreciation and amortization ("EBITDA").

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 properties and 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. We calculate NOI on an Operating Partnership basis which is before allocation to the noncontrolling interest of Vornado Realty L.P. (the "Operating Partnership").

EBITDA represents earnings before interest, taxes, depreciation and amortization. EBITDA is essentially NOI less general and administrative expenses. We use EBITDA as a secondary non-GAAP measure primarily in the context of a net debt to EBITDA ratio. We calculate EBITDA on an Operating Partnership basis which is before allocation to the noncontrolling interest of Vornado Realty L.P. (the "Operating Partnership").

A reconciliation of NOI and EBITDA to net income, the most directly comparable GAAP measure, is provided on the following pages.

These non-GAAP financial measures are used by management, investors and analysts to facilitate meaningful comparisons of operating performance between periods and among our peers because they exclude the effect of real estate depreciation and amortization and net gains on sales, which are based on historical costs and implicitly assume that the value of real estate diminishes predictably over time, rather than fluctuating based on existing market conditions. These metrics do not represent cash generated from operating activities and are not necessarily indicative of cash available to fund obligations and should not be considered as an alternative to net income as performance measures or cash flow as liquidity measures. These non-GAAP metrics may not be comparable to similarly titled measures employed by other companies.

*(Amounts in millions)*

### Reconciliation of net income to NOI at share - cash basis for the trailing twelve months ended June 30, 2018

| | For The TTM Ended June 30, 2018 |
|---|---|
| Net income | $ 148 |
| Deduct: | |
| Loss from partially owned entities | 33 |
| Loss from real estate fund investments | 39 |
| Interest and other investment income, net | (22) |
| Net gains on disposition of wholly owned and partially owned assets | (24) |
| Loss from discontinued operations | 47 |
| NOI attributable to noncontrolling interests in consolidated subsidiaries | (67) |
| Add: | |
| Depreciation and amortization expense | 440 |
| General and administrative expense | 146 |
| Acquisition and transaction related costs | 15 |
| Our share of NOI from partially owned entities | 270 |
| Interest and debt expense | 354 |
| Income tax expense | 43 |
| NOI at share | 1,422 |
| Non cash adjustments for straight-line rents, amortization of acquired below-market leases, net and other | (75) |
| NOI at share - cash basis | $ 1,347 |

### NOI at share - cash basis by segment:

| | For The TTM Ended June 30, 2018 |
|---|---|
| **New York:** | |
| Office (includes $26MM of BMS NOI) | $ 707 |
| Retail | 324 |
| Residential | 22 |
| Alexander's | 49 |
| Hotel Pennsylvania | 13 |
| | 1,115 |
| **Other:** | |
| theMART (including trade shows) | 105 |
| 555 California Street | 49 |
| Other investments | 78 |
| | 232 |
| NOI at share - cash basis | $ 1,347 |

*(Amounts in millions)*

**Reconciliation of net income attributable to the Operating Partnership to EBITDA and EBITDA, as adjusted for the trailing twelve months ended June 30, 2018**

| | For The TTM Ended June 30, 2018 |
|---|---|
| Net income attributable to the Operating Partnership | $ 171 |
| Interest and debt expense | 463 |
| Depreciation and amortization | 533 |
| Income tax expense | 44 |
| EBITDA | 1,211 |
| Adjusted, net [1] | 74 |
| EBITDA, as adjusted | $ 1,285 |



1. Includes income from our former Washington, DC segment, sold properties, our Real Estate Fund, gains on sale of real estate, impairment losses and other adjustments

*(Amounts in millions)*

**Reconciliation of theMART net income to EBITDA, NOI - cash basis and NOI - cash basis adding back free rent for the year ended December 31, 2011 and for the trailing twelve months ended June 30, 2018**

| | For the Trailing Twelve Months Ended June 30, 2018 | For the year ended December 31, 2011 |
|---|---|---|
| Net income (loss) | $ 36.0 | $ (4.5) |
| Interest and debt expense | 18.7 | 31.2 |
| Depreciation and amortization | 39.5 | 21.6 |
| Income tax expense | — | — |
| EBITDA | 94.2 | 48.3 |
| Non-cash adjustments and other | (0.7) | 3.1 |
| NOI - cash basis | 93.5 | 51.4 |
| Adding back free rent | 10.1 | 2.9 |
| NOI - cash basis adding back free rent | $ 103.6 | $ 54.3 |

**Reconciliation of 555 California Street net income to EBITDA, NOI - cash basis and NOI - cash basis adding back free rent for the year ended December 31, 2012 and for the trailing twelve months ended June 30, 2018**

| | For the Trailing Twelve Months Ended June 30, 2018 at share | For the year ended December 31, 2012 at share |
|---|---|---|
| Net income (loss) | $ 6.9 | $ (4.6) |
| Interest and debt expense | 18.6 | 22.0 |
| Depreciation and amortization | 25.5 | 28.5 |
| Income tax expense | 0.2 | 0.3 |
| EBITDA | 51.2 | 46.2 |
| Non-cash adjustments and other | (1.8) | (9.1) |
| NOI - cash basis | 49.4 | 37.1 |
| Adding back free rent | 4.3 | 1.1 |
| NOI - cash basis adding back free rent | $ 53.7 | $ 38.2 |





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SEPTEMBER 2018