COPY

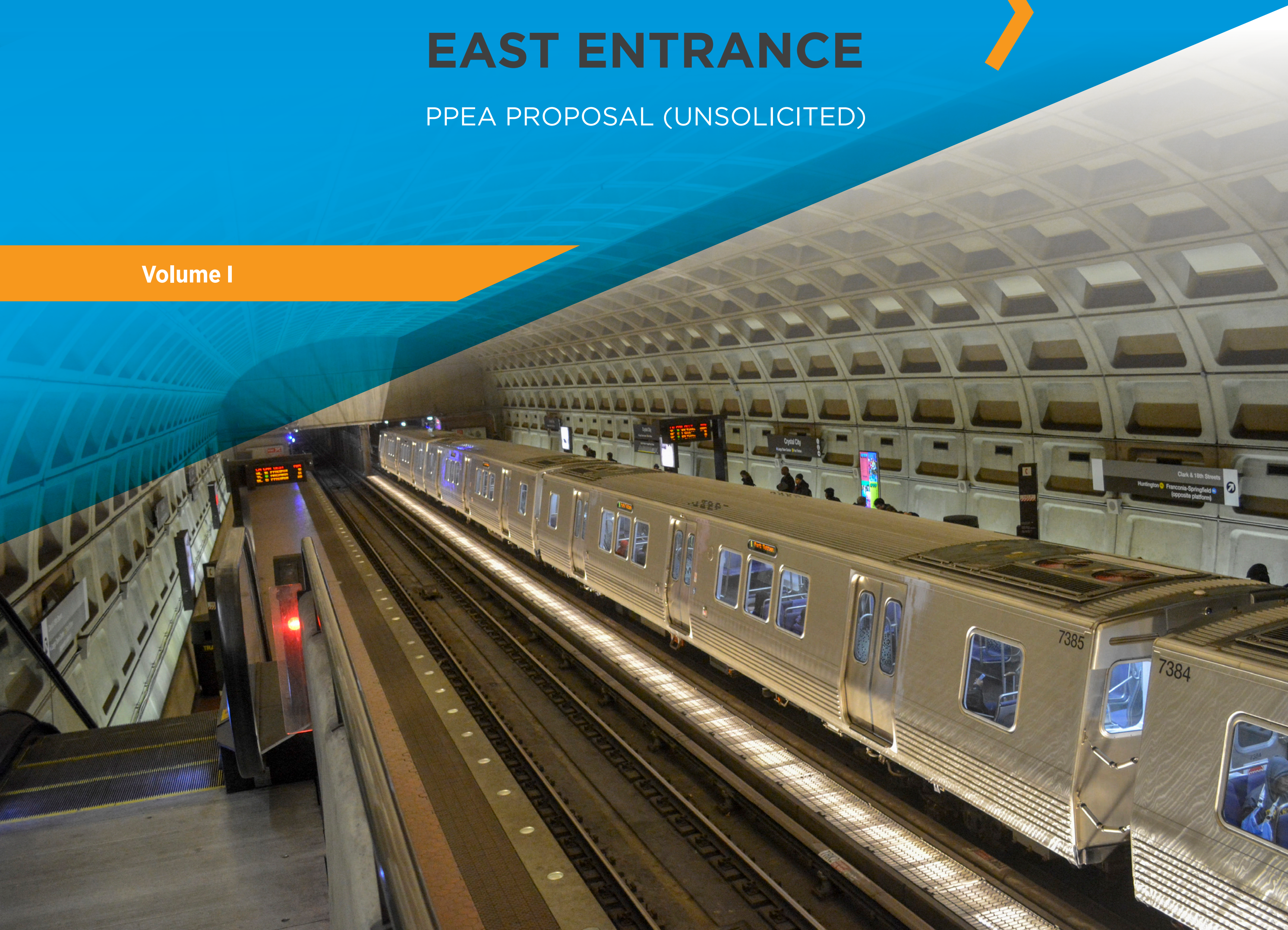
JBG SMITH

Crystal City Metrorail Station

EAST ENTRANCE

PPEA PROPOSAL (UNSOLICITED)

Volume I



IN ASSOCIATION WITH

VHB
Clark
KGP
AECOM

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JBG SMITH

May 29, 2019

Sharon T. Lewis, M.A., MPS, CPPB, VCO, VCA
Arlington County Purchasing Agent
2100 Clarendon Boulevard
Suite 511
Arlington, VA 22201

Re: Crystal City Metrorail Station East Entrance PPEA Proposal (Unsolicited)

Dear Ms. Lewis,

Transportation has been the lifeblood of National Landing since its time as a Richmond, Fredericksburg, and Potomac Railroad rail yard. Today, the area's vitality is supported by its robust transit network, with the Metrorail at its heart. By expanding the reach and capacity of the existing station, the planned Crystal City Metrorail Station East Entrance promises to provide a strong foundation for healthy growth in the decades to come.

The planned station entrance is critical to the long-term success of National Landing, and both Arlington County and JBG SMITH have a strong, shared interest in getting it right. This interest, rooted in a broader, shared commitment to smart growth and the Crystal City Sector Plan, serves as the basis for a proposed partnership, presented in the enclosed unsolicited proposal for implementing the planned East Entrance to the Crystal City Metrorail Station, pursuant to the Virginia Public-Private Education Facilities and Infrastructure Act of 2002 (PPEA). We believe our alignment of values, supported by each party's expertise and resources, creates an opportunity to implement the project more effectively and efficiently than would otherwise be possible working independently.

Given the importance of the project, and our mutual interest in its success, we believe working together will yield the best outcome. In that spirit, we offer this proposal as a first step towards a partnership that will help us achieve our shared goals for the project. The proposal outlines the three core strengths of our Project Team and approach:

» **Aligned Incentives:** Reflecting JBG SMITH and Arlington's shared goals, our proposal is designed to spread the risks and rewards of implementation, such that all parties involved share an incentive to work together to achieve the project goals.

» **Flexible and Transparent Terms:** The East Entrance is a complex project located on a dynamic site; unforeseen challenges are inevitable. Rather than ignoring this reality, the proposal embraces it by providing a process to clearly evaluate the costs and benefits of any potential changes, allowing the County to make well-informed decisions based on the best interest of the overall project.

» **Best-in-Class Team:** The importance and complexity of the project demand a team with the experience, expertise, and resources to deliver a world-class project while navigating the inevitable challenges along the way. The proposed Project Team, comprised of industry-leading firms with strong local roots, achieves this through a combination of superior expertise, broad capability, and decades of relevant experience.

JBG SMITH

In short, we believe working together to design and construct the East Entrance provides the best opportunity to deliver an efficient, effective project that fulfills the goals of the Crystal City Sector Plan, while positioning National Landing for continued, long-term success. We sincerely hope this proposal will serve as the first step towards that partnership, and we look forward to discussing it further with you.

Please note that the information contained in Volume II of this proposal is confidential. JBG SMITH's request for protection of such information, and the exclusion thereof from mandatory disclosure provisions, is set forth in the separate cover letter accompanying Volume II.

Respectfully,

Jay Corbalis
Vice President, Public Affairs
jcorbalis@jbgsmith.com

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OVERVIEW

The Evolution of National Landing

From ferry landing to freight yard, South Arlington's Potomac shore has long been a place defined by transportation. National Landing continues that legacy, with growth centered around transit. Today, and increasingly in the future, mobility is supported primarily by high-capacity transit, supplemented by a micromobility ecosystem complete with walkable streets and shared bikes. In this transit-oriented universe, the East Entrance to the Crystal City Metrorail Station promises to be a new center of gravity. Opening on to Crystal Drive, the station will have direct access to the Crystal City—Potomac Yard Transitway, VRE Commuter Rail, the Mount Vernon Trail, and numerous local and commuter bus routes, making it a natural hub of activity.

The East Entrance Project

The 2010 Crystal City Sector Plan recommended establishing an additional entrance in the vicinity of 18th Street and Crystal Drive, as part of a broader effort to improve transit service in Crystal City, citing improved pedestrian access to the VRE Station and Metroway Bus Rapid Transit (BRT). WMATA and the County completed

JBG SMITH's investment in the National Landing community demonstrates our commitment to the successful delivery of the East Entrance project.

PROJECT BENEFITS

Relieve transit congestion and increase capacity

Improve connectivity and mobility

Enhance passenger safety and accessibility

Improve access to high-density development

Enhance and enable Amazon's impact on the local economy

development and analysis of alternative site locations for the new entrance at the Crystal City Metrorail Station, selecting the currently proposed location at the northwest corner of 18th Street South and Crystal Drive. WMATA has developed concept-level design details in coordination with the County and property owner.

A Shared Interest

As a keystone of National Landing's transportation ecosystem, getting the project right will be critical to the area's long-term success. In that, JBG SMITH and Arlington County have a shared interest, given the importance of National Landing to the company and the county. Likewise, both have an incentive to manage the project efficiently in order to maximize the impact of limited funding for this and other infrastructure projects in National Landing. Recognizing the project's importance to our collective interests, we believe that the best way to advance the project is through a partnership that takes advantage of each party's strengths, allows for flexibility, and aligns our interests towards the achievement of our mutual goals.

The PPEA Process

In that spirit, we present our unsolicited proposal for implementing the East Entrance in partnership with Arlington County, submitted pursuant to the Public-Private Education Facilities and Infrastructure Act of 2002 (PPEA) and the guidelines adopted by the County in accordance therewith (County PPEA Guidelines). This proposal consists of two volumes, where Volume II consists of confidential information to be protected and excluded from mandatory disclosure provisions as noted in the separate cover letter accompanying Volume II.

Project Approach

The current status of the planning for the entrance requires an innovative approach to project delivery, as the Project Team understands the station design to still be at a conceptual level based on publicly available materials. This proposal provides a path for delivering the project in two phases using an Interim Agreement and a Comprehensive Agreement consistent with the County PPEA Guidelines.

The services for the first phase include completion of budget-level design development (~30% design), preconstruction services, and the negotiation of a guaranteed maximum price contract between Arlington and the Project Team for full design and construction. This

Interim Agreement	Comprehensive Agreement
» ~30% design » Preconstruction services » Utility relocation, excavation, site preparation, etc. » Negotiation of a firm contract price	» Final design » Construction

approach assumes the County and WMATA will provide the Project Team with the current conceptual design package upon award of the project, and the Project Team will advance design to the 30% completion stage through a collaborative process with the County, WMATA, property owner, and other stakeholders. In this phase, the Project Team will first collaborate with the County to confirm the project's basis of design and programming requirements and will then advance that design. Design and other project decisions will be based on cost, schedule, quality, operability, life cycle, and other considerations, with the design-builder providing ongoing, transparent cost estimates to allow informed decision-making that weighs costs and benefits. Once design has been advanced to an appropriate level of definition that aligns with County and WMATA requirements and goals, the Project Team will provide a formal commercial proposal for full design and construction for purposes of a Comprehensive Agreement. This proposal will include a Guaranteed Maximum Price (GMP) that shares any realized project savings below the GMP between the County and the entire Project Team, including the design team, in order to incentivize all parties to work together to realize additional cost savings throughout the project. A detailed scope of services for the Interim Agreement is included in Volume II of this proposal.

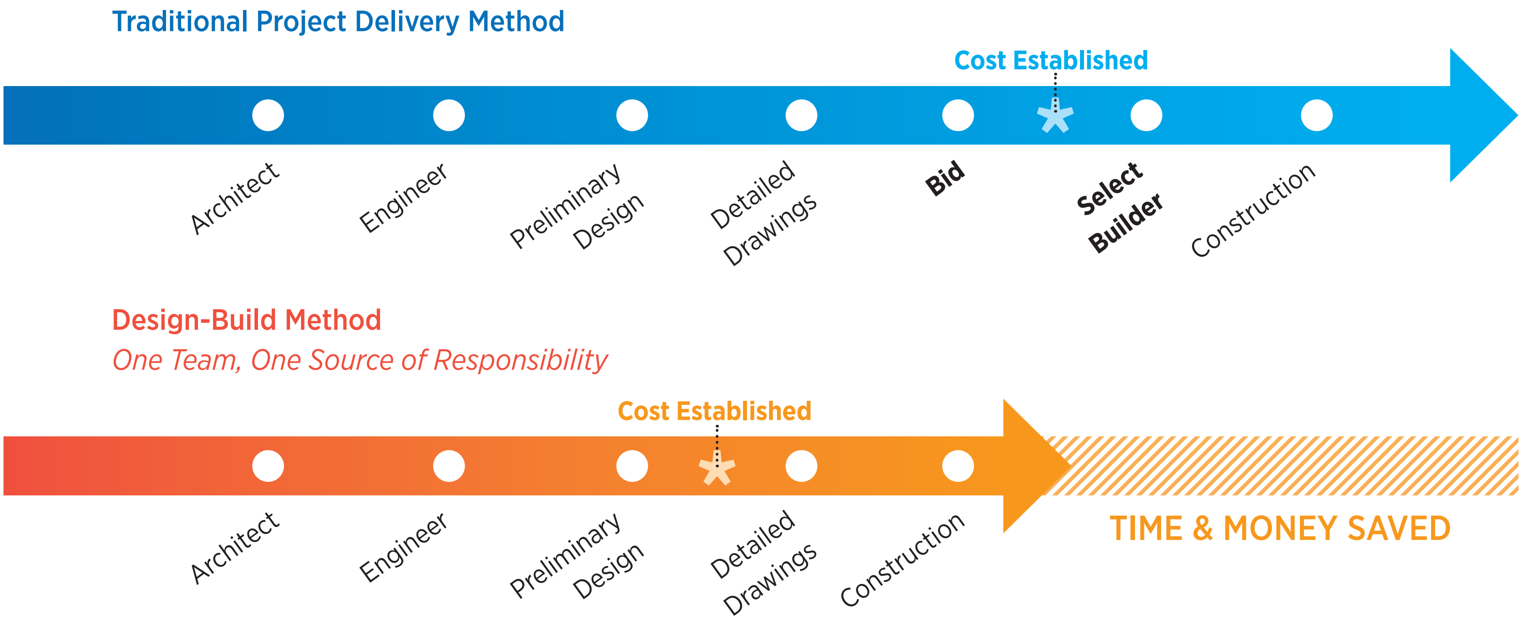
The services for the second phase of the Project will be provided consistent with the County PPEA Guidelines through a Comprehensive Agreement and will include all remaining activities for final design and construction. Once the Project Team and the County agree upon commercial terms (including the GMP and schedule), the Project Team will complete the design and construction of the facility in accordance with those commercial terms. The Project Team will look to advance early action construction items, such as utility relocation, excavation, and site preparation, prior to final design being fully complete in order to expedite the schedule and will complete any testing, commissioning, and other services that have been agreed upon for opening the facility.

This two-phase approach of delivering the Project on a design-build basis pursuant to a Comprehensive Agreement, with the use of an Interim Agreement to develop 30% design, establishes a relationship between parties under two separate contracts, but within a single, coordinated process for completion of the overall Project. This proposed approach allows for the Project Team to progress the design and construction in a true public-private partnership, while advancing and protecting the County's interests. This approach will lessen the time and cost pressures on the County and WMATA to review and act upon initial design selections and submittals and will shorten the overall project schedule with an expedited procurement process. By proceeding in segments to include the interim step of developing 30% design, the County will (i) retain a heightened level of control over design (as compared to moving forward on a design-build basis from the outset with less complete drawings) and (ii) enjoy maximum flexibility as the procurement moves forward. Moreover, the County can rest assured that the ultimate cost of the Project will reflect a more competitive price for the facility it is procuring.

Advantages of Design-Build Approach

The design-build method of project delivery, within the context of a PPEA procurement, offers many benefits for the community and Arlington County. Importantly, the design-build approach allows more flexibility in finding creative design solutions to reduce the cost and risk of the Project. The key elements and advantages of delivering this Project though design-build are as follows:

» One contract required with the County for the completion of both architectural/engineering design and construction.



- Integrated process overlapping station design and construction, with all firms working together towards common goals, allowing for concurrent activities for fast-track delivery.
- Cost efficiencies achieved with contractor and designer working together throughout the entire process, while coordinating as one team with the County and WMATA.
- County's earlier knowledge of fixed Project costs.
- Change orders typically limited to requests that are made from Owner (County).
- Design-build delivers Project more quickly and efficiently than conventional design-bid-build.
- Ability to enhance project coordination through formal partnering process with the County, WMATA, and design and construction personnel, as well as utility owners and other key project stakeholders.
- Industry-proven ability to reduce project claims to Owner through design and construction team
- Design and construction integration will best facilitate successful development of the Project in navigating the Project complexities in a high-profile environment as a result of Amazon HQ2.
- Creates an opportunity for collaboration between public and private partners in a productive way.

A World-Class Team

To carry out this proposed approach, JBG SMITH assembled a custom team of design and construction partners who have direct experience providing WMATA Metrorail Station design-build projects on time and on budget, in addition to advisors who specialize in design-build delivery and project management. For this PPEA project, JBG SMITH will contract directly with Arlington County. The firms of VHB, Clark, KGP, AECOM, and Seyfarth Shaw will subcontract with JBG SMITH. Each firm has a specific and dedicated role to the successful design and construction of the East Entrance.

JBG SMITH

- **JBG SMITH** will serve as the project lead and point of contact with the County. JBG SMITH is an S&P 400 company that owns, operates, invests in, and develops a dynamic portfolio of high-quality mixed-use properties in and around Arlington County. Through an intense focus on placemaking, JBG SMITH cultivates vibrant, amenity-rich, walkable neighborhoods throughout the region, including for National Landing where it now serves as the exclusive developer for Amazon's new headquarters. JBG SMITH's Washington, DC, portfolio is comprised of approximately 18 million square feet of high-quality office, multifamily, and retail assets, 98% of which are Metrorail-served. Serving as project lead on this Project, while also serving as property owner, is the perfect fit to ensure the Project is completed most efficiently in the County's best interests. JBG SMITH will also coordinate closely with our corner building project team, a separate project to be constructed over the new entrance at the same time.

- **VHB** will assist with overall project coordination, management, integration with a separate JBG SMITH site development project on the same property, environmental and permitting services, and implementation of the Project Quality Management Plan. The VHB management team has extensive experience providing these services and is well suited to partner with JBG SMITH in delivering the Project.

- **Clark** will serve as the Prime Contractor for the design-build team and will be responsible for developing the GMP, managing and supervising design and construction, and self-performing major work elements during construction. Clark has a long history of successfully completing WMATA Metrorail station projects across the region, with a depth of experience in design-build project procurement and execution.

- **KGP** will provide station architecture services, relying on decades of corporate and individual experience in completing WMATA Metrorail stations through the planning, design, and construction phases. The firm has provided unparalleled design and support of traditional Metrorail design-bid-build contracts, as well as design-build projects, and its staff are well versed in the needs of this Project.

- **AECOM** will serve as Lead Station Designer and brings experience in design-build projects from across the DC metro area and the country, helping mitigate risk for the team throughout the project. AECOM has participated in complex and innovative transit projects across WMATA's full network, including planning and design of Metrorail stations through all phases of engineering, and brings in-depth knowledge of WMATA processes, standards, procedures, and expectations.

- **Seyfarth Shaw** will serve as legal advisor for JBG SMITH and brings a deep breadth of understanding of the Virginia PPEA process, as well as public-private partnerships, and will be a valuable contributor to the Project Team.

I. Introduction of Entity/Firm

I

INTRODUCTION OF ENTITY/FIRM

a. Legal Name of Entity

CESC Square L.L.C., a subsidiary of JBG SMITH Properties LP (JBG SMITH)

b. Address

c/o JBG SMITH Properties
4445 Willard Avenue, Suite 400
Chevy Chase, MD 20815

c. Tax ID Number (EIN)

20-1957621

d. Type of Business Entity (i.e., Corporation, General Partnership, Limited Partnership, Unincorporated Association, Limited Liability Company, Sole Proprietorship). Identification number issued to the entity by the SCC.

Limited Liability Company;
SCC Identification Number: S0232647

e. Indication whether or not the Firm or any of its principals are currently debarred from submitting bids to Arlington County, Virginia, or any other state or political subdivision:

CESC Square L.L.C., a subsidiary of JBG SMITH Properties LP, as well as its principals, is not currently debarred from submitting bids to Arlington County, Virginia, or any other state or political subdivision.

f. Minority/DBE Status.

N/A

g. Contact Person, and contact information (i.e., telephone number, e-mail address)

Jay Corbalis
4445 Willard Avenue, Suite 400
Chevy Chase, MD 20815
Telephone number: 240.333.7704
Email address: jcorbalis@jbgsmith.com

II. Project Characteristics

II PROJECT CHARACTERISTICS

a. Provide a description of the project, including the conceptual design. Describe the proposed project in sufficient detail so that type and intent of the project, the location, and the communities that may be affected are clearly identified.

Project Type, Intent, Location, and Communities Affected

The proposed Crystal City Metrorail Station East Entrance Project ("the Project") includes preliminary engineering, final design, and construction (on a design-build basis) of a second public entrance to the existing Washington Metropolitan Area Transit Authority (WMATA) Crystal City Metrorail Station. Located at the northwest quadrant of the intersection of 18th Street South and Crystal Drive, the new entrance will provide vertical transportation through elevators, stairs, and/or escalators for public pedestrian access from the street level to a new, below-grade mezzanine level. The underground mezzanine will contain a fare payment area with faregates, fare vending machines, and an attendant kiosk. New openings created by puncturing the vault will connect passengers via vertical transportation from the mezzanine to the northbound and southbound train platforms.

A new public plaza is planned as part of the overall site design under a separate project and will be surrounded by cafes and shops. The Project Team will closely coordinate with the team involved in the separate project for the design, permitting, and construction of these overall site improvements. The addition of a public plaza will enliven the public space and help turn Crystal Drive into a pedestrian-oriented street. The new entrance will also provide more direct access to businesses and residences on the eastern side of National Landing, including redevelopment sites along Crystal Drive. Large volumes of transfer passengers from Manassas and Fredericksburg Lines use the VRE Crystal City Station.

Rendering of Crystal City Metrorail East Entrance and Public Plaza
Source: JBG SMITH

The new second entrance will also improve connections to the northbound Metroway BRT service originating in Alexandria and the ART 43, which provides direct, limited-stop service to the Rosslyn-Ballston Corridor. Additionally, two Capital Bikeshare stations are located within a block of the new entrance. The Metrorail station entrance therefore provides transferability between bikeshare, bus service, transit, and rail, connecting citizens throughout the region to employment centers. The new station entrance is a centerpiece of the expanded and improved intermodal passenger transport hub, an essential element of National Landing.

The new entrance will also relieve congested conditions at the current entrance and station platform. With redevelopment in National Landing, overall trips will increase, and transit will need to capture a substantial majority of that growth, which will overburden the existing station entrance. A second entrance will also allow for a more balanced passenger distribution along the platform, enabling more efficient loading and unloading, therefore reducing crowding on trains and resulting in substantially improved system performance. The additional station entrance will also provide additional egress during emergency situations, which is a systemwide goal for WMATA. Furthermore, the Project adds additional street level elevators and platform elevators to improve compliance with the Americans with Disabilities Act (ADA).

Multimodal Hub—Metrorail, VRE, Metroway BRT, and Capital Bikeshare

Source: VHB

Evolution of the Crystal City Metrorail Station East Entrance Project

2010

- Arlington County Crystal City Sector Plan **identified access improvements needed** at the Crystal City Metrorail Station

2014

- Arlington County and WMATA **identified three alternative locations** for a new Crystal City Metrorail Station entrance
- WMATA executed the *Crystal City Station Access and Second Entrance Study* **alternatives report**

2015

- WMATA **selected an alternative location** for the new entrance at the northwest corner of Crystal Drive and 18th Street South—east of the existing entrance
  - Conducted additional engineering analysis
  - Obtained input from Arlington County and adjacent property owners

2016

- Crystal City Metrorail Station East Entrance Project included in Arlington County's **Transit Development Plan and Capital Improvement Plan**

2018

- Arlington County **held an open house** to present the Crystal City Metrorail Station East Entrance Project to the public and **presented the project** to the Transit Advisory Committee
- Arlington County Board **approved JBG SMITH's site amendment plan** to redevelop a portion of Crystal Square, including integration of the east entrance with an on-site retail building
  - Site plan redevelopment approval consisted of a one-year public review process that included Site Plan Review Committee meetings, Long Range Planning Committee meetings, public hearings before the Transportation and Planning commissions, and an online survey
- Northern Virginia Transportation Authority **endorsed the Project** and **approved $5 million in funding** for preliminary engineering
- Arlington County **SMART SCALE program application approved for $52.9 million** in funding
- Arlington County and WMATA **advanced limited conceptual design** for the Project

2019

- Project included in Arlington County's **FY 2019–FY 2028 Capital Improvement Plan**
- **JBG SMITH submitted a proposal** to Arlington County to design and construct the Project

Project Conceptual Design

WMATA and the County completed development and analysis of alternative site locations for the new entrance at the Crystal City Metrorail station, selecting the currently proposed location at the northwest corner of 18th Street South and Crystal Drive. WMATA has developed concept level design details in coordination with the County and the private landowner, JBG SMITH. The County and WMATA will provide the Project Team with the current conceptual design package. The Project Team expects to advance and complete the conceptual design package before construction in a collaborative partnership with the County, WMATA, the property owner, and other stakeholders. The design will be tailored to deliver the Project in a timely and cost-effective manner in the best interest of Arlington County. The Project Team will look for opportunities to advance elements of construction, such as utility relocation, excavation, and site preparation before final design is fully complete.

b. Identify and fully describe any work to be performed by the County or any other public entity.

The County would serve as the Project Sponsor for the Project in administering funding and providing oversight of the Project Team. Accordingly, the County will work to procure the necessary dollars from local, regional, and state sources to complete the Project. The County will also provide guidance on major project elements, review design submittals, and ensure appropriate coordination within County agencies and relevant public agencies.

The Project Team proposes that the County enter into a separate agreement with WMATA to provide design reviews relating to station infrastructure and operational requirements. The Project Team would recommend that the County-WMATA agreement permit WMATA to engage directly with the Project Team on appropriate design and implementation issues. The Project Team expects that agreements between the County and WMATA will set defined discrete review timelines that allow the project to keep to the schedule outlined in Volume II, Section II.f.

c. Include a list of all federal, state and local permits and approvals required for the project and a schedule for obtaining such permits and approvals.

The following is a list of anticipated permits and approvals that are likely to be required. Note that on past projects, WMATA has acted as its own Authority Having Jurisdiction (AHJ). In such cases, local building permits have not been required, and are listed below for reference only.

1. WMATA permits and approvals
2. Maintenance of Traffic (MOT) plan
3. Building Permit (where WMATA is not the AHJ)
4. Land Disturbing Activity (LDA) Permit
   - Erosion & Sediment Control (E&S)
   - Stormwater Management (SWM)
5. Fire Protection Systems Permit
6. Fire Flow Test & Fire Hydrant Permit
7. Transportation Right-of-Way (TROW) Permit
8. Geotechnical Drilling/Boring Permits

A full schedule for permitting will be developed during the 30% design process. The Project Team will obtain the necessary building and construction permits from WMATA, the County, and the Commonwealth in a timely manner to maintain the Project schedule.

d. Identify any anticipated adverse social, economic and environmental impacts of the project. Specify the strategies or actions to mitigate known impacts of the project. Indicate if environmental and archaeological assessments have been completed. Such social and economic impacts should include but are not limited to community benefits, including the economic impact the project will have on the local community in terms of the amount of additional tax revenue to be generated for the County, the number

of jobs generated for County residents and level of pay and fringe benefits of such jobs, the training opportunities for apprenticeships and other training programs for County residents generated by the project, and the number and value of subcontracts generated for County subcontractors.

No adverse social, economic, or natural environmental impacts are expected for the operational period of the Project.

Some construction impacts are envisioned, consistent with a substantial underground construction project that interfaces with an active and busy Metrorail station. Construction vehicles, material deliveries, and worker vehicles would need access to the site and will require a management plan to ensure minimal disruption to the public and adjacent landowners and businesses. Shutdowns of portions of bike lanes, sidewalks, and roadways may be required for certain periods of the Project; however, these would be coordinated closely with the County to determine acceptable configurations, feasibility, and specific timelines. Alternate access to driveways may also be considered if other routes are viable. All transportation needs will be addressed through a Maintenance of Traffic (MOT) Plan approved by the County.

Underground construction will need to account for all existing public and private utilities within Project limits to minimize any adverse effects. Further analysis is required to determine these impacts, and if impacts are identified, the Project Team will coordinate with the County, WMATA, and the utilities to identify appropriate relocation plans.

Metrorail operations at the station may be affected during construction. During construction of the new mezzanine, the Project Team would expect certain activities may require single tracking or bypass of the station on a temporary basis. To mitigate impacts of construction, the Project Team would develop a Maintenance of Operations Plan in close coordination with the County and WMATA. The Project Team will seek to minimize overall disruption to the traveling public by selecting construction assemblies and methods that minimize station disruption, limiting mezzanine construction work to nights and weekends and coordinating more intensive activities with existing planned Metrorail system maintenance activities. The Project Team will coordinate with WMATA to identify opportunities for coordinated construction.

A Phase I Environmental Site Assessment and a preliminary archaeological assessment would be conducted to identify potential issues at the site.

There are also substantial positive social and economic impacts. These impacts, including tax revenues, direct and indirect job creation, workforce training, and disadvantaged business participation, are addressed in Section III.a.

e. Identify the projected positive social, economic and environmental impacts of the project.

The 2010 Crystal City Sector Plan recommended establishing an additional entrance in the vicinity of 18th Street and Crystal Drive, as part of a broader effort to improve transit service in National Landing, citing improved pedestrian access to the VRE Station and Metroway BRT.[1] In addition to the positive value to the community of strengthening the transit hub in National Landing, improving access to transit encourages higher density development, which can offer more commercial revenue, and has been shown to increase the value of commercial properties in central business districts.[2] Improved access to transit with the addition of the east entrance would help bolster nearby property values and therefore increase Arlington County revenue from real estate taxes, allowing the County to continue to provide high-quality amenities and public services.[3]

Furthermore, in November 2018, Amazon announced National Landing (a collection of the Crystal City, Potomac Yard, and Pentagon City neighborhoods) as the location for the expansion of its corporate headquarters—HQ2. The Crystal City Metrorail Station East Entrance was

1 *https://arlingtonva.s3.amazonaws.com/wp-content/uploads/sites/5/2014/03/sprc_Jul3012_SectorPlan_CrystalCityPO.pdf*

2 *https://www.reonomy.com/blog/post/effect-of-transit-development-projects-on-cre*

3 *https://newsroom.arlingtonva.us/release/arlington-property-values-rise-in-2019-but-budget-choices-remain/*

Amazon HQ2 at National Landing
Source: JBG SMITH

included as one of the five "Transportation Projects" to be funded and implemented in the Commonwealth of Virginia's Memorandum of Understanding (MOU) with the Virginia Economic Development Partnership Authority and Amazon as part of the HQ2 incentive package.[4] Arlington County expects Amazon to create 25,000 jobs in the county by 2030. That number could increase to 37,850 by 2035. The county estimates the net tax benefit to the county for each scenario would be approximately $162,360,000 and $319,540,000, respectively. See Section III.a for additional information on the social and economic benefits that this Project will bring to the community.

A new Metrorail entrance at the Crystal City Station would increase the capacity of the station, therefore encouraging and allowing more people to utilize the station and the Metrorail system. Replacing single-occupancy personal vehicle trips with Metrorail use has many positive environmental impacts on the region, including emissions reductions and improved air quality.

f. Identify the proposed schedule for the work on the project, including the estimated time for completion.

A proposed schedule for the completion of the design and construction of the Project is detailed in Volume II, Section II.f. The Project Team's experience working in urban areas and on many Metrorail projects across the region allowed the Project Team to set an aggressive schedule. The proposed schedule is designed to provide recovery opportunities in the event of unanticipated delays or unforeseen conditions.

g. Identify contingency plans for addressing public needs in the event that all or some of the project is not completed according to projected schedule.

The Crystal City Metrorail Station has operated with the current single entrance since its opening in 1977. If the project were delayed, the existing entrance would continue to be used. The 2014 Crystal City Station Access and Second Entrance Study estimates that the average percentage of passengers that would experience a Level of Service (LOS) density of E or F (5 to 10 square feet and <5 square feet person, respectively) during peak periods would increase to 18% in 2030 if the second entrance is not added, compared to 7% in 2014.[5] LOS E and F are typically outside of the design maximum target and can potentially result in unsafe conditions, particularly if they occur on platforms or at escalator and stair boarding areas. Therefore, the public would still be able to utilize the existing entrance at the Crystal City Metrorail Station if the project were not completed on the above schedule, but congestion at the station would continue to increase.

4 https://d39w7f4ix9f5s9.cloudfront.net/a1/f2/85b7a8db41379e151054ff05e815/commonwealth-of-virginia-agreement.pdf

5 https://projects.arlingtonva.us/wp-content/uploads/sites/31/2015/04/DES-Crystal-City-Metro-Second-Entrance-CCSA_Final_Report_Feb_2014.pdf

In addition, the 2030 LOS densities calculated in the 2014 Crystal City Station Access and Second Entrance Study do not take into account the additional increase in ridership at the Metrorail station due to the arrival of Amazon HQ2, which could exacerbate the situation. As shown in the prior schedule of milestones, the Project Team is proposing to accelerate design and construction to deliver the Project in the timeliest manner possible.

h. Propose allocation of risk and liability for work completed beyond the agreement's completion date, and assurances for timely completion of the project.

The Project Team is prepared to assume risk and liability for delays beyond the contract completion dates as will be established in both the Interim Agreement and the Comprehensive Agreement, subject to mutually agreeable deadlines, as well as industry-standard relief events and related conditions. With respect to the Comprehensive Agreement, we anticipate a performance bond will be in place to secure full and timely performance of the design and construction of the project, further assuring the County that the Project Team is assuming full responsibility for delivering the Project in a timely manner.

The Project Team has a proven track record of successfully completing similar projects on schedule in the Washington metropolitan area. The experience of our team, coupled with their familiarity and understanding of the procedures of the County and WMATA, enables us to partner with you in establishing a realistic schedule and delivering a project that is practical, meets all objectives, and exceeds expectations.

We have the "strength in numbers" to meet the Project's needs quickly by allowing us to not only handle critical tasks with little notice, but also provide immediate response to Project requests on a regular basis and to maintain the schedule. Our team's depth includes more than 5,000 professionals in the DC area with a balance of seasoned veterans and younger staff, combined with senior advisors from each firm who will provide their expertise throughout the life of the contract.

i. State assumptions related to ownership, legal liability, law enforcement and operation of the project and the existence of any restrictions on the public entity's use of the project.

The completed Project will be owned and operated by WMATA with all safety, security, and law enforcement responsibilities managed by WMATA forces. The public use of the facilities will be consistent with WMATA Metrorail standards, and any deviations will be negotiated directly between the County and WMATA.

j. Provide information relative to phased or partial openings of the proposed project prior to completion of the entire work.

The Project Team proposes a single-phase construction approach for the Project that integrates design and construction with the new corner building to be constructed concurrently on the same site. While these are two separate projects, the most efficient process from both a schedule and cost savings approach will be to have the teams coordinate closely in an integrated fashion. Additionally, given that JBG SMITH would be leading each Project, our team is uniquely positioned to ensure the projects are well coordinated while meeting the common goals of the County and JBG SMITH.

Given there is an existing Metrorail station entrance operating, combined with there effectively being no feasible approach to a partial opening of the East Entrance, our team is proposing a full Project opening upon completion of all work. While the project could consider phased construction implementation if the new corner building needs to advance ahead of the station entrance, we feel that would be an inefficient implementation that would add significant project cost and should be avoided. Obviously, the selection of a single-phase or two-phase Project will need to be determined through careful consideration of the options and goals with the County and WMATA.

k. Describe any architectural, building, engineering, or other applicable standards that the proposed project will meet.

Life Safety Codes

The approach to the application of fire life safety codes and standards for the design of the Project is based on the use of National Fire Protection Association (NFPA) 130, in conjunction with the Virginia Construction Code, as applicable to the alteration of an existing rail station. NFPA 130, Standard for Fixed Guideway Transit and Passenger Rail Systems, is a nationally recognized fire life safety consensus standard that generally takes precedence over the corresponding criteria of the Virginia Construction Code. NFPA 130 timed egress criteria will be applied in evaluating the means of egress from the public areas of the station. New construction elements, components, systems, and spaces are typically designed with a goal to comply with the requirements of the Virginia Construction Code, except where NFPA 130 criteria apply.

As with many older Metrorail stations, the new entrance may not bring the station into full compliance with NFPA 130. While it is anticipated that the NFPA 130 egress analysis will demonstrate egress improvements that are achievable and reasonable within the constraints of the existing station and site while being acceptable to the AHJ, if the egress analysis generates seemingly unreasonable requirements, the Project Team will provide recommendations for practical design approaches to balance an efficient use of available space with costs.

The Project will seek to comply with applicable local, state, and federal design standards, such as the criteria listed below. Waivers may be pursued in certain cases to achieve context-appropriate design solutions with concurrence of relevant agencies.

WMATA Guidelines & Standards

» Manual of Design Criteria, Release 9, Revision 3, November 2016

» Adjacent Construction Project Manual, Revision 5a, September 2015

» Standard Design Drawings

» Standard Specifications

» Station Site and Access Planning Manual

» CAD Standards Manual

» Specification Preparation Style and Usage Guide

» Construction Safety and Environmental Manual (CSEM)

» Safety and Security Certification Program Plan (SSCPP)

Accessibility Standards

» Department of Transportation (DOT), ADA Standards for Transportation Facilities, 2006

» Department of Justice (DOJ), ADA Standards for Accessible Design, 2010

Building Codes

On past projects, WMATA has acted as its own AHJ as noted above and in such cases, local building codes do not apply. Local building codes include:

» 2015 Virginia Construction Code (USBC, Part I)

» 2015 Virginia Existing Building Code (USBC, Part II)

» 2015 Virginia Statewide Fire Prevention Code

» 2015 Virginia Mechanical Code

» 2015 Virginia Plumbing Code

» ICC International Building Code (IBC), Energy Conservation Code, 2015 edition

National and Industry Standards

» NFPA 13, Standard for the Installation of Sprinkler Systems, 2013 edition

» NFPA 70, National Electrical Code, 2014 edition

» NFPA 72, National Fire Alarm and Signaling Code, 2013 edition

» NFPA 130, Standard for Fixed Guideway Transit and Passenger Rail Systems, 2017 edition, and its referenced standards

» American Society of Mechanical Engineers (ASME) A17.1, Safety Code for Elevators and Escalators

» American Concrete Institute (ACI) Manual of Concrete Practice, including the Building Code Requirements for Structural Concrete (ACI-318) and Commentary (ACI 318R)

- American Institute of Steel Construction (AISC) Manual of Steel Construction, Allowable Stress Design

l. List any other assumptions relied on for the project to be successful.

Achieving the schedule projected in Volume II, Section II.f will require the County to assist with receiving timely input from WMATA, who will be responsible for reviewing and approving various aspects of the project. Thus, this proposal assumes that the County will use its general standing and project-specific agreement with WMATA to ensure the Authority's timely participation in the Project.

m. List any contingencies that must occur for the project to be successful.

Following are Project contingencies identified by the Project Team:

1. Agreement/MOU between the County and WMATA that ensures WMATA's participation in the design and construction process and assures mutually agreed-upon levels of performance.
2. Full funding contingent upon County receiving SMART SCALE grant, NVTA regional funding, and any additional funding required for Project completion.
3. Contract closeout is contingent on WMATA inspection and approval of the final improvements.
4. Arlington County and WMATA will provide the Project Team with the current conceptual design package.

III. Project Benefit and Compatibility

III

PROJECT BENEFIT AND COMPATIBILITY

a. Describe the anticipated benefits to the community, region or state, including anticipated benefits to the economic condition of the County, and identify who will benefit from the project and how they will benefit. Such social and economic impacts should include but are not limited to community benefits, including the economic impact the project will have on the local community in terms of the amount of additional tax revenue to be generated for the County, the number of jobs generated for County residents and level of pay and fringe benefits of such jobs, the training opportunities for apprenticeships and other training programs for County residents generated by the project, and the number and value of subcontracts generated for County subcontractors.

Social and Economic Community Benefits

Improve connectivity and mobility

The new stairs and elevator will provide direct pedestrian access from the east end of the Metrorail station, approximately 700 feet from the existing entrance. This will eliminate the need for pedestrians to backtrack and result in walk times that are reduced by 4 minutes to destinations on the east side of National Landing and along Crystal Drive, where there is high-density development and transit connections.

The new entrance will enhance connectivity and incorporate intermodal wayfinding, allowing for faster transfers to regional commuter rail via the planned new location of the Crystal City VRE station serving the Manassas and Fredericksburg Lines; bus services, including Metroway BRT running from Braddock Road and the ART 43 that provides direct, limited-stop service to the Rosslyn-Ballston Corridor; and the pedestrian and bicycle network. This intermodal connectivity provides bus-to-rail transfers at one location from regional rail service to employment centers. A second entrance at the eastern end of the station will curtail bottleneck congestion at the current entrance and reduce the time needed to transfer between Metrorail and VRE or Metroway by four minutes for every transferring passenger.

Relieve transit congestion and increase capacity

The Crystal City Metrorail Station is one of the more highly utilized stations in Arlington County, and the station's existing vertical circulation is reaching capacity during peak periods. A second entrance will relieve congested conditions at the current entrance and station platform, improve passenger travel times, and increase passenger capacity at the station due to more efficient passenger distribution along the platform. Evenly distributed platform loading enables more effective loading and unloading of train cars, reducing crowding on trains and facilitating more efficient system performance.

Enhance passenger safety and accessibility

Currently, the station has limited emergency egress with an inconveniently located, non-redundant elevator. A second entrance will provide additional egress during emergency situations. The new elevators improve ADA compliance by providing additional ADA access and elevator redundancy. The East Entrance will also address station deficiencies related to emergency egress in the event of a fire or other unsafe incident by increasing stair egress capacity, thereby improving the station's compliance with NFPA 130 egress standards. Finally, a second entrance will also reduce the number of street crossings necessary for thousands of pedestrians per day to access Metrorail, reducing car/pedestrian conflicts near the station.

Improve access to high-density development

A second access point from the Crystal City Metrorail Station at the northwest intersection of Crystal Drive and 18th Street South will improve local and commuter access to the hundreds of thousands of square feet of existing commercial and residential space on the east side of National Landing, as well as the high-density transit-oriented development that is also planned or under construction in the area and directly adjacent to the entrance.

Enhance and enable Amazon's impact on the local economy and tax revenues

The County expects Amazon to create 25,000 jobs in the county by 2030 and up to 37,850 jobs by 2035, occupying 4 million to 8 million square feet of office space. The County estimates the net tax benefit to the County for each scenario would be approximately $162,360,000 in 2020 and $319,540,000 in 2035. The addition of the East Entrance at the Crystal City Metrorail Station is one of the five "Transportation Projects" included in the Amazon HQ2 incentive package and will be essential in improving connectivity, increasing transit capacity, and improving mobility for employees and residents, including the tens of thousands of Amazon workers.[6]

Local Employment and Training Opportunities

The Project Team has a strong local presence in Arlington County, and each of the firms participate in several local business and community organizations. The Project Team will make use of their affiliations to share information about the Project and to promote the availability of jobs for local residents, as well as to solicit subcontractors, vendors, and professional services suppliers. Through ongoing dialogue, presentations, and distribution of materials, the Project Team will enlist local organizations as active partners in communicating contracting and employment opportunities (with market-based compensation and benefits) to the local community and area residents.

In addition, Clark developed and implemented an intensive, 10-month executive education program called the Strategic Partnership Program (SPP). The SPP is designed to assist small enterprises in gaining the in-depth knowledge necessary to successfully manage and grow their construction businesses. Each class of 25 to 35 participants meets for 3 hours one evening each week from September to May. The curriculum provides core construction management and business skills to participants and supplements the capabilities of small, local, and minority businesses. It has been a tremendous benefit to greater Baltimore- and Washington-area businesses. Since the program began in 2006, some 332 small, local, minority, and disadvantaged business leaders have graduated from the program. Clark will work with selected contractors to enroll them in the SPP throughout the course of the Crystal City Metrorail Station East Entrance project.

6 *https://d39w7f4ix9f5s9.cloudfront.net/a1/f2/85b7a8d b41379e151054ff05e815/commonwealth-of-virginia-agreement.pdf*

b. Identify any anticipated public support or opposition, as well as any anticipated government support or opposition, for the project.

The Commonwealth of Virginia and regional leadership have indicated their support of the Project by approving funding for the Project through several mechanisms, including a capital reimbursement grant through the Virginia Department of Rail and Public Transportation (DRPT), Northern Virginia Transportation Authority (NVTA) funding, and Virginia's SMART SCALE program. As detailed in Volume I, Section III.e, local and regional governments are also supportive of the Project, as it is included in their key comprehensive, transportation, and sector plans, including the Arlington County Capital Improvement Plan, since 2015.[7]

In 2018, JBG SMITH submitted two site plan amendment applications for Crystal City Block Plan G—Metro Market Square. The applications propose a new retail building and a new public plaza. The proposed East Entrance to the station is included in the 2010 Crystal City Sector Plan, and therefore was also included in the plans submitted with the JBG SMITH applications. The plans were reviewed by the Long Range Planning Committee, which solicited online feedback from the public, and public hearings on the plans were held by the Planning Commission and County Board. The public indicated support for the plans, and some community members specifically highlighted their support for the second Metrorail entrance. The Arlington County Planning Commission recommended the Arlington County Board adopt the site amendment plans, which they did on October 20, 2018.

There has been some public opposition to the Amazon HQ2 announcement, and community members opposing HQ2 could potentially oppose the Project, as it is included in the Amazon HQ2 incentive package.

7 https://arlingtonva.s3.amazonaws.com/wp-content/uploads/sites/18/2018/11/E-Adopted-Metro-and-Transportation-1.pdf

c. Explain the strategy and plans that will be carried out to involve and inform the general public, business community, and governmental agencies in areas affected by the project.

We believe in turning public engagement into an opportunity to build support and trust for public projects. Delivering timely and accurate information to the public, businesses, and other agencies and involving them throughout the Project is critical for success during design and construction. In particular, construction will require impacts to streets, noise, and other potential impacts to the community, neighborhood, and traffic, as well as potential impacts to WMATA riders. The Project Team will work closely with the County and WMATA to develop an information and communication plan regarding both design and construction activities that will engage stakeholders to ask questions and provide feedback, while keeping them informed along the way.

The Project Team has worked extensively with community leaders and stakeholders in Crystal City. We would expect to jump into major engagement activities soon after Project Award.

After the signing of the Interim Agreement, the engagement lead from VHB on the Project Team would work with Arlington County to introduce the team and explain the anticipated Project process to stakeholders. Project stakeholders likely include a mix of public and private entities actively engaged in the future of National Landing, including the Crystal City Civic Association, the Crystal City Business Improvement District, the Arlington County Transportation Commission, and the Arlington County Board. The Project Team will also draft a press release and information for Arlington County's project website page announcing the team, approach, and schedule.

Throughout the early design stages, the Project Team will provide briefings to the relevant stakeholder groups and host a public meeting. In this meeting, we would explain the proposed design of the station entrance and provide an update on the Project timeline so that the public can understand when changes would be taking place.

At the completion of Final Design, we will provide briefings to relevant stakeholder groups and host a public meeting to discuss the construction phase of the Project, explaining impacts and mitigation measures to the public. During the construction period, the Project Team will provide a round of briefings to relevant stakeholders at the midpoint of construction and will make a community liaison available for project questions or concerns. The Project Team also expects to provide artistic renderings on the construction fencing that demonstrates the finished product and a live webcam of the construction that shows what is happening behind the fence. These approaches will ensure that the public can always stay updated on what is happening with the station.

During the life of the Project, the Project Team will coordinate interagency meetings to provide updates to relevant agencies, including the Virginia Department of Public Rail and Transportation, Arlington County Department of Economic Development, and Virginia Railway Express. The Project Team will also expect to provide regular updates to the Crystal City Business Improvement District, the Crystal City Civic Association, and public agency officials as requested by those entities.

Ongoing activities will also include:

» Developing informational materials, including maps, graphics, presentations, and fact sheets, to keep the public informed.

Design Phase

» Work with Arlington County to **introduce the team** and explain the anticipated **Project process** to stakeholders

» Draft a **press release** and information for Arlington County's project website page announcing the team, approach, and schedule

» Provide **briefings** to the relevant stakeholder groups

» Host a **public meeting** to explain the proposed design of the station entrance and provide an update on the Project timeline

» Host a **public meeting** to discuss the construction phase of the Project, explaining impacts and mitigation measures to the public

Construction Phase

» Provide a round of **briefings** to relevant stakeholders at the midpoint of construction

» Make a **community liaison** available for project questions or concerns

» Provide **artistic renderings** on the construction fencing that demonstrates the finished product

» Set up a **live webcam** of the construction that shows what is happening behind the fence

Ongoing Activities

» Coordinate **interagency meetings** to provide updates to relevant agencies

» Develop **informational materials**, including maps, graphics, presentations and fact sheets, to keep the public informed

» Assist the County in **updating website materials** to make sure information about design, schedule, and construction is always current

» Update our existing comprehensive **list of stakeholders** for email updates and information blasts

» Develop **presentations** for internal Arlington County meetings

- Assisting the County in updating website materials to make sure information about design, schedule, and construction is always current.
- Updating our existing comprehensive list of stakeholders for email updates and information blasts.
- Developing presentations for internal Arlington County meetings.

d. Describe the compatibility of the project with local, regional, and state economic development efforts.

Arlington Economic Development focuses on attracting new businesses, retaining the existing business base, and encouraging businesses to grow and expand in Arlington County. The addition of the East Entrance at the Crystal City Metrorail Station will expand the capacity of the station and create convenient connections to future and existing businesses, enabling Arlington Economic Development's goals. The Crystal City Metrorail Station East Entrance was also included as one of the five "Transportation Projects" to be funded and implemented in the Commonwealth of Virginia's MOU with the Virginia Economic Development Partnership Authority and Amazon as part of the Amazon HQ2 incentive package.[8] The station is an important aspect of the transportation infrastructure required to support HQ2 and the economic development that HQ2 will induce. The project is therefore an essential element of local and state economic development efforts.

8 https://d39w7f4ix9f5s9.cloudfront.net/a1/f2/85b7a8d b41379e151054ff05e815/commonwealth-of-virginia-agreement.pdf

e. Explain the compatibility with the County's comprehensive plan, infrastructure development plans, capital improvements budget, or other government spending plan.

The project is located on a parcel within the Crystal City Coordinated Redevelopment District that contains existing high-density land use for office, residential, and hotel properties. The parcel is currently zoned C-O Mixed Use District: Commercial Office Building, Hotel, and Multiple-Family Dwelling District. The purpose of the C-O Mixed Use District zoning designation is to "encourage rebuilding with high-rise office buildings, hotels, or multiple-family dwellings in the vicinity of Metrorail stations." An amendment has been submitted to the Arlington County Board to rezone the parcel to C-O Crystal City, as recommended by the Arlington County Planning Commission. C-O Crystal City also encourages mixed-use development of office, retail, and service commercial, hotel, and multiple family dwelling uses in accordance with the 2010 Crystal City Sector Plan.

The Crystal City Metrorail Station East Entrance Project is included in key local and regional planning and budget documents, including the Arlington County Capital Improvement Plan (since 2015)[9], the Arlington County FY 2017-2026 Transit Development Plan[10], the 2010 Crystal City Sector Plan[11], and the Financially Constrained Long-Range Transportation Plan (CLRP) for the National Capital Region—Resolution of Support, June 20, 2018.[12] The Project was also recommended for and scored by the Commonwealth of Virginia's SMART SCALE program as a regional priority project.[13]

9 https://arlingtonva.s3.amazonaws.com/wp-content/uploads/sites/18/2018/11/E-Adopted-Metro-and-Transportation-1.pdf

10 https://projects.arlingtonva.us/wp-content/uploads/sites/31/2016/11/DES-2017-TDP-Chapter_6_Capital_Improvement_Program.pdf

11 https://arlingtonva.s3.amazonaws.com/wp-content/uploads/sites/5/2014/03/sprc_Jul3012_SectorPlan_CrystalCityPO.pdf

12 https://www.mwcog.org/file.aspx?&A=5pSpQ662QdVc7wDtFm7TexRbD75erRebipCoR18u828%3D

13 https://smartportal.virginiahb2.org/api/pdf/F15-0000004976-R01

Crystal City Metrorail Station
EAST ENTRANCE

IV. Qualifications and Experience

IV

QUALIFICATIONS AND EXPERIENCE

a. Identify the legal structure of the firm or consortium of firms making the proposal. Identify the organizational structure for the project, the management approach and how each partner and major subcontractor in the structure fits into the overall team. All members of the proposer's team, including major subcontractors known to the proposer must be identified at the time a proposal is submitted for the Conceptual stage. Identified team members, including major subcontractors (over $5 million), may not be substituted or replaced once a project is approved and comprehensive agreement executed without the written approval of the County.

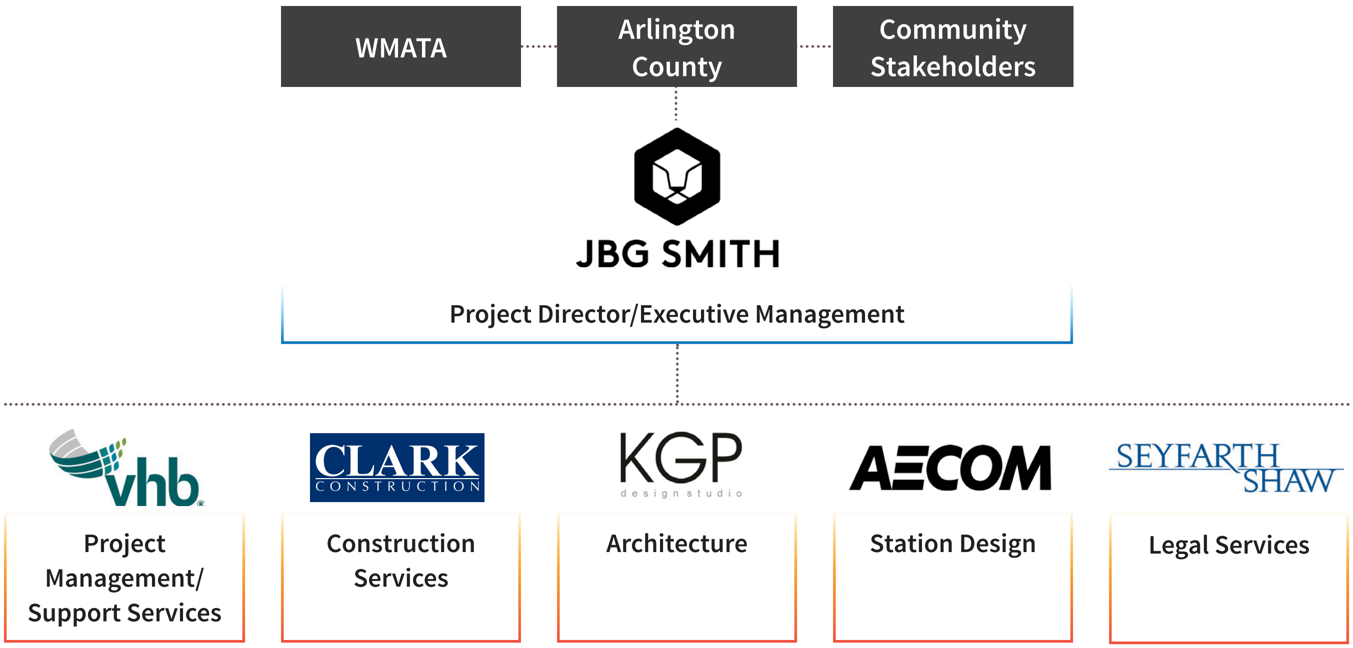
Legal Structure of Team

Our Project Team brings diverse, talented, and experienced individuals to the East Entrance Project. We provide exceptionally qualified staff, all-encompassing resources, and proven approaches to projects of similar size and scope. Our team members have an exemplary record of past performance in every role that underscores our ability to deliver innovative projects on-time and within budget.

JBG SMITH will contract for the Crystal City Metrorail East Entrance Project directly with the County. The firms of VHB, Clark, KGP, and AECOM will subcontract with JBG SMITH. An organizational chart depicting the legal structure of the team can be found on the following page. **JBG SMITH**, through its subsidiary CESC Square L.L.C, will serve as the primary point of contact with the County.

VHB will assist with overall project coordination and management services, as well as various data collection, integration of this Project with the separate JBG SMITH corner building project on the same property, environmental and permitting services, and development and implementation of the Project Quality Management Plan. VHB's key personnel bring a wide breadth of experience managing large, complex infrastructure improvement projects, including P3 and design-build delivery. The East Entrance Project Management Team is currently managing one of the largest infrastructure projects in the Metro DC area with the $1.8B, 2-mile Long Bridge Project, extending from Long Bridge Park in Arlington, Virginia, to L'Enfant Station in Washington, DC.

Organizational Chart



Clark will serve as the Prime Contractor for the design-build team and will be responsible for developing the guaranteed maximum price (GMP), managing and supervising design and construction, and self-performing major work elements during construction. Clark has a long history of successfully completing WMATA Metrorail station projects across the region, with a depth of experience in design-build project procurement and execution. Led by experienced technical professionals and supported by a multidisciplinary in-house team, Clark brings unmatched experience developing innovative, tailor-made solutions to projects such as the Crystal City Metrorail Station East Entrance. Whether managing a billion-dollar Metrorail expansion, making much-needed improvements to a station platform, building a new intermodal facility, or stabilizing a national landmark, Clark brings the same commitment to delivering the Metro DC region projects safely, with unparalleled budget and schedule certainty.

KGP will provide station architecture services, with decades of corporate and individual experience in completing WMATA Metrorail stations through the planning, design, and construction phases. They have provided outstanding design and support of traditional Metrorail design-bid-build contracts, as well as design-build projects, and are well-versed in the needs of this Project. KGP will bring award-winning, diverse multidisciplinary experience in transit architecture to provide this project a coherent, unified solution that results in both a creative and functional outcome for Arlington County and station users.

AECOM will serve as Lead Designer and brings experience in design-build projects from across the Washington, DC, area and the country, helping mitigate risk for the team throughout the project. AECOM has participated in complex and innovative transit projects across WMATA's full network, including planning and design of Metrorail stations through all phases of engineering, and brings in-depth knowledge of WMATA processes, standards, procedures, and expectations. AECOM is a global network of professionals working to develop and implement innovative solutions to the world's most complex challenges and are well suited to lead station design services for this new Metrorail entrance and help deliver a transformative outcome that will unlock opportunities in the community and region and dramatically improve people's lives.

Seyfarth Shaw will serve as legal advisor for JBG SMITH and brings a deep breadth of understanding of the Virginia PPEA process, as well as public-private partnerships, and will be a valuable contributor to the Project Team.

Management Approach

Our management approach will facilitate critical County, WMATA, and stakeholder interfaces with the integration necessary for success on this Project. Benefits of the Project Team's organizational structure are as follows:

» A single point of accountability to the County and stakeholders for management of the design and construction and to address any concerns that arise
  • Jay Corbalis, JBG SMITH, is the primary point of contact to the County and the Project Director

» Designated Project Management Team leader facilitating coordination between the design and construction teams and supporting JBG SMITH on all technical and administrative aspects of the project
  • Mark Colgan, VHB, is the Project Management Team lead

» Seasoned contractor and designers that have worked on previous WMATA Metrorail Entrance design-build projects in the Washington metropolitan area

» Experienced staff and task managers with the authority and responsibility to make sure the work meets requirements and commitments to the Project

» Integration of key design and construction personnel throughout phases

» Early and continuous integration of transit expertise for injecting lifecycle considerations into the design

In support of an effective, integrated project delivery approach, the Project Team will make use of BIM systems that provide common, interactive renderings of the project and reduce coordination delays, while incorporating the separate but concurrent corner building project on the same site.

Partnering Process

JBG SMITH will manage the Project Team, supervising the design, permitting, and construction of all work elements in partnership with a management team from VHB, Clark, KGP, and AECOM. We're proposing a formal Partnering process be used to facilitate strong project management across the Project Team, County, WMATA, and other key stakeholders to establish open lines of communication, commitments to collaborative problem-solving, and a consistent focus on the Project purpose and goals for all key elements. The Partnering process will be developed to result in the following positive outcomes:

» Maximize cost and schedule certainty while minimizing disruptions

» Ensure proactive quality management of all tasks and work products

» Build relationships with positive communication, cooperation, honesty, and trust

» Help all team members learn and respect perspectives of other team members

» Keep team focused on the big picture while jointly solving problems large and small

» Seek commitment from all parties to work within agreed upon parameters and goals

» Establish performance measures for safety, quality, permitting, schedule, and budget

The Project Team's management approach will begin with a Partnering workshop immediately after Award that will be attended by key personnel from the County, WMATA, and other stakeholders to solicit input from all and produce the following deliverables:

» Project communication and roles matrix

» Partnering charter (mission, goals, and guidelines)

» Issue resolution process

» Action plans

» Partnering evaluation program (periodic surveys, continuous feedback system)

» Partnering Report (include charter and all partnership agreements)

Many of the above elements are proven effective project kickoff and management practices; however, what sets our proposed formal Partnering process apart will be the defined Project charter, workshop, consistent follow-up meetings, survey feedback system, and a Partnering Report that incorporates agreements from all parties at the beginning of the Project.

Key Personnel Chart

A chart depicting the Project Team's key personnel can be found below.

The Project Team has been organized to work alongside the County throughout the delivery of this important project. Our team's relationships are effective, functional, and benefit from a common accountability initiative—to safely and soundly complete the project expeditiously. The Project Team is led by highly qualified and capable professionals with the collective features of local roots, national expertise, and strong design-build experience. All of our firms and key personnel have noteworthy experience managing transportation projects in identical roles that they will serve on this Project. Our firms have extensive experience delivering design-build projects together, which comes with an understanding of the importance of considering both design and construction simultaneously throughout project development. We have established the Management Team reporting to the Project Director with the intent to specifically ensure the team maintains common goals and is continuously communicating design and construction activities as one unit, regardless of which phase of the project is taking place.

Integrated Team

One of the keys to the Project Team's past successes has been acknowledging the distinct differences between designers and constructors in the approach to their

Project Team—Key Personnel

MANAGEMENT TEAM

JBG SMITH	VHB	Clark Construction	AECOM
Project Director Jay Corbalis **Executive Management Team** Andy VanHorn Taylor Lawch Greg Trimmer	**Project Management Team** Mark Colgan, PE, DBIA Drew Morrison Kelsey Robertson, ENV SP **Support Services** Jim Long, PE	**Construction Services** Joe Abidin Mo Hosseini, PE **KGP** **Principal Architect** Bill Gallagher, FAIA	**Station Design Manager** Jim Gast, AIA **Seyfarth Shaw** **Legal Advisor** Chuck Wall

TECHNICAL PERSONNEL

Utility Coordination Tim Smith, PE, ENV SP **Environmental Documentation** Neville Reynolds, PWS **Quality Management** Pete Clary, PE **Agency/Stakeholder Coordination** Joyce Tsepas, AICP **P3/Design-Build Delivery** Phil Sheridan, PE, DBIA	**Constructability** Matt Ellis **Construction Management** John Munson Ryan McBride, PE **Construction Engineering** Ryan McBride, PE **Architectural Design** Ethan Marsh **Design/CAD** Brandon Blount	**Project Architect** Manuel E. Feijoo, AIA, LEED AP **Deputy Station Design Manager** Michael Hance, RA **Entrance Structures** Mark Zimpleman, PE **Station Egress** Howard Cohen, AIA **Vertical Transportation** Sean Yaghobi	**Electrical Engineering** Yoseph Solomon, PE **Plumbing Engineering** Mark Thayer **Underground Structures** Elliot Mandel, PE **Mechanical Engineering** Paul Sabatiuk, LEED AP **Site/Civil Design** Sameer Shukla **Drainage/Stormwater** Joe Huesmann

work, as well as their individual approach to making project assumptions and establishing priorities. We have found it imperative that design and construction personnel are engaged throughout the process to effectively understand and mitigate these diversities along the way and take full advantage of the integrated team environment. A key aspect of the Project Team's success will be founded on maintaining a high level of communication, organization, and leadership, with key disciplines for design and construction represented at all decision points. Our Management Team members are capable of unifying complex technical issues between a multitude of team members, County stakeholders, WMATA, and regulators, while they also ensure sufficient labor, materials, and equipment will be provided to deliver the physical product on-time and within budget.

From the moment our team was formed, we emphasized the importance of integrating design and construction personnel to foster positive behaviors and ideas that have promoted consistent core values across the Project Team. These values embrace an environment of trust, characterized by integrity and honest communication, a mutual respect for and appreciation of diverse perspectives, and a commitment to innovation and creativity to drive quality and the highest level of ethical behavior. The result is a team with a demonstrated history of success on design-build projects and a valued relationship that has been built on trust and transparency, where ideas and expertise are shared openly at all times between design and construction personnel.

The Project Team will emphasize these principles so that the vision of the team is carried forward into project execution, where organizational excellence is the underpinning for us to produce outstanding results. All members of the team understand that the Project's success is dependent on the ability of team members to work collaboratively and to trust that each member is committed to working in the best interests of the Project. Our team has been carefully staffed with individuals that are educated and experienced in the implementation of design-build best practices, and whose personalities are well suited to the collaborative nature of the design-build process.

From proposal development through project completion, the Project Team will be working under the direction of Jay Corbalis, the Project Director and primary point of contact with the County. Jay will be assisted by VHB's Mark Colgan, whose primary responsibility is to ensure integration between the design and construction personnel at all times.

The Management Team is an integrated design and construction leadership group that includes senior management and key personnel who will oversee design, construction, and quality all with equal emphasis. The design-build team will be led by Construction Services Managers Joe Abidin and Mo Hosseini of Clark, Principal Architect Bill Gallagher of KGP, Station Design Manager Jim Gast of AECOM, and Support Services Manager Jim Long of VHB.

The Project Director will bring the Management Team together on a weekly basis to discuss all aspects of the project and ensure there is a unanimous understanding of the key goals, critical path items, and primary areas of focus for production teams.

The Station Design Manager will coordinate the design of various design disciplines and verify that contributing design elements from other disciplines are properly reviewed, integrated, and completed within schedule requirements. The Station Design Manager will also work closely with the Construction Services Managers and Project Management Team to ensure that construction considerations are fully addressed throughout the design process. Through continuous team integration, design and construction staff are able to quickly and proactively approach changes and challenges efficiently since the team is aligned closely. Additionally, the infusion of construction knowledge into every design approach results in a highly efficient design in early project development stages that will carry through successful construction efforts with regard to appropriate constructability, phasing, and close coordination.

Project Team Co-Location

Key members of the management and production team intend to co-locate at a convenient location central to the Project location during critical design and construction phases, and we intend to invite County and WMATA staff to consider periodically using the space to facilitate strong collaboration and continued partnering throughout the major work periods. Through a co-location process, the Project Team and the County will benefit from these closer working relationships while allowing true team integration to successfully deliver the project. This central location will also facilitate the informal "over the shoulder" reviews with County and WMATA staff and will keep stakeholders current on the design progress to facilitate immediate feedback and input. The central location will also facilitate timely decision-making by allowing direct dialog to reduce process turnaround. Additionally, co-location provides a higher degree of efficiency for the Quality Assurance and Quality Control process, while ensuring that all design and construction procedures and review processes conform to the Project's Quality Management Plan. Co-location will integrate key design and construction personnel through all phases with the following:

» Weekly leadership team meetings

» Weekly design and construction staff meetings

» Informal over-the-shoulder review meetings

» Issue/resolution meetings

» Post-design support meetings

It is vital for the long-term success of the project to have key members of the Project Team in a close partnering relationship, where everyone understands performance expectations, roles and responsibilities, and conflict resolution strategies to help the Project Team operate effectively and functionally.

b. Describe the experience of the firm or consortium of firms making the proposal and the key principals involved in the proposed project including experience with projects of comparable size and complexity. Describe the length of time in business, business experience, public sector experience and other engagements of the firm or consortium of firms. Describe the past safety performance record and current safety capabilities of the firm. Describe the past technical performance history on recent projects of comparable size and complexity, including disclosure of any legal claims of the firm. Include the identity of any firms that will provide design, construction and completion guarantees and warranties and a description of such guarantees and warranties. Provide resumes of the key individuals who will be involved in the project.

Experience of firm/length of time in business

JBG SMITH

JBG SMITH is an S&P 400 company that owns, operates, invests in and develops assets concentrated in leading urban infill submarkets in and around Washington, DC. Our mixed-use operating portfolio comprises approximately 19 million square feet of high-quality office, multifamily and retail assets, 98% at our share of which are served by Metrorail. With a focus on placemaking, we drive synergies across the portfolio and create amenity-rich, walkable neighborhoods. JBG SMITH's future development pipeline includes 19.6 million square feet of potential development density at our share. The company has been providing these service for more than 50 years.

Collaboration forms the core of our identity. We focus on creating successful partnerships at every level—with our tenants, residents, municipalities, local community organizations, and other key stakeholders—aligning objectives as we seek to create successful outcomes. Our strong sense of community inspires our commitment to environmental sustainability and social responsibility throughout our portfolio and our company.

VHB

VHB's passionate professionals include engineers, scientists, planners, and designers who partner with public and private clients in the transportation, real estate, institutional, and energy industries, as well as federal, state, and local governments. VHB delivers high-quality, innovative, and timely design for major infrastructure projects and has designed high-profile transit, highway, and bridge projects for more than 20 years. The company has been in operation for 40 years and has more than 1,500 professionals in 31 locations throughout the East Coast. VHB is a leader in design-build delivery, having completed more than 30 design-build projects from Maine to Florida. VHB also has a history of positive engagement in the Crystal City area, having served as an on-call transportation consultant to WMATA, the City of Alexandria, Arlington County, Virginia Railway Express (VRE), VDOT, and DDOT.

Clark

As the Engineering News Report #1 Top Contractor in the Mid-Atlantic in 2018, Clark Construction Group, LLC (Clark) has the necessary resources and technical expertise to complete the Crystal City Metrorail Station East Entrance Project (the Project). Clark has been in business since 1906. Clark buys $1.4B annually in the Mid-Atlantic region alone, which roughly translates into $26.4M in subcontracts issued each week. Nationally, Clark purchases $3.7B in subcontracts per year. Clark's strength is their familiarity in working with WMATA, coupled with the firm's unique discipline-specific knowledge of every critical aspect related to a project of this magnitude and complexity. In addition, Clark has extensive experience working within an active rail system.

KGP

Since 2000, KGP Design Studio (KGP) has collaborated with their clients to transform their specific needs into design solutions that positively affect individuals, communities and cities. With offices in Washington, Honolulu and Manila, the firm benefits from a diverse team, sharing resources on a global scale to provide the best possible support for our clients and craft a unique strategy of development for every project. An open process based on innovation and proficiency, coupled with the personal engagement of the principals, ensures that all possibilities are considered in every project.

KGP employs a philosophy rooted in the basic premise that the best architecture stems from a coherent response to both the collective and individual needs and desires of people. Ultimately, the effect of good design is measured in the quality of life and well-being of the people who use and experience their designs. Nowhere has this philosophy been more thoroughly applied than in their transit projects.

With more than 35 years of partner-led experience in transit projects, the firm's efforts have focused on transit design from its inception. For the past 17 years, the firm has served as the architectural consultant to WMATA for the Washington Metrorail. The scope of these projects range from being the architect of record for Rosslyn and Medical Center new deep rock station entrances, to entry canopies, to producing construction drawings to rehabilitate platforms along the Red Line. The firm has produced numerous station access studies including Silver Spring, Foggy Bottom, L'Enfant Plaza, Gallery Place-Chinatown, and Union Station. Several efforts are systemic in nature, including the Eight Car Train Implementation and Bethesda "Station of the Future".

AECOM

As a global company since its inception in 1970, and with 87,000 employees in over 150 countries, AECOM has a deeply rooted presence in many of the world's major urban centers, including Washington, DC.

AECOM combines their international expertise and local focus on every project they are involved in. The firm is both a leader in transit design and construction nation-wide, and the consultant of choice for agencies in the metropolitan Washington region. Their regional experts in transit planning, architecture, and engineering are based in Arlington, co-located with their national transit consulting practice, which includes transportation modeling, finance, and economics.

AECOM is a leader in design and management of heavy rail programs and has played a central role in planning and developing projects for WMATA since the early days of the Metrorail system. AECOM has the expertise and local resources to perform design and engineering for bus and rail facilities and corridors, and to support public involvement, joint development, and stakeholder coordination. AECOM has an accomplished local project team that has delivered a variety of projects for Metrorail stations throughout Arlington County, including the Court House Metrorail Station Second Elevator Feasibility Assessment In the broader DMV region and similar projects including the Washington Union Station Metrorail Station New Center Mezzanine Study, the Dulles International Airport Metrorail Extension Silver Line Phase 2, and the White Flint North Entrance Feasibility Study in Rockville, MD.

AECOM is committed to providing high-quality and cost-effective services. They have robust corporate systems and processes for accounting and quality assurance/ quality control (QA/QC). These in-house procedures ensure that their deliverables are completed in a consistent, timely, and quality manner.

Through their strong performance as a team, AECOM maintains excellent working relationships with local jurisdictions including Arlington County, Fairfax County, the City of Alexandria, the City of Falls Church, and other important regional agencies such as WMATA, NVTA, NVTC, and DRPT. For the Crystal City Metrorail Station East Entrance project, AECOM has assembled a team of multidisciplinary professionals who have delivered for Arlington County and who will help advance this project into a very dynamic future for transportation here in the region and globally.

Seyfarth Shaw

Seyfarth Shaw is a full-service law firm with more than 850 attorneys offering a national platform and an international gateway to serve their clients' changing business and legal needs in a wide variety of practice areas. The firm's clients range from Fortune 100 to midsize companies and include publicly traded and privately held companies and various types of funds.

With regard to public-private partnerships (P3s), Seyfarth possesses a multidisciplinary team of attorneys who have the combined skills and experience to provide project stakeholders with strategic guidance in project development, financing, design, construction, operation, and maintenance. This team includes attorneys experienced in the areas of project finance and development, construction, government policy and funding, real estate, environmental, and tax law, among other relevant practice areas. In Virginia, this extensive experience spans a wide range of projects procured pursuant to Virginia's Public-Private Education Facilities and Infrastructure Act (PPEA) and Public-Private Transportation Act (PPTA).

Collectively, their P3 team helps project participants achieve their goals by understanding the unique opportunities and challenges a P3 project presents and knowing how to effectively balance the various competing interests. Seyfarth's P3 attorneys have represented public authorities, project developers and sponsors, lenders and institutional investors, design-builders, and operation and maintenance contractors on a myriad of P3 projects. The wide range of sectors in which their P3 attorneys routinely practice includes transit and rail; highways, tunnels, and bridges; airports; student housing and education facilities; and water and wastewater facilities.

Complementing the firm's P3 practice is one of the largest and most experienced construction law practices in the United States, offering clients the benefits of a classic construction boutique supported by the resources of a large full-service firm. Seyfarth's construction team of more than 40 attorneys has successfully represented all of the different players in the design and construction process, including private owners and developers, public agencies, general contractors, subcontractors, suppliers, architects, engineers, and sureties.

Key principals

JBG SMITH

Jay Corbalis
Vice President, Public Affairs
Project Role: Project Director

Jay Corbalis is Vice President of Public Affairs for JBG SMITH, specifically focused on the company's efforts in National Landing. In that capacity, he works with a diverse range of public stakeholders to create long-term value by aligning priorities and investments around shared goals, particularly related to major transportation projects. Prior to joining JBG SMITH, Jay was part of the Mixed-Use Development Team at Federal Realty Investment Trust, where he worked on large-scale redevelopment projects, including Pike & Rose.

Andy VanHorn
Executive Vice President
Project Role: Executive Management Team

Andy has more than 15 years of experience in various aspects of real estate and is responsible for the entitlement oversight and planning of JBG SMITH's development activities in National Landing, including Amazon's HQ and the associated infrastructure improvements. He has completed over 2 million square feet of entitlement in Arlington County, including the Rosslyn Gateway and Central Place projects in Rosslyn.

He is very active in both Arlington and Alexandria, through participation on public and private committees and boards in those two markets. Andy currently serves as an Executive Committee Member and Board Member of both the Rosslyn BID and the Crystal City BID, and a Board Member of Virginia NAIOP and the Arlington Partnership for Affordable Housing.

The JBG Companies merged with Vornado DC, and formed JBG SMITH, the largest publicly traded REIT in the Washington Metro region in July 2017. Prior to his current role with JBG SMITH, Andy was a Principal with The JBG Companies. He also worked for two years in real estate private equity with Buvermo Properties, and for Charles E. Smith and Clark Construction in various roles after completing his undergraduate degree.

Taylor Lawch
Vice President of Development
Project Role: Executive Management Team

Taylor is a Vice President of Development at JBG SMITH and has spent the last 10 years in commercial real estate finance and development. He joined JBG SMITH in 2014 to focus on the acquisition, design, entitlement, financing, and delivery of mixed-use urban infill projects. After delivering Central Place, a two-phase high-rise project comprised of a 377-unit apartment building and a 530,000 SF office tower, Taylor focused on the master-planning of JBG SMITH's National Landing portfolio in conjunction with the Amazon HQ2 pursuit. In addition, Taylor is managing the development of Central District Retail, JBG Smith's first phase of Crystal City redevelopment that includes a nine-screen Alamo Drafthouse Cinema, a specialty grocer, 50,000 SF of new street-fronting retail, and a public park that sits adjacent to the proposed Project Site. Taylor is active in Arlington County civic activities; he is an Arlington County Board appointed Commissioner to the Crystal City Citizen Review Council and is an active participant in the Crystal City and Rosslyn BID activities.

Prior to joining JBG SMITH, Taylor worked for Walker & Dunlop and MidCap Financial financing multifamily, seniors housing and skilled nursing projects throughout the Country.

Greg Trimmer
Executive Vice President
Project Role: Executive Management Team

Greg has nearly 20 years of experience overseeing mixed-use and build-to-suit office development. He currently oversees large scale development projects in multiple jurisdictions, including Arlington, Montgomery and Fairfax Counties, as well as the District of Columbia. He previously served as Project Executive for the successful delivery of 575,000 SF for The National Cancer Institute, 935,000 SF for Health and Human Services, and 491,000 SF for the National Institute of Allergy and Infectious Diseases. Currently, he oversees JBG Smith's development of a 215,000 SF trophy building at 500 L'Enfant Plaza, a 260,000 SF trophy office building at 1900N Street NW, the Central District Retail project, and the redevelopment of the 260,000 SF office at 1770

Crystal Drive, both in National Landing. Prior to joining The JBG Companies in 2007, Greg was a Development Executive at Clark Realty Capital and had a previous tenure with JBG as an Associate. He is a member of ULI and NAIOP, and is an accredited member of the Congress for New Urbanism. He is currently serving on the Phase 2 Dulles Rail Transportation Improvement Advisory Board, ULI's National Office Development Council, and NAIOP's national Urban Redevelopment Forum. In the community, he is a member and former Chair of the Special Gifts Committee for the Arlington Free Clinic.

VHB

Mark Colgan, PE, DBIA
Vice-President/Principal &
Mid-Atlantic Transportation Director
Project Role: Project Management Team

Mark has more than 30 years of project management, transportation, and construction-related experience, both as a private contractor and consultant engineer with VHB for the last 20 years. He brings a unique perspective, having led construction teams in the field as a general contractor before leading design teams across VHB. Mark has served a wide range of design-build roles, including Project Manager, Design Manager, Project Director, and Senior Advisor on projects from southern Florida to northern Maine. He continues to serve on high-profile projects across VHB's footprint and leads VHB's Corporate Design-Build practice, implementing best practices for all 31 offices.

In addition to serving in a practitioner role, Mark has served as Owner's Representative on more than a dozen design-build projects, with a management role on seven first-in-the state projects for Virginia, New York, Vermont (one state and one municipal), New Hampshire, Rhode Island, and Florida. In this role, Mark led the development of all procurement documents, specifications, and internal Owner processes; assisted selection committees; developed DOT manuals and trainings; and managed the review of design-build team submittals from design through construction. Mark has a deep understanding of the design-build process and knows how to be effective in delivering services on-time and mitigating risk throughout.

Mark is currently managing the $1.5B Long Bridge Project from Arlington into Washington, DC, and is VHB's Principal-in-Charge on two separate on-call contracts for WMATA. He also served as engineering lead on the Crystal City to DCA Pedestrian Bridge Feasibility Study VHB developed for the Crystal City BID, and he serves in various roles advising JBG SMITH on National Landing transportation improvements.

Mark is a member of the Design-Build Institute of America (DBIA) National Transportation & Aviation Market Committee, as well as the DBIA National Legislative Committee and is well versed in the policies, planning, procurement, risk management, design, and construction best practices for large, multidisciplinary design-build projects involving utilities, roadways, transit, rail, bridges, and structures.

He is supported by more than 250 Mid-Atlantic staff, 75 transit and rail professionals, and a structures and bridge team of more than 60 professionals. Mark's primary focus is to ensure VHB consistently delivers high-quality services to their many valued clients and will serve on the Project Management Team for the Project, reporting directly to Project Director Jay Corbalis.

Drew Morrison
Transportation Planner
Project Role: Project Management Team

Drew is a Transportation Planner for VHB. Prior to joining VHB, he worked for the Montgomery County Council on transportation, environmental, and energy issues. Since joining VHB, Drew has focused on project management, station planning, and implementation strategies for large transit and rail projects in the Washington, DC, area. Recently, Drew served as project manager on the Washington Union Station Expansion Project EIS, a proposed multibillion-dollar reconstruction of DC's train station to accommodate increased intercity and commuter rail.

Kelsey Robertson
Transportation Planner
Project Role: Project Management Team

Kelsey is a Transportation Planner for VHB. She has extensive experience advancing project development documents for major infrastructure projects in the DC region. She is currently serving this role on the $1.5B Long Bridge Project from Arlington into Washington, DC, and also works closely with Mark Colgan in a Project Management Team role. Kelsey will provide assistance on all aspects of project management, document control, communication, and meeting facilitation for the entire Project Team.

Neville Reynolds, PWS
Principal
Project Role: Environmental Documentation

Neville is a Senior Environmental Scientist and Principal at VHB. His primary experience includes environmental permitting and regulatory affairs. He has extensive experience in planning, design, and permitting of transportation infrastructure improvements with VHB throughout the Mid-Atlantic states. His professional responsibilities include project and task management on major projects, and his strengths include the development of effective permit strategies using innovative ideas and superior negotiation skills with regulatory personnel.

Jim Long, PE
Chief Civil Engineer
Project Role: Support Services

Jim is a Professional Engineer with close to four decades of experience on a wide range of complex urban infrastructure and transportation projects throughout the Mid-Atlantic region. He has a wealth of experience in all phases of project delivery, including due diligence investigations, concept development, construction documents, permitting/entitlements, construction administration, and turnover/commissioning. His involvement in complex transit and rail projects includes the following:

» King Street Station Platform Extension (WMATA)
» Blue Line Extension to Largo (WMATA)
» Silver Line Extension to Wiehle Avenue (WMATA)
» NOMA-Gallaudet University Infill Station (WMATA)
» Manassas Park Station Parking Improvements (VRE)

Jim will be responsible for coordinating various VHB and subconsultant support services.

Tim Smith, PE, ENV SP
Civil Engineer
Project Role: Utility Coordination

Tim is a Project Manager and Lead Site/Civil Engineer with 9 years of experience managing civil design and utility coordination across the Washington metropolitan region. He has developed strong relationships with both the public and private sector across various jurisdictions throughout DC and Northern Virginia.

Tim has an excellent record of client service and communications skills and excels in providing utility coordination for project teams of all sizes. He takes pride in his ability to understand the importance of the design elements and impacts on existing and proposed utility networks, while understanding the challenges of the reviewing agencies and knowing how to anticipate and overcome those challenges. It is Tim's goal, as a member of this team, to continue to add value with every interaction, keep his team members informed of all anticipated risks and outcomes, and positively contribute to the successful delivery of a quality product.

Pete Clary, PE
Director of Transportation Engineering
Project Role: Quality Management

Pete is the Director of Transportation Engineering for VHB's Metro DC operation, with more than 32 years of experience. With a varied background in the transportation industry, his planning, preliminary design, final design and construction experience for transportation and utility infrastructure projects enables him to balance the needs of each project. Pete's previous employment as a DOT Owner has equipped him with a comprehensive understanding of overall project development from both sides of the table, from concept design through construction.

His project experience includes site development projects, bike-ped improvements, interchanges, arterials, intersections, trails and parkways, and water, sewer, power and communications including design-bid-build and design-build project delivery. Pete understands multi-phased maintenance of traffic in urban settings; extensive utility coordination; access and mobility evaluations for bicycles, pedestrians, and parking; and balancing impacts associated with roadway design improvements and curb adjustments. Pete is currently serving in a similar Quality Management role on the $1.5B Long Bridge Project from Arlington, VA, to Washington, DC.

Joyce Tsepas

Project Role: Agency/Stakeholder Coordination

Joyce has experience as a Transportation Planner and Stakeholder Engagement Specialist in the Washington, DC region, and has worked for both the public and private sectors. Joyce has led and supported community revitalization plans, corridor plans, feasibility studies, transit-oriented development plans, pedestrian and bike studies, and environmental studies. She's also the former Ward 2 planner at the DC Office of Planning. She recently served as Project Manager for a study to evaluate the potential of building a walkway between Reagan National Airport and Crystal City, and incorporating a VRE commuter rail entrance in a private office building. Tasks included organizing public meetings and content, stakeholder coordination, leading a working group with MWAA, NPS, NCPC, and JBG SMITH, as well as coordinating with Arlington County and other local agencies. Joyce will serve a similar role on this project in delivering Agency/Stakeholder Coordination, as well supporting the JBG SMITH and the Project Management Team with public involvement commitments.

Clark

Mahmoud (Mo) Hosseini, PE, Division President & CEO, and Joe Abidin, Senior Vice President, will serve as executive management of the Project for Clark. Both of these individuals oversee the office operations of Clark's Civil group. They will guarantee that the Project receives the personnel and equipment required to meet all operational objectives. Mo and Joe both have more than 30 years of professional experience on projects of this order and magnitude, many of them for WMATA.

Joe Abidin

Officer-in-Charge

Project Role: Construction Services

Joe is responsible for achieving the client's goals through consistent communication and coordination with the client and architect, and direct management of Clark's project team throughout all phases of construction. With access to the full range of corporate resources, Joe will ensure that the project receives the personnel and equipment required to meet set objectives.

Mahmoud "Mo" Hosseini, PE

Executive Management

Project Role: Construction Services

As part of executive management, Mo is responsible for achieving the client's goals through consistent communication and coordination with the client and architect, and direct management of Clark's project team throughout all phases of construction. With access to the full range of corporate resources, he will ensure that the project receives the personnel and equipment required to meet set objectives.

Phil Sheridan, PE, DBIA

Design-Build Executive

Project Role: P3/Design-Build Delivery

Bringing 35 years of experience, having worked on nearly $3 billion of design-build projects, Phil is a recognized industry leader in infrastructure design-build delivery. He is familiar with WMATA standards and systems and has worked on numerous WMATA projects in the past 16 years. From his experience on major projects, such as MWAA's Dulles Corridor Metrorail Project, Phase 2, Package A and WMATA's Orange and Blue Line Rehabilitation, Phil brings a problem-solving attitude with a strong appreciation of managing risk. He will lead the team with a strong emphasis on collaboration and ensuring that we maximize the benefits of design-build delivery to produce a highly successful project.

Matt Ellis

Superintendent

Project Role: Constructability

Matt oversees the total field construction effort and field staff to ensure the project is constructed in accordance with design, budget and schedule. He supervises and coordinates Clark trades and all project subcontractors to ensure contract compliance. Matt facilitates communication between field engineers and subcontractors to make certain construction complies with drawings and specifications. He is responsible for project safety and quality control.

John Munson
Project Executive
Project Role: Construction Management

John provides overall management direction for the project, establishing objectives and policies while maintaining liaison with the client and architect. He monitors construction and financial activities and serves as Clark's representative with primary financial and contractual responsibility for the project. With broad authority to commit Clark on matters of cost and schedule, John has the ability to reserve personnel and corporate resources to ensure the project's success. He will attend all executive-level oversight meetings with the client and actively participate in the selection of the Clark project staff and subcontractors. Ultimately, John has principal responsibility for subcontractor performance in building a high-quality project safely, within schedule and to the satisfaction of the client.

Ryan McBride, PE
Project Manager
Project Role: Construction Management/ Construction Engineering

Ryan plans, monitors and supervises on-site construction engineering and administration activities and advises on any preconstruction effort. He maintains liaison with the client and architect regarding project progress. Ryan ensures that project administration activities comply with company and client requirements, providing interpretation of design and application of construction methods. Additionally, he oversees project management staff and supervises all activities related to contract administration, including any small business administration program, shop drawing reviews, submittals, procurement, payment requisition and schedule.

KGP

The principals of the firm have participated in numerous transit-related projects: the 1980s renovation of Union Station in Washington, studies for the upgrade of the Northeast Corridor Amtrak Stations, and the design of many of the earlier Washington Metrorail stations.

Bill Gallagher, FAIA
Principal
Project Role: Principal Architect

At the beginning of his career, Bill, a founding principal of KGP, spent 8 years as a designer of the Washington Metrorail and other projects under Harry Weese. As one of the founding principals of KGP, Bill leads the firm's transit, urban design, and planning studio. He has more than 40 years experience designing and managing projects, including architecture, master planning, and multiple transportation modes. As chief facilities designer for several transit systems, he has worked with many international corporations in the US, Asia, and the Middle East. He has been involved in creating and integrating transit systems that have played vital roles in the development of communities in local and regional environments.

Ethan Marsh
Associate
Project Role: Architectural Design

Ethan is a Project Manager and Architectural Designer at KGP with more than a decade of experience in the field. As supervising manager of the technical/production team, he manages the daily activities of the project's production team, including delivery schedule, construction detailing, and coordination with engineers and other specialty contractors. His training and expertise includes a broad range of BIM, 3D modeling, environmental analysis/ simulation, and visualization software packages. This skillset, combined with more than 10 years' experience in architecture, has allowed Ethan to develop a streamlined workflow and design process where quantitative analysis, design alternatives, and document production are forged into a single, unified design product.

Brandon Blount
Project Role: Designer/CAD

Brandon is a CAD Manager and Architectural Designer at KGP with a decade of experience in the field. He oversees the daily activities of the project production teams, including: delivery schedule; construction detailing, and coordination with engineers and other specialty contractors. His expertise includes a broad range of BIM, 3D Modeling, and visualization software packages.

These skills enable Brandon to streamline workflow for the design process and produce a single unified design package for KGP's clients.

Manuel E. Feijoo, AIA, LEED AP

Project Role: Project Architect

Manuel, a Registered Architect in New York, Virginia, DC, and Perú and a LEED AP, brings more than 30 years of experience in the USA and Latin America. He possesses strong management and people skills, as well as extensive knowledge of conceptual design through construction administration on commercial, mixed-use, hospitality, residential, and institutional projects.

AECOM

Jim Gast, AIA

Program Manager

Project Role: Station Design Manager

Jim is an Associate Vice President, Senior Transit Architect, and Program Manager of AECOM's A/E General Planning Services contract with WMATA. Jim is an Arlington County resident with more than 34 years of experience in planning, design, and implementation of multimodal transportation facilities, station-area urban design, and joint development. His broad project experience includes passenger and maintenance facilities for commuter rail, heavy rail, light rail transit, and bus rapid transit. He has practiced in all phases of planning and project implementation, and in facility design from schematic design through construction administration. He has worked in both traditional design-bid-build, and design-build project-delivery environments. Jim's experience over the past 3 years has included managing Preliminary Engineering for the Dulles Corridor Metrorail Project Airport Segment.

Mike Hance, RA

Deputy Project Manager

Project Role: Deputy Station Design Manager

Mike is a Transit Architect and Project Manager with a career exclusively focused in the field of transportation. His experience includes planning, design, and implementation of multiple project types including transit passenger stations, rail maintenance yards, and multimodal transportation facilities. He has practiced in all phases of project implementation from early conceptualization through construction administration and has experience working for both owners and contractors in the traditional design-bid-build, and design-build project-delivery environments. His comparable experience includes Project Manager and Architect for the new mezzanine feasibility study at Washington Union Station.

Elliot Mandel, PE

Station Structure

Project Role: Underground Structures

Elliot has extensive experience leading structural projects in the Arlington area including design of new structures, modification to and evaluations of existing structures, and projects in congested urban settings. His problem-solving capabilities have benefited a diverse range of projects, from technically-complex to environmentally-sensitive, and from initial concept development through final design and construction. Elliott is a 27-year resident of Arlington County and was a member of the Neighborhood Conservation Advisory Committee (NCAC) for 10 years. His similar work includes serving as Task Manger for conceptual studies and constructability analyses for the L'Enfant Metrorail Station, New Underground Entrance Study, and Project Manager for the feasibility of a dedicated pedestrian tunnel beneath the Northeast Corridor track at NOMA Metrorail Station Pedestrian Tunnel Feasibility Study.

Mark Zimpleman, PE

Project Role: Entrance Structures

Mark leads the Washington, DC, are structural design practice. He has extensive experience in planning, organizing, and directing structural design and evaluation activities on commercial, institutional, and government building projects. Mark has been a key member on interdisciplinary project teams and has closely managed the preparation of construction documents and condition assessment reports. His public sector experience includes multiple task order projects for the Architect of the Capitol, structural design for the U.S. Army Corps of Engineers, and design for the U.S. National Transportation Safety Board.

Howard Cohen, AIA

Project Role: Station Egress

Howard is a specialist in the application of fire life safety and accessibility codes and standards to rail transportation projects, and he has a broad range of architectural experience working on rail transportation, commercial/industrial, projects including his role as fire life safety and ADA accessibility specialist for the WMATA Feasibility Assessments for Improvements to Existing Metrorail Stations and technical lead for the Study of the Application of Codes and Standards for the Design of Metrorail Stations.

Sean Yaghobi

Project Role: Vertical Transportation

Sean is a Senior Project Engineer with more than 16 years of experience in vertical transportation. He has managed several local and international projects across various disciplines in both new and existing structures, while keeping up with the latest in technology and traffic analysis. Sean is responsible for vertical transportation design, development, and coordination in new and existing structures; traffic analysis; preparation of construction drawings, budget, and specifications; project bidding; construction period services; elevator inspections and witness testing; and engineering of hydraulic and traction elevator systems and components. His most recent experience includes the vertical transportation engineering for the elevator/escalator program for New York City MTA and construction services support for the 35 escalators and 16 elevators included in Phase I of the new Second Avenue Subway in New York City.

Paul Sabatiuk, LEED AP

Project Role: Mechanical Engineering

With 35 years of experience in AECOM's Arlington office, Paul has been responsible for all aspects of mechanical design, analysis, specification, and cost estimating. Projects included HVAC, refrigeration, plumbing, fire protection, building systems evaluation, life cycle cost analysis, transit system design, solar energy system design, and other mechanical specialties. He has written several papers on solar energy system design and analysis, and energy-conserving building systems, components, and materials. Recent comparable experience includes Lead Engineer for the McPherson Metrorail Station Design and Engineering Feasibility Assessment and the General Services Administration/ U.S. Department of Transportation Headquarters in Washington, DC.

Yoseph Solomon, PE

Project Role: Electrical Engineering

Yoseph is an engineer with 13 years of experience in electrical engineering, controls, and automation. He has worked for construction and engineering firms as a controls and automation engineer in commercial, government, and industrial facilities; and as an electrical engineer with a mechanical, electrical, and plumbing firm specializing in renovation of commercial and government facilities. Yoseph has been in a variety of positions including engineering and design, commissioning, and project management. He was Electrical Engineer for the Engineering analysis and feasibility study for the WMATA Metrorail Station at Washington's Union Station, and has provided electrical engineering services for various office renovation projects for government projects throughout Washington, DC.

Mark Thayer

Project Role: Plumbing Engineering

Mark is a senior plumbing systems designer for secure government buildings, museums, educational facilities, libraries, dining facilities, and other projects under traditional and design-build procurements. His design responsibilities include domestic and non-potable water; pool water; sanitary and storm drainage; acid and decontamination waste; inert, cryogenic and fuel gases; compressed air, vacuum, and medical gas systems. He is an industry leader in engineered alternative vacuum waste plumbing systems and developed the design concept and engineering for vacuum waste plumbing for one of the first LEED certified jails in the US. Mark brings extensive experience with the evaluation of building energy performance and implementing enhancements such as solar-powered water heater systems. He was plumbing designer for Phases I, II, and II of the Eisenhower Executive Office Building Modernization in Washington, DC, and Plumbing and Fire Protection Designer responsible for multiple tasks under the IDIQ contract to restore the historic National Museum of Natural History for the Smithsonian Institution.

Sameer Shukla

Project Role: Site/Civil Design

Sameer has more than 24 years of experience in the design and project/program management of diversified and multidisciplined design-build and design-bid-build projects, with an emphasis on major, as well as minor, highway/roadway projects, major arterials, complex interchanges and intersections, civil site and facilities, feasibility, preliminary, and detail design and plan production. He has thorough knowledge of industry practices, regulations, current technologies and design procedures and standards of AASHTO; FHWA regulations; DOTs of VA, MD, DC; and regional counties. He has hands-on experience on projects in the DC metro area and has been actively involved in concept/feasibility studies and preliminary and detailed design of various facilities, highways, expressways, urban roads, at-grade signalized and unsignalized intersections, grade-separated interchanges, and county roads.

Joe Huesmann

Project Role: Drainage/Stormwater

Joe has experience with applications of hydrology and hydraulics, including ditch and channel design and analysis, storm drain inlet and pipe system design and analysis, culvert design and analysis, stormwater management and best management practices design, river mechanics/floodplain analysis and bridge scour computations, and erosion and sediment control design. He is responsible for drainage design for roadway and development projects, from conceptual development through computation and final design, including drafting of plans. Joe also has experience with concrete and soil field and laboratory inspection and testing, structural steel erection, as well as soil boring operations supervision.

Seyfarth Shaw

Chuck Wall

Partner

Project Role: Legal Advisor

Chuck is a partner in the Washington, DC, office of Seyfarth Shaw LLP and a member of the firm's national Construction practice. Recognized by Best Lawyers in America as 2019 "Lawyer of the Year" in Construction Law in Richmond, Virginia, Chuck is a trusted advisor on complex public-private partnerships (P3s or PPPs), infrastructure development, and general construction law. Building on the common ground between business and government, he helps clients craft successful partnering arrangements for a wide range of infrastructure projects.

Chuck lived and practiced in Virginia for 29 years before joining Seyfarth Shaw in 2018. He has been involved in numerous PPEA and PPTA projects across the Commonwealth, including representation of a variety of developers and contractors in successfully pursuing and negotiating Interim and Comprehensive Agreements with state agencies, regional authorities, and local governments.

Chuck assists clients in all aspects of P3s and infrastructure development, from initial concept through procurement, design, construction, post-completion and long-term operation and maintenance. His work focuses on crafting project-specific risk-sharing arrangements involving the design, construction, financing, operation and maintenance of high-priority public facilities. Chuck has advised both private- and public-sector clients on numerous concession arrangements (greenfield and brownfield) and other alternative project deliveries and procurement-related matters. Through this work, he has developed a deep understanding of the substantial risks and opportunities these ventures can present developers, equity members, construction firms/JVs, lenders, designers, operation and maintenance providers, and public agencies.

In addition to P3s, Chuck advises clients on a vast array of construction and corporate matters, including design-build and other construction-related contracts, joint ventures and teaming arrangements, and issues that arise through procurement, project execution, O&M, and beyond. His comprehensive understanding of the construction industry, combined with his corporate and government relations experience, enables him to proficiently work through the details and subtleties of a project, while also helping parties keep focused on the big picture.

Past safety performance record and current capabilities

Please see Volume II, Section IV.I for safey performance records.

Past technical performance history

Relevant case studies of past technical performance history from the Project Team follow on the next page. Additional past technical performance history examples for the Project Team can be found in Appendix A.

Legal claims

Please see Volume II, Section IV.I for legal claims.

Guarantees and warranties

The Project Team will be providing appropriate guarantees and warranties for design, construction, or project completion as part of our Interim and Comprehensive Agreements with the County in full keeping with the County PPEA Guidelines.

While Seyfarth Shaw will not be providing warrantees and guarantees specifically, they will assist the Project Team in the development of appropriate guarantees and warranties for design, construction, or project completion as part of our Interim and Comprehensive Agreements with the County in full keeping with the County PPEA Guidelines.

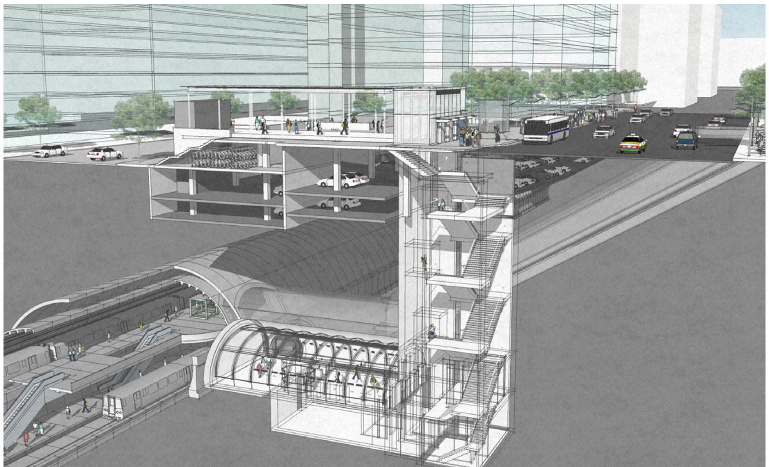
Resumes

Please see Volume I, Appendix B for resumes.

c. For each firm or major subcontractor ($1 million or more) that will be utilized in the project, provide a statement listing all of the firm's prior projects and clients for the past three (3) years with contact information for such clients (names/ addresses/ telephone numbers/email). If a firm has worked on more than ten (10) projects during this period, it may limit prior project list to 10, but shall first include all projects similar in scope and size to the proposed project, and second, it shall include as many of its most recent projects as possible. Each firm or major subcontractor shall be required to submit all performance evaluation reports or other documents in its possession evaluating the firm's performance during the preceding three (3) years in terms of cost, quality, schedule, safety and other matters relevant to the successful project development, operation, and completion.

Rosslyn Station Access Improvements

Arlington, VA



Project Owner

Washington Metropolitan Area Transit Authority

Completed: 2015

Collaboration Amongst Crystal City East Entrance Team

Proposed Crystal City East Entrance Team members JBG SMITH, KGP, and Clark all collaborated together on this project, working with Arlington County and WMATA, the two major parties involved in our proposed East Entrance project.

Relevance to Crystal City East Entrance project

The Rosslyn Station Access Improvements project is of comparable size and complexity to the East Entrance, requires coordination with WMATA and Arlington County, and centers around a Metrorail station entrance in a dense, urban environment.

"Arlington County is proud of the performance of the teams and the completed project. Clark's performance on the contract is noteworthy and deeply appreciated."

—Bee Buergler, Arlington County Transit Capital Program Manager

Rosslyn Station is at the center of new development, which features the tallest buildings in the DC area. The new all-elevator station entrance is the focus of Rosslyn's Central Place plaza, a new mixed-use development with residential and office towers, ground-floor restaurants, and active storefronts surrounding this new public space.

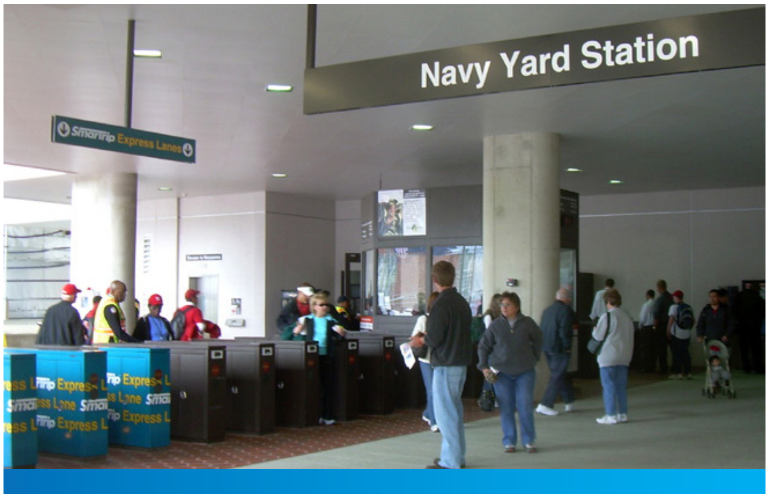
KGP developed the design for the station, consisting of three high-speed elevators extending from the plaza to the new mezzanine approximately 110 feet below grade. The mezzanine space is carved out of rock, creating a natural vault lined with precast concrete. Acoustic panels are recessed into concrete coffers and indirect lighting is integrated into the horizontal ribs. A new passage connects to the existing escalator passageway and is protected by large fire doors. These doors close in an emergency allowing the mezzanine to act as an area of refuge for patrons. A new emergency stair tower flanks the elevators connecting to the street level through an emergency hatch. Below the mezzanine, new service rooms supply fresh air and air conditioning to the mezzanine.

At the surface, a glass enclosure surrounds the three elevators and vent shafts. Although separated by glass, the elevators and vents appear as one translucent structure, with vision glass surrounding the elevator cabs for safety. The vent on the south side of the elevators is enclosed in bluestone in a pattern matching other features in the plaza. The entire enclosure is up-lit with LED fixtures embedded in the base surrounding the structure. A glass canopy protects patrons from the weather while waiting.

The contract included special provisions due to the unique relationship structure that included Clark, Arlington County (Owner), WMATA (End User), Federal Transit Administration (Partial Funding), and JBG SMITH (Adjacent Property Owner). Clark was able to draw on past WMATA experience and self-performed major scopes of work, including support of excavation, cast-in-place concrete, precast erection, demolition, temporary shoring, and backfill. In addition, Atkinson Construction, a subsidiary of Clark, performed all of the tunnel work, including the drill and blast operations and installation of rock bolts and shotcrete.

Navy Yard Station Upgrades

Washington, DC



Project Owner

Washington Metropolitan Area Transit Authority

Completed: 2008

Collaboration Amongst Crystal City East Entrance Team

Clark was involved on a design-build team working side by side with WMATA and a developer, a similar experience to the Crystal City East Entrance project. In addition, KGP provided bridging documents for the project.

Relevance to Crystal City East Entrance project

The Navy Yard Station Upgrades project is of comparable size and complexity to the proposed Crystal City East Entrance project. The Navy Yard Station project, also a metrostation entrance project, required a multi-party agreement, including WMATA, similar to the Second Entrance project.

The Navy Yard Station Upgrades was a design-build GMP project for WMATA. This design-build entrance expansion was constructed on a fast track schedule to accommodate the Washington Nationals baseball stadium's grand opening. The original capacity of this entrance was 5,000 persons per hour. The modifications increased the entrance capacity to 15,000 persons per hour.

The entrance modifications were integrated into the concurrent construction of the 280,000 SF, nine-story 55 M Street commercial office building, which included three levels of underground parking. The station's west entrance was built into the lobby of 55 M Street on the street level. Both 55 M Street and the Navy Yard Metrorail Station project included various unique and challenging structural aspects that were all completed within a very aggressive schedule in order to be ready for opening day of the Washington Nationals season.

The project delivery and contractual relationships of the project were unique. There were three parties: Clark, WMATA, and MR Ballpark 5, a local developer, as well as three simultaneous projects being constructed in the same city block.

Central Place

Arlington, VA

Central Place is a 1 million SF, mixed-use development located on top of the Rosslyn Metrorail Station in one of the area's most dense urban submarkets. Central Place's two towers are the tallest inside the Beltway and will be the home to 377 new households, over 3,400 new employees, and over 45,000 SF of inspiring dining and retail options within its outdoor public plaza.

CEB Tower at Central Place will be the global headquarters for The Corporate Executive Board and features a 12,400 SF public observation deck that will attract more than 600,000 tourists per year with unobstructed views of DC's monuments from its outdoor cantilevered terrace, the highest public point in the Washington, DC, area. Central Place also features a 16,000 SF fully landscaped urban plaza that will play host to outdoor dining, retail, and over 15,000 weekday Metro riders.

Project Owner

JBG SMITH

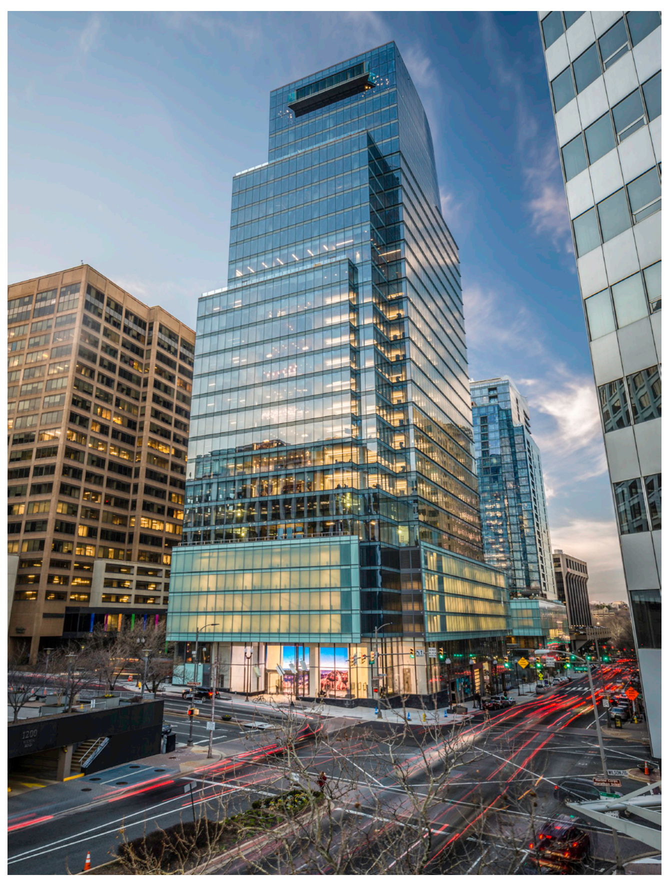
Completed: 2018

Collaboration Amongst Crystal City East Entrance Team

Team member Clark provided preconstruction and construction services for the Central Place Office Building, adjacent to the Central Place Residential Tower, also constructed by Clark. The team first demolished an existing nine-story office building to make way for the 31-story structure with two levels of below-grade parking. The project was designed and built to achieve LEED Gold certification. The 750,000 SF, cast-in-place concrete building, features a unitized curtain wall with unique curved elements. The main lobby is finished with stone flooring and walls, as well as a translucent stretched fabric ceiling.

Relevance to Crystal City East Entrance project

The Central Place project is of comparable size and complexity to the proposed Crystal City East Entrance project, also located in Arlington County in a dense and urban environment. The Central Place project engaged a lot of the same stakeholders as the East Entrance project will, and Central Place demonstrates a successful product as a result of JBG SMITH and Clark's working relationship.



Prior Projects and Clients Within the Past 3 Years

Project Name & Location	Project Owner, Contact Name, Address, Telephone, Email	Completion Date
JBG SMITH		
Central Place Arlington, VA	***JBG SMITH*** **Andy VanHorn** 4455 Willard Avenue, Suite 400 Chevy Chase, MD 20815 240.333.3815 | avanhorn@jbg.com	Completed 2018
500 L'Enfant Plaza Washington, DC	***JBG SMITH*** **Andy VanHorn** 4455 Willard Avenue, Suite 400 Chevy Chase, MD 20815 240.333.3815 | avanhorn@jbg.com	Completed 2018
4747 Bethesda Avenue Bethesda, MD	***JBG SMITH*** **Andy VanHorn** 4455 Willard Avenue, Suite 400 Chevy Chase, MD 20815 240.333.3815 | avanhorn@jbg.com	Completed 2019
1900 N Washington, DC	***JBG SMITH*** **Andy VanHorn** 4455 Willard Avenue, Suite 400 Chevy Chase, MD 20815 240.333.3815 | avanhorn@jbg.com	Completed 2019
VHB		
Long Bridge EIS & Preliminary Design Washington, DC	***District Department of Transportation*** **Anna Chamberlin** 55 M Street SE, Suite 400 Washington, DC 20003 202.671.2218 | achamberlin@dc.gov	Ongoing
Washington Union Station Expansion Project & EIS Washington, DC	***Beyer Blinder Belle Architects & Planners LLP*** **Jill Cavanaugh, AIA, AICP** 3307 M Street NW, Suite 301 Washington, DC 20007 202.333.8000 | jcavanaugh@bbbarch.com	Ongoing
VRE Crystal City Station Planning and Design Arlington County, VA	***Virginia Railway Express*** **Sonali Soneji** 1500 King Street, Suite 202, Alexandria, VA 22314 703.838.5432 | ssoneji@vre.org	Completed 2019

Project Name & Location	Project Owner, Contact Name, Address, Telephone, Email	Completion Date
VTrans Design-Build Program Management Statewide VT	***Vermont Agency of Transportation*** **Wayne B. Symonds, PE** VTrans Highway Division 1 National Life Drive Montpelier, VT 05633-5001 802.279.8745 | Wayne.Symonds@vermont.gov	Completed 2018
WMATA Planning On-Call Contracts VHB Prime Washington, DC	***WMATA*** **Allison Davis** 600 Fifth Street, NW Washington, DC 20001 202.962.2056 | adavis5@wmata.com	Ongoing
WMATA Planning On-Call Projects with HNTB Washington, DC	***WMATA*** **Shyam Kannan** 600 5th Street NW Washington, DC 20001 202.962.2730 | Skannan@wmata.com	Ongoing
CC2DCA Feasibility Study Arlington County, VA	***Crystal City BID*** **Rob Mandle** 2001 Jefferson Davis Highway Suite 505 Arlington, VA 22202 703.412.9435 | rmandle@crystalcity.org	Completed 2018
MBTA South Coast Rail Program Management New Bedford to Fall River, MA	***Massachusetts Department of Transportation/ Massachusetts Bay Transportation Authority*** **James Jackson** Ten Park Plaza, 5th Floor, Boston, MA 02116 617.222.5937 | jjackson@mbta.com	Ongoing
Pawtucket Rail Station Pawtucket, RI	***Rhode Island Department of Transportation*** **Stephen A. Devine** Two Capitol Hill, Room 372, Providence, RI 02903-1111 401.222.4203 x4063 | stephen.devine@dot.ri.gov	Ongoing
SunRail Commuter Rail Transit Project Design Central Florida	***Florida Department of Transportation*** **Karen Snyder** 719 South Woodland Boulevard, DeLand, FL 32720 386.943.5434 | karen.snyder@dot.state.fl.us	Ongoing

Project Name & Location	Project Owner, Contact Name, Address, Telephone, Email	Completion Date
KGP		
Farragut West/ Foggy Bottom Station Improvements and New Entrance Washington, DC	***WMATA*** **Robin McElhenny-Smith** 600 5th Street NW Washington, DC 20001 202.962.1114 | rmcelhennysmith@wmata.com	Ongoing
White Flint North Entrance North Bethesda, MD	***WMATA*** **Robin McElhenny-Smith** 600 5th Street NW Washington, DC 20001 202.962.1114 | rmcelhennysmith@wmata.com	Ongoing
Archives Station New Entrance Washington, DC	***WMATA*** **Robin McElhenny-Smith** 600 5th Street NW Washington, DC 20001 202.962.1114 | rmcelhennysmith@wmata.com	Ongoing
L'Enfant Plaza & Metro Center Station Improvements 30 & Design Washington, DC	***WMATA*** **Robin McElhenny-Smith** 600 5th Street NW Washington, DC 20001 202.962.1114 | rmcelhennysmith@wmata.com	Ongoing
Farragut North-West Pedestrian Passageway Washington, DC	***WMATA*** **Robin McElhenny-Smith** 600 5th Street NW Washington, DC 20001 202.962.1114 | rmcelhennysmith@wmata.com	Ongoing
McPherson Station Improvements Washington, DC	***WMATA*** **Robin McElhenny-Smith** 600 Street St NW Washington, DC 20001 202.962.1114 | rmcelhennysmith@wmata.com	Ongoing
Huntington Station New Entrance Alexandria, VA	***WMATA*** **John Thomas** 600 5th Street NW Washington, DC 20001 202.962.2493 | jthomas@wmata.com	Ongoing
Gallery Place New Entrance and Pedestrian Tunnel Washington, DC	***WMATA*** **John Thomas** 600 5th Street NW Washington, DC 20001 202.962.2493 | jthomas@wmata.com	Ongoing

Project Name & Location	Project Owner, Contact Name, Address, Telephone, Email	Completion Date
Power 001, 004, 005, 008, 009 WMATA Station Lighting Washington, DC	***WMATA*** **Tiffany Lockhart** 600 5th Street NW Washington, DC 20001 202.962.1948 | tlockhart@wmata.com	Ongoing
WMATA Station Canopies— in National Parks Various Locations	***WMATA*** **Ivailo Karadimov** 600 5th Street NW Washington, DC 20001 202.962.1521 | ikaradimov@wmata.com	Ongoing
Clark		
Ballston Quarter Residential Arlington, VA	***Forest City*** **Kenny Hewitt** 4075 Wilson Boulevard, Suite 440 Arlington, VA 22203 703.312.6797 | khewitt@shooshancompany.com	Completed 2019
INOVA ICPH— Dwight and Martha Schar Cancer Center Fairfax, VA	***INOVA Health System Facilities Development*** **Mark Ehret** 3300 Gallows Road Falls Church, VA 22042 703.776.2313 | Mark.ehret@inova.org	Completed 2018
Ballston Quarter Retail Renovation Arlington, VA	***Forest City*** **Kenny Hewitt** 4075 Wilson Boulevard, Suite 440 Arlington, VA 22203 703.312.6797 | khewitt@shooshancompany.com	Completed 2018
2311 Wilson Boulevard Arlington, VA	***Carr Properties*** **James Berkon** 1615 L Street NW, Suite 650 Washington, DC 20036 202.461.3972 | jberkon@carrprop.com	Completed 2018
Central Place Office and Garage Arlington, VA	***JBG SMITH*** **Andy VanHorn** 4455 Willard Avenue, Suite 400 Chevy Chase, MD 20815 240.333.3815 | avanhorn@jbg.com	Completed 2017
1008 North Glebe Road (Marymount University Residential) Arlington, VA	***The Shooshan Company*** **Kenny Hewitt** 4075 Wilson Boulevard, Suite 440 Arlington, VA 22203 703.312.6797 | khewitt@shooshancompany.com	Completed 2017

Project Name & Location	Project Owner, Contact Name, Address, Telephone, Email	Completion Date
Marymount University Ballston Campus Office Arlington, VA	***The Shooshan Company*** **Kenny Hewitt** 4075 Wilson Boulevard, Suite 440 Arlington, VA 22203 703.312.6797 | khewitt@shooshancompany.com	Completed 2017
Central Place Residential Arlington, VA	***JBG SMITH*** **Andy VanHorn** 4455 Willard Avenue, Suite 400 Chevy Chase, MD 20815 240.333.3815 | avanhorn@jbg.com	Completed 2017
WMATA Orange/Blue Line Rehabilitation Washington, DC	***WMATA*** **John Thomas** 600 5th Street NW Washington, DC 20001 202.962.2493 | jthomas@wmata.com	Completed 2018
Arenew Enterprises Sanup Package C—NMF Alexandria, VA	***Alexandria Renew Enterprises*** **Karen Pallansch, CEO** 1800 Limerick Street Alexandria, VA 22314 703.549.3382 | karen.pallansch@alexrenew.com	Completed 2016
AECOM		
Crystal City Metrorail Second Entrance Conceptual Design and Feasibility Study Arlington, VA	***WMATA*** **Robin McElhenny-Smith** 600 5th Street NW Washington, DC 20001 202.962.1114 | rmcelhennysmith@wmata.com	Ongoing
Washington Dulles International Airport Metrorail Extension, Silver Line Phase 2 Washington, DC	***Dulles Corridor Metrorail*** **Russ Werner** 198 Van Buren Street, 3rd Floor Herndon, VA 20170 703.572.0536 | russ.werner@dullesmetro.com	Ongoing
Potomac Yard Metrorail Station Environmental Impact Statement and Design-Build Bridging Documents Alexandria, VA	***WMATA*** **John Thomas** 600 5th Street NW Washington, DC 20001 202.962.2493 | jthomas@wmata.com	Ongoing
Union Station Metrorail Station New Center Mezzanine Study Washington, DC	***WMATA*** **Robin McElhenny-Smith** 600 5th Street NW Washington, DC 20001 202.962.1114 | rmcelhennysmith@wmata.com	Completed 2017

Project Name & Location	Project Owner, Contact Name, Address, Telephone, Email	Completion Date
White Flint North Entrance Feasibility Study Rockville, MD	***WMATA*** **Robin McElhenny-Smith** 600 5th Street NW Washington, DC 20001 202.962.1114 | rmcelhennysmith@wmata.com	Ongoing
Court House Metrorail Station Second Elevator Feasibility Assessment Arlington, VA	***WMATA*** **Robin McElhenny-Smith** 600 5th Street NW Washington, DC 20001 202.962.1114 | rmcelhennysmith@wmata.com	Completed 2017

Performance Evaluations Within the Past 3 Years

In the past 3 years, the Project Team has provided services for hundreds of projects. A selection of performance evaluations can be found in Volume II, Section IV.c. Additional evaluations can be provided if requested.

d. Provide the names, addresses, email, and telephone numbers of persons within the firm or consortium of firms who may be contacted for further information.

Jay Corbalis, JBG SMITH
4445 Willard Avenue, Suite 400, Chevy Chase, MD 20815
Telephone number: 240.333.7704
Email Address: jcorbalis@jbgsmith.com

e. Provide a current or most recently audited financial statement of the firm or firms and each partner with an equity interest of twenty percent (20%) or greater. Submit the most recent Securities and Exchange Commission 10-K and 10-Q reports if applicable.

Please see Volume I, Appendix C.

f. Identify any persons known to the private entity who would be obligated to disqualify themselves from participation in any transaction arising from or in connection to the project pursuant to The Virginia State and Local Government Conflict of Interest Act, Chapter 31 (§ 2.2-3100 et seq.) of Title 2.2.

At this time, JBG SMITH does not know of any persons on the Project Team who would be obligated to disqualify themselves from participation in any transaction arising from or in connection to the Project pursuant to the Virginia State and Local Government Conflict of Interest Act, Chapter 31 (§ 2.2-3100 et seq.) of Title 2.2.

g. Identify proposed plan for obtaining sufficient numbers of qualified workers in all trades or crafts required for the project.

All members of the Project Team are committed to providing the necessary resources to meet the requirements of this project for the life of the contract. A review of current committed backlogs by all team members indicates that, given the current scheduled start, all of our key personnel will have availability to be dedicated to this project. Additionally, we are committed and will make necessary resources available should the need arise to meet unanticipated project demands.

In terms of construction, Clark's position in the local market, combined with their unmatched self-perform experience, allows them to structure the most beneficial approach to execution of the work through labor, small business strategies, and subcontracting approaches to properly distribute the work and ensure success and best value to Arlington County.

This combination of self-perform capabilities and their outstanding relationships with local subcontractors, including DBE firms, positions Arlington County for an enhanced level or responsiveness, subcontractor coverage, and accountability.

Clark has never failed to meet its commitments on any prior assignments. They are well positioned to provide the required services for Arlington County, and deliver within the required timeframe, along with cost and schedule parameters for the project. As an expert in WMATA's system, and with a bevy of experience in Arlington County in particular, they understand the financial and personnel-related commitments their company needs to make to execute the work and perform to the highest level of client service.

Clark's deep bench of available and qualified talent in all trades related to this project, coupled with the firm's depth of corporate resources, is their assurance that a skilled and qualified team of construction professionals will be available to perform the Project and be backed by the full resources of the entire Clark organization.

Clark employs more than 100 dedicated preconstruction, estimating and design management personnel whom are located in their various regional offices around the United States. Most of this staff is in the Mid-Atlantic region, particularly in the Washington, DC, metropolitan area.

Clark has over an average annual, national project volume exceeding $4.2 billion at any given time, which translates to successful management of more than 100 active construction projects throughout the United States. In turn, Clark is well poised to provide the required services for the Crystal City Metrorail Station East Entrance Project and deliver it within the required cost and schedule parameters.

Clark's position as a leader in the construction industry directly benefits their clients and their projects by allowing them to receive the most competitive prices from the most qualified subcontractors, vendors, and suppliers.

Clark brings to Arlington County the familiarity they have working in this jurisdiction and in the WMATA Metrorail System, coupled with the trade-specific knowledge they have of every critical aspect that could be involved in this contract. This comprehensive understanding will allow Clark to provide efficient construction solutions that are fully responsive to each requirement of the Project.

h. Provide information on any training programs, including but not limited to apprenticeship programs registered with the U.S. Department of Labor or a State Apprenticeship Council, in place for employees of the firm and employees of any member of a consortium of firms.

Outreach to Local Organizations

Clark has a strong local presence and long history in Arlington County, and they are active participants in several local business and community organizations. Clark will make full use of these affiliations to share information about the Project, build new networking connections, promote the availability of jobs for area residents, and attract subcontractors, vendors, and professional services suppliers. Through ongoing dialogue, special presentations, and the distribution of materials, the Project Team will enlist these organizations as active partners in communicating contracting and employment opportunities and other project information to the local community and area residents.

Clark will attend forums and outreach events held by local agencies and organizations to share information about the Project and specific opportunities and to promote interest and involvement as the Project moves towards reality.

Identify

Clark will identify qualified subcontractors, vendors, and service suppliers; "right size" opportunities for packaged scopes of work to align with subcontractor bonding or business limitations like number of available managers or skilled craft workers; and find opportunities to pair large business subcontractors with firms using teaming agreements.

Identifying Qualified Subcontractors

Clark will add to and update their existing database and compile a comprehensive listing of firms that are interested in performing work on the project. Each firm will fill out Clark's Subcontractor Qualification Application, and they will review that application through their Subcontractor Qualification Review process to ensure they are capable and qualified to bid on the project phases in which they are interested. This vetting process is an essential part of how Clark manages project risk, by ensuring only fully qualified firms are awarded work, greatly reducing the risk of a default and adverse project impacts.

Part of their identification process is collecting certification information from potential subcontracting partners. If a potential partner does not hold the necessary certification, their team will work with them to ensure they are aware of opportunities for certification with agencies recognized by Arlington County's program and to provide guidance and resources, when needed, to help them get certified under the proper program.

Scopes of Work

Clark will identify scopes of work appropriate for firms based on the data they collect and their detailed review of each project phase requirement.

Subcontractor Teaming Agreements

In conjunction with identification of qualified firms and packaging and unbundling scopes of work so they are sized appropriately for each firm, Clark will facilitate teaming agreements between Clark and subcontractors or subcontractor firms and large contractors performing similar scopes of work at scale. These partnerships allow businesses the opportunity to work on larger, complex projects, ensuring long-term growth of the subcontracting firms and providing opportunities for Clark to mentor and grow the firms.

Educate

Key to ensuring long-term success of subcontractors is the education and growth of their people. Clark will meet one-on-one with subcontractors to help them with the bid process, facilitate mentor- protégé relationships, and help them enroll in their Strategic Partnership Program, an MBA-style management training program.

One-On-One Pre-Bid Meetings

Clark will hold meetings with the qualified firms they identify to ensure they fully understand the scope of work on which they will bid and minimize risk to their firm on bid day by helping them accurately price general conditions.

Mentor-Protégé Program

In addition to project-specific teaming agreements, mentoring programs that match large successful businesses with smaller businesses have played a vital role in helping smaller firms grow and successfully compete for larger contracts on their own. As part of their work on the Project, Clark will encourage mentor-protégé relationships at all levels of the project, including between Clark and smaller firms.

Support

Technical Assistance Referral Network

Clark's strong local presence has led to beneficial relationships with surety firms, banks, and other institutions that can provide valuable services and assistance to subcontractors. Clark will make the most of these relationships through a technical assistance referral network for subcontractors working on their projects or participating in one of their other programs. Some subcontractors may need help meeting contracting requirements such as bonding, financing, or insurance. Others may require assistance with general business requirements, like working capital, accounting, or financial planning. The referral network will identify resources locally and nationally that provide assistance. It also refers contractors to the appropriate resources.

Subcontractor Success

Clark will perform the following key functions to guarantee that opportunities are available and that they stress participation throughout the procurement stages of each phase of the project:

» Teach our Project Management Team about the subcontractor plans to ensure that the team members are knowledgeable about the requirements and goals and are actively involved in program implementation.

» Establish and maintain records and data in support of the plan.

» Develop additional business outreach and local hiring events in coordination with Arlington County.

» With Arlington County's assistance, coordinate with any and all available area assist agencies to leverage business listings or databases as tools for enhancing participation of local businesses.

» Identify new and additional sources or listings of local and small business enterprises.

» Participate in and/or arrange for participation in local or minority business association trade fairs, industry meetings, and business opportunity workshops conducted by organizations such as the Capital Region Minority Supplier Development Council and the Maryland Washington Minority Companies Association.

» Connect small and local businesses with larger subcontractors to form joint ventures and mentor-protégé relationships.

» Advertise in industry and local publications.

» Structure procurement packages and solicit local, minority participation in product and service areas where these firms may be capable of performing.

» Verify that statements and clauses that may restrict qualified small subcontractors from bidding are not included in the bid documents.

» Coordinate with and cooperate in authorized surveys by Arlington County.

» Monitor compliance with the subcontracting plan and have progress meetings on goals on a continual basis.

» Review and evaluate subcontracting plans submitted by subcontractors for procedures to improve and increase opportunities for local businesses, and ensure that plans are similar to and support the objectives of this plan.

» Provide subcontractors with easy access to plans and specifications.

» Provide information regarding insurance and bonding requirements.

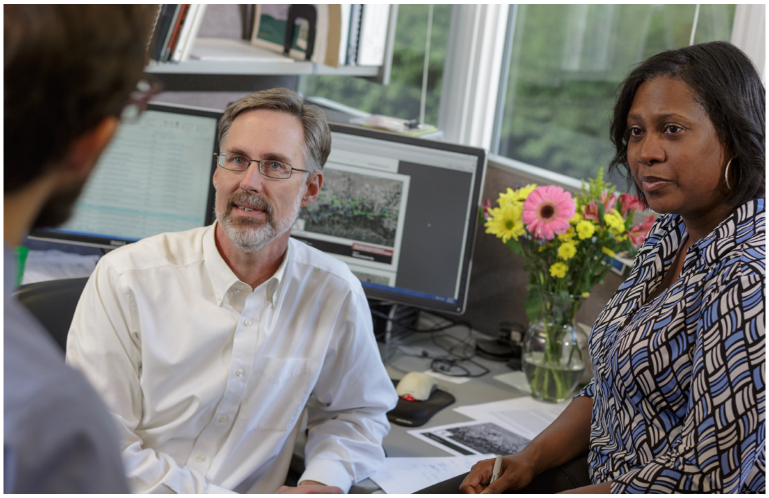
» Ensure compliance with appropriate Arlington County reporting methods.

» Monitor, facilitate, and verify that small businesses are receiving timely payments in compliance with the terms of subcontract agreements.

Clark is committed, through the processes described above, to exceed the subcontracting goals of the Crystal City Metrorail Station East Entrance Project.

i. Provide information on the level of commitment by the firm to using small, women-owned, or minority businesses in developing and implementing the project.

The lead architect on the Project Team is KGP. KGP is a DBE firm registered with the Virginia Department of Small Business and Supplier Diversity. JBG SMITH and all members of the Project Team have extensive history working with small, women-owned, and minority-owned businesses in successfully delivering projects. The Project Team expects to incorporate disadvantaged businesses into both the design and construction activities associated with the Project. More information about workforce



training, local hiring, and DBE construction subcontractor involvement are provided in Volume I, Section III.a and Volume I, Section IV.g.

Strategic Partnership Program (SPP)

In 2006, recognizing a lack of small, local, and minority business capacity in the market, Clark developed and implemented an intensive, 10-month executive education program called the Strategic Partnership Program (SPP). SPP is designed to assist MBEs in gaining the in-depth knowledge necessary to successfully manage and grow their construction businesses. Each class of 25–35 participants meets for three hours on one evening each week from September to May. The curriculum provides core construction management and business skills to participants and supplements the capabilities of small, local, and minority businesses. It has been a tremendous benefit to greater Baltimore/Washington area businesses. Since the program began in 2006, more than 300 small, local, minority, and disadvantaged business leaders have graduated from the program. Clark will work with selected MBE contractors to enroll them in the SPP throughout the course of the Crystal City Metrorail Station East Entrance project.

j. For each firm or major subcontractor that will perform construction and/or design activities, provide a sworn certification by an authorized representative of the firm attesting to the fact that the firm is not currently debarred or suspended by any federal, state or local government entity.

Please see Volume I, Appendix C for completed debarment forms.

k. Describe worker safety training programs, job-site safety programs, accident prevention programs, written safety and health plans, including incident investigation and reporting procedures.

Establishing a Safety Culture

Clark strives to not only implement an effective safety program, but more importantly, to establish a strong safety culture. By instilling a deep sense of safety awareness in each worker, they create an environment where supervision is a resource to facilitate safe practices, instead of a tool needed to enforce them. Their goal is achieving Zero/Zero—zero lost time and zero recordable incidents.

All Hands

Personal Accountability

Clark's Stop, Talk, Accept program empowers everyone on the jobsite to take responsibility for the safety of themselves and others on every Clark project and go home injury-free at the end of the day. They want everyone on site to feel comfortable speaking up about safety concerns, following the Stop, Talk, Accept steps:

STOP Unsafe Work: Workers have the authority and responsibility to stop any work they believe is being conducted in an unsafe manner. Everyone on site, from subcontractors to project management staff, must respect these concerns and take the time to respond.

TALK to Coworkers: After stopping work, employees are empowered to communicate directly with other employees about hazards he/she may be creating. This results in subcontractors talking to each other without Clark employees acting as intermediary. However, it is crucial that employees do not fear the threat of confrontation.

ACCEPT Confrontation: As part of their on-site safety training, employees learn they must accept safety corrections from coworkers without resentment. The upfront explanation reinforces the program's importance and the expectation that everyone will receive these corrections from time to time.

Clark's 100% Glove Policy for all personnel (including subcontractors) and their new 100% Chin Straps for Hard Hats policy for Clark employees are raising the bar for PPE within the industry.

All Heads

Proper Planning

Plan the work and work the plan. Clark's comprehensive training program coupled with their meeting and inspection regimen ensures they always have a plan to perform work safely, and supervisors are fully aware of safe work practices and are accountable for their crew's safety. Under the leadership of their Site Safety Manager, Clark will utilize the following tools and approaches to enforce safe practices on a daily basis:

New Worker Site-Specific Orientation

To ensure they emphasize, evaluate, and implement safety on a daily basis, Clark trains all new workers—not only Clark staff, but also subcontractors, designers, and clients—on Clark's site-specific safety procedures and standards. The Site Safety Manager will provide these face-to-face orientation sessions.

Strike Plan Reviews

To avoid accidents due to unforeseen conditions, they create strike plans to mitigate the effects of potential utility strikes. The Site Safety Manager will review the strike plans with all foremen so they know how to react in the event of a strike.

Logistics Plan Reviews

The Site Safety Manager will review area logistics plans with all foremen so all workers on site are aware of each project area's logistics procedures. This prevents accidents and injuries due to lack of knowledge of ongoing adjacent work.

Foreman Meetings

Clark's field personnel meet with all foremen on site to coordinate the work and discuss current safety concerns, as well as proposed plans to resolve the concerns. These meetings focus on education and training in proper safety policies.

Weekly Jobsite Safety Stand-Downs

Clark conducts weekly safety discussions in each workspace to discuss current safety conditions and safety trends and to obtain feedback from each individual worker (not just the foremen).

Project Team Site Walks And Safety Inspections

The entire project team walks the jobsite weekly to evaluate the site for safety best practices. Each team member fills out a safety audit report, which the Site Safety Manager discusses with foremen. This generates individual accountability for the project team's safety.

Safety Observation Reports

Workers are provided with cards and are encouraged to fill one out each time they see an area of concern. The Site Safety Manager will collect these cards, discuss them in foreman's meetings as a preventative program, and use them to identify safety trends and assign resources to areas of concern.

Utility Outage Reviews

The Site Safety Manager will meet with foremen on a weekly basis to review upcoming outages and associated logistics, including work hours, shutdowns, and mitigating their effect on ongoing operations.

Safety Certification Classroom Training

Clark holds periodic classroom training sessions to ensure the project foremen and leadership are up to date on all safety certifications (for example, first aid, CPR, flagging, OSHA 10-Hour).

Third Party Crane Inspections And Lift Plans

As annual crane inspections do not address all hazards associated with crane usage, Clark requires a mandatory third-party inspection of each crane brought on site. This includes an inspection of the crane as soon as it arrives, as well as during crane setup.

Crisis Management Planning

Working with Arlington County staff, JBG SMITH, designers, and subcontractors, Clark will develop a detailed crisis management plan that includes various scenarios ranging from full site evacuation to locking down the site and staying in place, depending on the type of crisis. Clark will work with the project team to create and practice this plan on a frequent basis.

Post Event Analysis

Clark investigates all injuries, incidents that result in a Clark employee or subcontractor employee seeking medical treatment, or incidents involving the public or property damage. Clark also investigates all near miss or close call incidents that could have had serious outcomes. The objective is to raise the importance of the accident, learn from it, and determine how to prevent a similar incident from occurring in the future.

All Hearts

Safety Is Personal

Safety is a core value. Everyone working on Clark jobsites is part of the Clark family. They care about each and every craftworker, architect, engineer, client, and tradesperson on their projects and work to ensure every individual returns home to their family at the end of each workday.

I. A completed qualification statement in a form acceptable to the County that reviews all relevant information regarding technical qualifications and capabilities, firm resources and business integrity of the firm or major subcontractors, including but not limited to, bonding capacities, insurance coverage and firm equipment. This statement shall also include a mandatory disclosure by the firm for the past three (3) years, except as indicated, any of the following conduct:

1. *bankruptcy filings*
2. *liquidated damages*
3. *fines, assessments, or penalties*
4. *judgments or awards in contract disputes*
5. *contract defaults, contract terminations*
6. *license revocations, suspensions, other disciplinary actions*
7. *prior debarments or suspensions by a governmental entity*
8. *denials of prequalification, findings of non-responsibility*
9. *maximum five years safety performance data*
10. *"Experience Modification Rating" and issuing insurance company*
11. *"Recordable Incidence Rates" "Lost Time Incidence Rates"*
12. *OSHA 200 Summary and OSHA 300A Forms*
13. *OSHA violations, dates, and disposition*
14. *violations of any federal, state or local criminal or civil law by the firm or its principals*
15. *criminal indictments or investigations of the firm or its principals*
16. *legal claims filed by or against firm*

Please see Volume II, Section IV.I for response.

V. Project Financing

V
PROJECT FINANCING

a. Provide a preliminary estimate and estimating methodology of the cost of the work by phase, segment, or both.

As noted earlier in Volume I, Section II, the current Project design is understood to be only at a conceptual level stage of completion, and this proposal provides a path for delivering the project in two segments, an Interim Agreement and a Comprehensive Agreement, consistent with the County PPEA Guidelines. Executing an Interim Agreement will allow for design work to continue in a coordinated way while the final price and preliminary design are established.

The services for the first segment of the Project will be provided under the County PPEA Guidelines for an Interim Agreement and will include completion of budget level design development (~30% design), preconstruction services, and the negotiation of a firm contract price (either lump sum or guaranteed maximum price).

The services for the second segment of the Project will be provided under the County PPEA Guidelines for a Comprehensive Agreement, to include all remaining activities for final design and construction.

Under the Interim Agreement, the Project Team will first collaborate with the County to confirm the project's basis of design and programming requirements and will then advance that design. Design and other project decisions will be based on cost, schedule, quality, operability, life cycle, and other considerations, with the design-builder providing ongoing, transparent cost estimates to allow for the owner's budgetary requirements to be achieved. At the point in time where the design has been advanced to an appropriate level of definition that aligns with County and WMATA requirements, the Project Team will provide a formal commercial proposal (including the overall contract price) for the Comprehensive Agreement services. The price will be established when the design is approximately 30% complete.

Comprehensive Agreement services will include final design and construction. For the Comprehensive Agreement, the Project Team and the County will agree upon commercial terms, including the Project's price and schedule. The Project Team is currently using a Project cost of $90,765,000 as provided in the Project's SMART SCALE application. The Project Team will then complete the design and construction of the facility in accordance with those commercial terms. The Project Team will also complete any testing, commissioning, and other services that have been agreed upon for opening the facility.

A segmented approach of delivering the Project on a design-build basis pursuant to a Comprehensive Agreement, with the use of an Interim Agreement to develop ~30% design, establishes a relationship between parties under two separate contracts, but within a coordinated process for completion of the overall Project.

Advantages of Utilizing an Interim and Comprehensive Agreement

The County will realize additional benefits from segmenting the PPEA delivery as follows:

» Under the Interim Agreement, the Project Team will receive valuable input on constructability from team member Clark. Furthering design to the 30% level is important to securing a highly competitive design-build price under the Comprehensive Agreement. Without this interim step, JBG SMITH is concerned the County may be disadvantaged by a lump-sum price established at an earlier stage. This concern centers around the risk that design-build pricing based on a less complete design may (i) include what may later be discovered as pricing elements or contingencies that ultimately result in unnecessarily higher costs to the County and/or (ii) result in an increased likelihood of legitimate change orders that drive costs beyond expectations.

» Progresses the project in a true public-private partnership.

» Provides the most effective means of advancing and protecting the County's interests.

» Streamlines and simplifies the procurement process.

» Enables the County to provide substantial input on design decisions as it collaborates with design-builder during design development.

» Lessens time and cost pressure for County and WMATA to review and act upon initial design selections and submittals, as this will be completed during the Interim Agreement, before the contract's commercial terms (including contract price and schedule) have been guaranteed by the Project Team.

» Shortens the overall project schedule due to a quicker procurement process.

» Shortens the overall project schedule, because early work packages can be employed in phasing the work because of the combined team.

» The use of a GMP offers Arlington County accountability because it sets the ultimate cost for final design and construction. The development of a GMP while the team is under an Interim Agreement will give Arlington County a transparent view of the price development process.

» From a statutory and compliance standpoint, this process—to include a distinct deliverable pursuant to an Interim Agreement, followed by complete design and construction of the project under a Comprehensive Agreement—fully comports with the terms and the spirit of the PPEA, as well as the County's PPEA Guidelines.

» By proceeding in segments to include the interim step of developing 30% design, the County will (i) retain a heightened level of control over design (as compared to moving forward on a design-build basis from the outset with less complete drawings) and (ii) enjoy maximum flexibility as the procurement moves forward. Moreover, the County can rest assured that the ultimate cost of the Project will reflect a competitive price for the facility it is procuring and nothing more.

Additional Assurance of Quality and Competitive Pricing

To provide the County with even greater assurance on both quality and competitiveness of the design-build pricing, the Project Team proposes the following:

» Upon completion of the Interim Agreement, if either the County or JBG SMITH is of the opinion that the overall design-build package (including the lump-sum or GMP price) or a central component thereof offered by a particular team member is less than satisfactory or not adequately competitive in the then-current market, JBG SMITH will invite (i) another fully-qualified contractor to bid on the design-build aspect of the project and/or (ii) another fully-qualified design firm to propose on a discreet component of the design, as appropriate, based on the 30% drawings.

» Any such additional contractor or design firm will be required to submit a statement of qualifications for review and approval by the Project Team and the County, to ensure the County is fully satisfied with the qualifications of the new team member. Submission of pricing and negotiation of the Comprehensive Agreement will then follow.

While we do not anticipate the above-described steps will be necessary (and acknowledge this path will delay project delivery), JBG SMITH stands ready to proceed in this fashion as a means of providing the County with additional security with respect to the quality and competitiveness of all components of the design and construction of the project.

In all instances, the County will remain (i) in complete control of the procurement as contemplated by the County PPEA Guidelines and (ii) fully empowered to exercise all of its rights in accordance with the terms of the Interim Agreement and the Comprehensive Agreement as negotiated by the parties.

Additional cost-related information can be found in Volume II, Section V.a.

b. Submit a plan for the development, financing and operation of the project showing the anticipated schedule on which funds will be required. Describe the anticipated costs of and proposed sources and uses for such funds, including any anticipated debt service costs. The operational plan should include appropriate staffing levels and associated costs. Include any supporting due diligence studies, analyses, or reports.

JBG SMITH proposes to develop the project on behalf of the County and deliver to WMATA through an integrated project team that can meet all the necessary requirements of the delivery process. To finance the project, JBG SMITH expects to make use of public resources made available for the Project. JBG SMITH does not propose using private finance to implement this Project. Instead, JBG SMITH will act as a Project Manager for the County, submitting monthly invoices to the County as work is completed. These invoices are subject to shift based on changes in the Project schedule in coordination with Arlington County. As the Comprehensive Agreement costs of this Project are not known at this time, the invoice schedule cannot be provided.

JBG SMITH does not intend to operate the completed Project. However, as the Project will be located on JBG SMITH property, JBG SMITH will consider strategies independently, or in coordination with the Crystal City Business Improvement District, to provide some degree of basic cleaning and maintenance services, which will be further defined in the Comprehensive Agreement.

c. Include a list and discussion of assumptions underlying all major elements of the plan. Assumptions should include all fees associated with financing given the recommended financing approach. In addition, complete disclosure of interest rate assumptions should be included. Any ongoing operational fees, if applicable, should also be disclosed as well as any assumptions with regard to increases in such fees.

Please see Volume II, V.a. for response.

d. Identify all anticipated risk factors and methods for dealing with these factors. Describe the methods and remedies associated with any financial default.

This section discusses potential risks that have been identified at this stage of project development, and potential mitigation measures for each. Advancement of design and engineering of the second entrance will further inform and refine risk identification and mitigation.

Organizational and Interface Risks

JBG SMITH-WMATA Interfaces

Lack of defined interfaces and allocation of responsibility between JBG SMITH and WMATA could adversely affect Project scope, schedule, and budget. Risks apply to both construction-period and end-state conditions. Potential mitigation measures include:

- Interface agreement between WMATA and the County. The agreement would address scope allocation; roles and responsibilities and decision-making during design, construction, and commissioning of the Project; design and construction oversight; construction-period access and operations; and latent defects, unforeseen conditions, and other key aspects of implementation.

» Define the permanent easement for the new station entrance relative to the overbuild, as well as operation and maintenance of the facility.

» Define structural requirements for the retail overbuild in parallel with the 30% design phase and to a level of detail sufficient to configure the below-grade structure to be compatible with the private development above.

Other Agreements and Permits

In addition to the interface agreement between WMATA and the County, agreements and permits may have direct effects on the project's scope, schedule, and budget. In particular, funding agreements with state agencies require appropriate environmental reviews in compliance with state law and regular coordination with those agencies, both of which the Project Team will complete in coordination with Arlington County.

Engineering & Construction Risks

Support of Excavation (SOE)

One of the most significant risks associated with SOE is the waterproofing of the existing tunnel. It is assumed construction of the Project will require SOE. Potential mitigation measures could include design refinements to minimize the risk of water infiltration.

Other potential risks include unforeseen geotechnical and subsurface infrastructure conditions that could impact schedule and cost. Potential mitigation measures include assuring sufficient geotechnical investigation is completed during conceptual design and including appropriate allowances in the design-build contract.

Metrorail Service

It is proposed that most construction of the new station mezzanine will take place during non-revenue hours with some weekend shutdowns. This results in potential project risks related to Metrorail service such as: changes to operational requirements that further restrict working hours or track access after contract award due to unforeseen service plan changes, availability of WMATA forces (e.g., flaggers), special events, incidents, emergency maintenance, or operational restrictions to accommodate supplemental transit service. Potential mitigation measures include:

» Development of a Maintenance of Operations Plan (MOP). This plan will be commenced during the 30% design phase and address elements such as advanced coordination of track shutdowns and station closures;

» Selection of structural systems (e.g., structural steel framing with metal deck in lieu of poured-in-place concrete) to minimize foul track time;

» Development of the MOP should begin during preliminary engineering and be completed during final design, before construction begins.

Mechanical & Electrical (ME) System Modifications

Modifications to existing ME rooms, and addition of new equipment such as elevators and an air chiller, pose schedule risks. To mitigate these risks, ME systems phasing should protect critical functions of the Metrorail systems (environmental controls, communications, Fire Life Safety), and integrate existing and permanent ME systems. This project will also entail executing cutover plans prior to initiating mezzanine work adjacent to the station platform and train operations.

Funding and Cost Risks

As the Project Team understands it, the conceptual design of the Project remains well below the 30% design level. As a result, costs related to the full implementation of the Project cannot be reliably determined. The Project Team will take a number of important steps, in coordination with the County, to address these cost risks and provide price surety as design progresses. First, the integrated project approach promises to provide project efficiencies by providing the opportunity for a combined team implementing preliminary engineering, final design, and ultimately construction. Second, the Project Team anticipates developing a clearly defined process with the County to manage coordination with WMATA and make sure that requirements can be met in innovative and context-specific ways to facilitate the cost-effective implementation of this Project.

As noted in Volume I, Section V.e. below, and due to the early stage of design, it is not certain that sufficient funds for the full cost of the Project have been appropriated. To avoid any such issue that might unnecessarily disrupt the project, JBG SMITH will coordinate with the County about appropriate timing to reach different Project milestones based on funding availability. Construction will not be commenced until all dollars for construction have been secured. More broadly, the environment around the HQ2 location mitigates against this risk. There is broad alignment at various levels of government to deliver this Project as part of the public improvements envisioned for the National Landing area.

e. Identify any local, state or federal resources that the private entity contemplates requesting for the project. Describe the total commitment, if any, expected from governmental sources (and identify each such source) and the timing of any anticipated commitment. Such disclosure should include any direct or indirect guarantees or pledges of the County's credit or revenue.

JBG SMITH anticipates a need for County staff to be assigned for the design and construction periods to assist in administering and facilitating the project, in keeping with the County PPEA Guidelines, along with any additional state and local resources the County may request support from. Once the Project is constructed, JBG SMITH anticipates the new entrance will be owned and operated by WMATA with some shared responsibilities for maintenance with JBG SMITH at the street level, which will be identified in the Comprehensive Agreement. It is not anticipated that any long-term local, county, or state resources beyond WMATA will be requested for the project.

JBG SMITH expects that public funds will cover the entire engineering and construction associated with the Project. Based on the County's SMART SCALE application, the following funding sources are assumed to be included and will be available upon selection of the Project Team for the Project:

» **SMART SCALE:** $52.9 million

» **Virginia Department of Rail and Public Transportation (DRPT):** $26.56 million in capital reimbursement grants

» **Northern Virginia Transportation Authority (NVTA):** $5 million

» **Local Tax Increment Financing:** $4.508 million

» **Local Transportation Capital Fund:** $1.552 million

» **Committed, but to be identified, local funding sources:** $0.228 million

The state resources from SMART SCALE, DRPT, and the regional resources from NVTA have been committed to the project. The local resources have been included in Arlington County's FY19-FY28 capital budget. Should the project exceed the $90 million identified here, JBG SMITH expects that a combination of state, County, and local TIF resources will be employed to fill remaining gaps following the completion of preliminary design and pricing when a GMP is identified. JBG SMITH does not expect to pursue federal funds and does not recommend such an approach due to additional regulatory requirements and uncertain funding availability. Other than the budget commitments already made or needed to meet any additional costs, JBG SMITH does not expect direct or indirect guarantees or pledges of the County's credit or revenue.

Additionally, no direct revenues are expected to be provided to the County, though indirect tax revenues may be generated due to the development effects of the Project.

f. Identify the amounts and the terms and conditions for any revenue sources.

N/A. No financing required.

g. Identify any aspect of the project that could disqualify the project from obtaining tax-exempt financing.

N/A. No financing required.

h. Identify any third parties that the private entity contemplates will provide financing for the project and describe the nature and timing of each such commitment.

N/A. No financing required.

VI. References

VI REFERENCES

Provide the address, telephone number, and the name of a specific contact person for an entity, or entities, for which the firm or consortium of firms, or primary members of the consortium, have completed a similar project or projects. These references should include:

- Name and address of project owner/sponsor
- Name, telephone number, fax number, and email address of the owner's project manager
- A summary of the project including budget and final cost
- Project schedule (proposed and actual)

JBG SMITH References

500 L'Enfant Plaza

Washington, DC

Project Owner

JBG SMITH
4455 Willard Avenue, Suite 400, Chevy Chase, MD 20815

Owner's Project Manager

Andy VanHorn, JBG SMITH
Phone: 240.333.3815 | Fax: N/A
Email: avanhorn@jbg.com

Contractor Reference

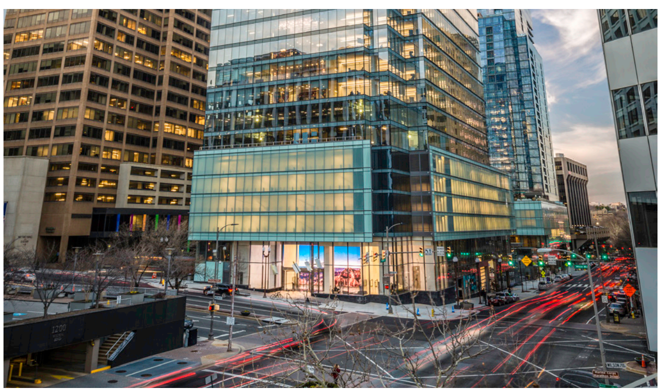
Chris Hoyson, Whiting-Turner
Phone: 240.297.3169 | Fax: N/A
Email: chris.hoyson@whiting-turner.com

Summary

500 L'Enfant Plaza is a brand new office building of remarkable character, a confident blend of dramatic beauty, unbeatable access, and intelligent efficiency. It is a sparkling addition to the dynamic L'Enfant Plaza mixed-use development. This 215,000-square-foot trophy building offers 12 stories of floor-to-ceiling glass. 500 L'Enfant Plaza rises over the Southwest Waterfront, its open, light-infused spaces offering sweeping, unobstructed views of the Potomac River and Northern Virginia skyline. Among its premium amenities are a beautifully landscaped rooftop terrace with 360-degree panoramic views, direct access to Metrorail and major highways, ample underground parking, a tenant fitness center, and state-of-the-art building systems.

Project Budget, Final Cost: N/A; $46,000,000

Proposed Schedule, Actual Schedule:
N/A; Completed 2018



Central Place
Arlington, VA

Project Owner

JBG SMITH
4455 Willard Avenue, Suite 400, Chevy Chase, MD 20815

Owner's Project Manager

Andy VanHorn, JBG SMITH
Phone: 240.333.3815 | Fax: N/A
Email: avanhorn@jbg.com

Contractor Reference

Lee Delong, Clark
Phone: 301.272.8262 | Fax: N/A
Email: lee.delong@clarkconstruction.com

Summary

CEB Tower at Central Place elevates the significance of the Rosslyn Skyline, soaring 31 stories as the tallest tower in the DC area. Designed by award-winning firm Beyer Blinder Belle, the 560,000-square-foot jewel box office tower will feature a two-story lobby outfitted with Calacatta marble, trophy-grade stainless steel satin accents, and a floor-to-ceiling video wall displaying custom digital art. The building will also be home to the highest public point in the Washington, DC, area—an observation deck with panoramic views of the DC, Maryland, and Virginia skylines that are projected to lure more than 600,000 annual visitors to the front steps of Central Place.

Project Budget, Final Cost: N/A; $141,000,000

Proposed Schedule, Actual Schedule:
N/A; Completed 2018

VHB References

Long Bridge EIS & Preliminary Design
Washington, DC

Project Owner

District Department of Transportation
55 M Street SE, Suite 400, Washington, DC 20003

Owner's Project Manager

Anna Chamberlin
Phone: 202.671.2218 | Fax: 202.671.0650
Email: anna.chamberlin@dc.gov

Summary

Current and future rail demand during peak periods exceeds the current capacity for the existing two-track Long Bridge corridor, which serves CSX Transportation, Amtrak, and the Virginia Railway Express (VRE). The District Department of Transportation is leading a partnership with the Virginia Department of Rail and Public Transportation and the Federal Railroad Administration to double capacity to a four-track width along the CSX-owned corridor. The project includes new rail bridges over the George Washington Memorial Parkway, Potomac River, WMATA Yellow Line Portal, I-395, Ohio Drive SW, Washington Channel, and Maine Avenue SW. The project also includes three new pedetrian-bike bridges over the George Washington Memorial Parkway connecting to Long Bridge Park, over the Potomac River, and another over Maine Avenue SW. Project limits extend from Long Bridge Park in Arlington to VRE's L'Enfant Station in Washington, DC.

VHB is leading the consultant team preparing an Environmental Impact Statement (EIS), as well as the completion of Conceptual and Preliminary Design of the $1.8B 2-mile corridor improvements. **Mark Colgan**, who is proposed as the East Entrance Project Management Team lead, has served as the VHB Project Manager for the Long Bridge Project and is well versed in the navigation of multiple consultants, contractors, agencies, interests, and stakeholders in navigating local, state, and federal processes. **Kelsey Robertson**, also on the proposed East Entrance team, has been a key contributor working side-by-side with Mark in managing this large project, similar to her proposed role on the East Entrance Project. The draft EIS has been completed, and the final EIS will be developed later this year, with a critical component of the project being continuous and effective involvement of the many stakeholders and key agencies such as DDOT, FRA, DRPT, WMATA, and the National Park Service. VHB has successfully facilitated a dynamic and transparent outreach strategy that engaged the public, as well as dozens of agencies that have been involved in the project.

Project Budget, Final Cost: $4,100,000; TBD (ongoing)

Proposed Schedule, Actual Schedule:
July 2020; TBD (ongoing)

VRE Crystal City Station Planning and Design

Arlington County, VA

Project Owner

Virginia Railway Express (VRE)
1500 King Street, Suite 202, Alexandria, VA 22314

Owner's Project Manager

Sonali Soneji
Phone: 703.838.5432 | Fax: N/A
Email: ssoneji@vre.org

Summary

Since 2016, VHB has served as VRE's primary General Planning Consultant (GPC), completing dozens of planning and engineering task orders across the VRE commuter rail system. Projects under this contract have ranged from station improvement studies to scheduling and federal grant application assistance to final design services. To date, VRE has issued 17 task orders to VHB, including one for the VRE Crystal City Station.

VRE is planning to expand and relocate the existing commuter rail station in Crystal City to better serve anticipated population and employment changes. Work under this task order included an alternatives analysis, environmental analysis, and conceptual design. Several of the VHB team members proposed on the East Entrance

Project have also worked on the VRE Crystal City Station and understand many of the multimodal needs of the community and region.

Project Budget, Final Cost: $1,600,000; $1,600,000

Proposed Schedule, Actual Schedule:
26 months; 24 months

Clark References

Navy Yard Station Upgrades

Washington, DC

Project Owner

Washington Metropolitan Area Transit Authority
600 5th Street NW, Washington, DC 20001

Owner's Project Manager

John Thomas
Phone: 202.962.2493 | Fax: N/A
Email: jthomas@wmata.com

Summary

The WMATA Navy Yard Station Upgrades project was a design-build GMP project. This design-build entrance expansion was constructed on a fast track schedule to accommodate the Washington Nationals baseball stadium's grand opening. The original capacity of this entrance was 5,000 persons per hour. The modifications increased the entrance capacity to 15,000 persons per hour.

The entrance modifications were integrated into the concurrent construction of the 280,000-square-foot, nine-story 55 M Street commercial office building, which included three levels of underground parking.
The station's west entrance was built into the lobby of 55 M Street on the street level. Both 55 M Street and the Navy Yard Metrorail Station project included various unique and challenging structural aspects that were all completed within a very aggressive schedule in order to be ready for opening day of the Washington Nationals season. The project delivery and contractual relationships of the project were unique. There were three parties: Clark, WMATA, and MR Ballpark 5, a local developer, as well as three simultaneous projects being constructed in the same city block.

Project Budget, Final Cost: $17,549,200, $17,140,429

Proposed Schedule, Actual Schedule: N/A,
Completed 2008.

Rosslyn Station Access Improvements

Arlington, VA

Project Owner

Arlington County
2100 Clarendon Boulevard, Suite 511, Arlington, VA 22201

Owner's Project Manager

Bee Buergler
Phone: 703.228.0597 | Fax: N/A
Email: bbuergler@arlington.va.us

Summary

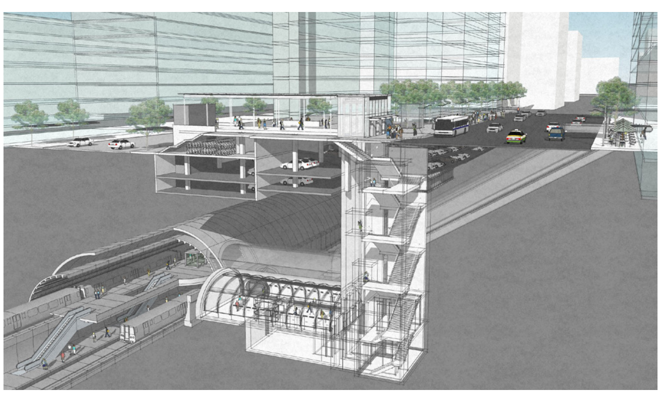
The Rosslyn Metrorail Station is one of the busiest Metrorail Stations in Virginia. The project added three high-speed elevators, an emergency access stairwell, a new mezzanine, an underground crossconnect passageway, extensive waterproofing, and mechanical and ancillary spaces to the station to increase capacity to meet future ridership needs.

The contract included special provisions due to the unique relationship structure that included Clark, Arlington County (Owner), WMATA (End User), Federal Transmit Administration (Partial Funding), and JBG SMITH (Adjacent Property Owner). Clark was able to draw on past WMATA experience and self-performed major scopes of work, including support of excavation, cast-in-place concrete, precast erection, demolition, temporary shoring, and backfill. In addition, Atkinson Construction, a subsidiary of Clark, performed all of the tunnel work, including the drill and blast operations and installation of rock bolts and shotcrete.

Project Budget, Final Cost: $32,600,000, $32,898,393

Proposed Schedule, Actual Schedule: N/A, Completed 2013.

KGP References



Rosslyn Station Access Improvements

Arlington, VA

Project Owner

Washington Metropolitan Area Transit Authority
600 5th Street NW, Washington, DC 20001

Owner's Project Manager

Tom Robinson
Phone: 202.962.2526 | Fax: N/A
Email: trobinson@wmata.com

Summary

Rosslyn Station is at the center of new development, which features the tallest buildings in the DC area. The new all-elevator station entrance is the focus of Rosslyn's Central Place plaza, a new mixed-use development with residential and office towers, ground-floor restaurants, and active storefronts surrounding this new public space.

KGP developed the design for the station, consisting of three high-speed elevators extending from the plaza to the new mezzanine, approximately 110 feet below grade. The mezzanine space is carved out of rock creating a natural vault lined with precast. Acoustic panels are recessed into concrete coffers, and indirect lighting is integrated into the horizontal ribs. A new passage connects to the existing escalator passageway and is protected by large fire doors. These doors close in an emergency allowing the mezzanine to act as an area of refuge for patrons. A new emergency stair tower flanks the elevators connecting to the street level through an emergency hatch. Below the mezzanine, new service rooms supply fresh air and air-conditioning to the mezzanine.

At the surface, a glass enclosure surrounds the three elevators and vent shafts. Although separated by glass, the elevators and vents appear as one translucent structure, with vision glass surrounding the elevator cabs for safety. The vent on the south side of the elevators is enclosed in blue stone in a pattern matching other features in the plaza. The entire enclosure is up-lit with LED fixtures embedded in the base surrounding the structure. A glass canopy protects patrons from the weather while waiting.

KGP worked closely with WMATA, Arlington County, Clark, and P2D, the engineers, to complete this project on time and within budget.

Project Budget, Final Cost: $37,000,000, N/A

Proposed Schedule, Actual Schedule: The project was delayed several months because the JBG SMITH garage was not built first, as designed. The rock excavation had to be redesigned due to all the extra soil on top of the mined station below. Completed 2015.

Washington Union Station Passenger Concourse Phase 1a and 1b Design and Construction

Washington, DC

Project Owner

National Railroad Passenger Corporation (Amtrak)
1 Massachusetts Avenue, NW, Washington, DC 20001

Owner's Project Manager

Dan Sporik
Phone: 202.906.2491 | Fax: N/A
Email: daniel.sporik@amtrak.com

Summary

Washington Union Station opened in 1907 as the largest train station in the world and remains the multimodal center of the nation's capital today. The station continues to be a heavily utilized hub, but the historic integrity and user experience of Union Station has long been jeopardized due to inattentive maintenance and the great demands exerted by the growing number of passengers. The Concourse Design represents a critical initial phase of the 2015 Washington Union Station Master Development Plan created by Amtrak and partners, providing immediate improvements for passengers and addressing existing deficiencies.

As the Prime Consultant for Phase 1, KGP leads an interdisciplinary team, including Grimshaw and Arup, and coordinates with all the stakeholders, including FRA, USRC, WMATA, Marc, VRE, and Bus and Ashkenazy, the retail lease holders. The project is comprised of a host of improvements to the Concourse that are divided into two phases: Phase 1a, which creates immediate expanded passenger space and amenities, and Phase 1b, which entails a series of longer-term improvements, including new entrances, a loading dock, yard and bus garage access, and new connections to the lower platforms.

Phase 1a will provide additional open concourse space with new access and resolution of emergency egress. This enlarged space will bring immediate passenger benefits with greatly improved waiting areas outfitted with a variety of seating types, Wi-Fi, new floors, ceilings, and lighting, as well as other amenities. Accessibility improvements include new elevators connecting all levels and new larger ADA-accessible restrooms. Accomplishing this task requires relocating critical support functions currently in the Passenger Concourse including the Amtrak Police Department (APD), station manager's offices, HVAC, and electrical equipment. These existing functions will be moved to the west rail yard or the First Street Level, which includes reorganizing baggage circulation. A central wall supporting the taxi road can then be removed to allow the entire concourse to be opened and become a space similar in size to the 1906 historic concourse. A new glass north wall is created with a continuous vestibule that can serve as a security point and allow full view out to the trains. A new Club Acela will be located on a mezzanine above the entry gates, with full glass views of both the expanded concourse and the trains. This scope of work will advance the design for the approximately 70,000 square feet of space to a 100% design level and will run parallel with the Phase 1b planning analysis.

Phase 1b includes complex relocations of program elements in the Passenger Concourse and establishing the next stage of improvements. The program issues being addressed by the KGP-led design team in this phase of the project include, development of the First Street station entrance to increase connectivity and capacity and meet critical life safety requirements; development of a new Metrorail entrance and/or mezzanine; relocation of the West Loading Dock operation and yard access; and modification of the North Hangar.

Project Budget, Final Cost: $80,000,000, N/A

Proposed Schedule, Actual Schedule: Construction is scheduled to start in 2019, to be completed 2021.

AECOM References

Washington Dulles International Airport Metrorail Extension, Silver Line Phase 2

Washington, DC

Project Owner

Metropolitan Washington Airports Authority
198 Van Buren Street, 3rd Floor, Herndon, VA 20170

Owner's Project Manager

Russ Werner
Phone: 703.572.0536 | Fax: N/A
Email: russ.werner@dullesmetro.com

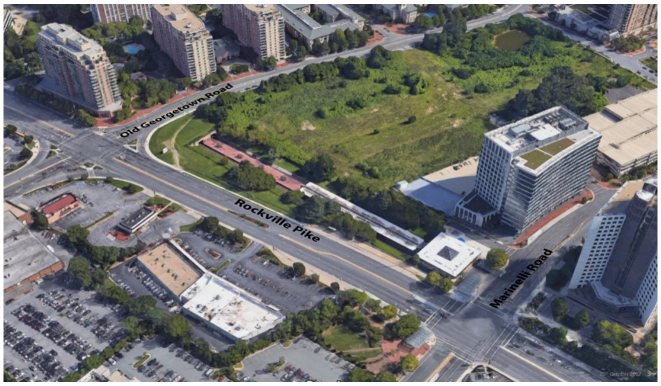
Summary

The 23-mile Dulles Corridor Metrorail Project (DCMP) is a $6.2 billion investment for improved mobility and access in the Washington, DC metropolitan region. The project is being constructed by the Metropolitan Washington Airports Authority (MWAA) and will be operated by WMATA. The DCMP is being implemented in two phases: the recently opened DCMP Phase 1, running from the current Orange Line, to the station at Wiehle Avenue, the interim terminus; and DCMP Phase 2, which begins at the Wiehle Avenue station tail tracks and extends to the terminus in eastern Loudoun County.

In a joint venture as Dulles Rail Consultants, AECOM most recently provided complete preliminary engineering and prepared the design-build procurement solicitation package for construction of the $3.8 billion, 11.4-mile Phase 2 extension of the Silver Line from Wiehle Avenue to Dulles International Airport. Major project elements included at-grade and aerial segments, five median running stations and associated auto and bus access/egress, and parking garages at the park-and-ride facilities serving Reston/Herndon, northern Loudoun County, and a station at the airport. In addition, the project includes a storage yard and rail maintenance facility, with a service and inspection building, maintenance of way building, warehouse, train wash building, heavy damage building, crew building, equipment storage areas, and approximately 25 storage tracks. The scope of work involved managing the technical design activities, and leading the planning, systems, and facilities engineering elements for the project. The joint venture prepared contract and reference drawings, program criteria, and technical specifications for soliciting a design-build contractor. The scope of services included systems, civil and structural engineering, architectural design, and preparation of all federal EIS documents.

Project Budget, Final Cost: $1,600,000, N/A

Proposed Schedule, Actual Schedule: 2018; to be completed 2020.



White Flint North Entrance Feasibility Study

Rockville, MD

Project Owner

Washington Metropolitan Area Transit Authority
600 5th Street NW, Washington, DC 20001

Owner's Project Manager

Robin McElhenny-Smith
Phone: 202.962.1114 | Fax: N/A
Email: rmcelhennysmith@wmata.com

Summary

AECOM is currently delivering the White Flint North Entry Feasibility Study for WMATA. This ongoing effort builds on WMATA's 2010 White Flint Station Access report, in addition to Federal Realty's 2017 White Flint Second Entry Phasing study, to evaluate the feasibility of constructing a new north entrance at WMATA's White Flint Metrorail station. Under the current task, AECOM is developing two new entrance alternatives, advancing the concepts through design development, and assessing the feasibility, constructability, and estimated costs to arrive at a preferred alternative.

Major design elements include a new north entrance, entrance canopy, public restrooms, station ancillary rooms, platform canopy extension, two elevators, and a 10-foot double-wide stair. The study includes a multidisciplinary evaluation including the architecture, structural, mechanical, electrical, plumbing, egress/life safety, estimating, and constructability disciplines. The task will complete with a Final Report summarizing the project's overall technical feasibility and include egress calculations, preliminary project drawings, construction schedule, and Rough Order of Magnitude cost estimates.

Project Budget, Final Cost: $22,968,000, TBD (ongoing)

Proposed Schedule, Actual Schedule: Not determined, TBD (ongoing)

VII. Conflict of Interest Statement

VII

CONFLICT OF INTEREST STATEMENT

Firms must submit an executed copy of the County's approved Conflict of Interest Statement which is available online at www.arlingtonva.us/purchasing.

The Project Team has included executed copies of the County's approved Conflict of Interest Statement in this section.

CONFLICT OF INTEREST STATEMENT

I, whose name is subscribed below, a duly authorized representative and agent of the entity submitting this proposal to Arlington County and on behalf of the Offeror certify that:

1. Neither the Offeror nor any affiliated entity has, within the past five years, been employed by or represented a deliverer of services that reasonably could be expected to be considered for purchase by the County as a result of this solicitation;

2. if the Offeror is awarded a contract under this solicitation and during the term of that contract prepares an invitation to bid or request for proposal for or on behalf of the County, the Offeror must not (i) submit a bid or proposal for that procurement or any portion thereof or (ii) disclose to any potential bidder or offeror information concerning the procurement that is not available to the public.

3. The Offeror will not solicit or accept any commissions or fees from vendors who ultimately furnish services to the County as a result of any contract award made as a result of this solicitation.

OFFEROR'S NAME: CESC Square LLC

SIGNED BY: [signature]

PRINTED NAME/TITLE: Aaron Herman, Assistant Secretary

DATE: May 15, 2019

NOTARY STATEMENT

~~COMMONWEALTH OF VIRGINIA~~/STATE OF Maryland)

CITY/COUNTY OF Montgomery) to wit:

Aaron Herman personally appeared before me this 15th day of May, 2019 the undersigned a Notary Public in and for the State and County of aforesaid, ____________________, known to me (or satisfactorily proven) to be the person whose name is subscribed to within the instrument as an agent of the Offeror and acknowledged that he/she has executed the same for the purposes therein contained.

TERESA N TILLES
My Commission Expires
NOTARY PUBLIC
05-05-2020
FREDERICK COUNTY, MD

(Seal) [signature]

Notary registration number: N/A
My commission expires: May 5, 2020

OFFEROR'S PRINTED NAME: Aaron Herman

A.

Appendix A— Past Technical Performance

A

PAST TECHNICAL PERFORMANCE

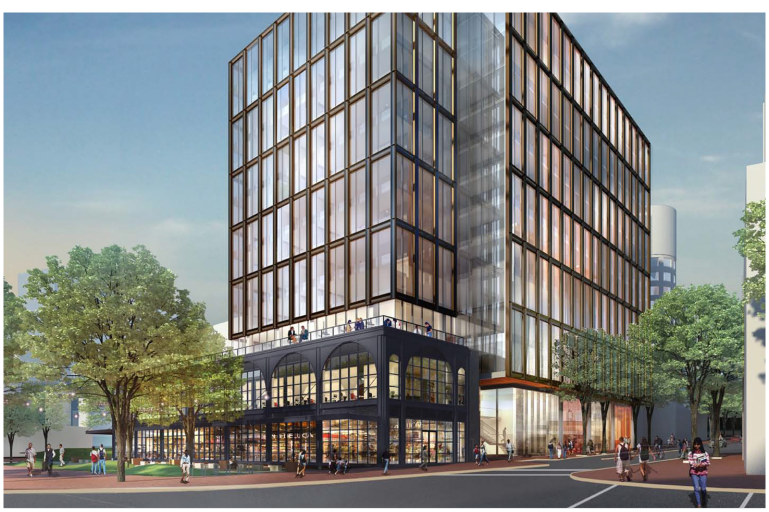
JBG SMITH

JBG SMITH's most relevant technical experience includes the development of Central Place in Arlington, VA, highlighted in Section IV.

Other past projects include:

- 500 L'Enfant Plaza
- 4747 Bethesda Avenue
- 1221 Van Street
- 1900 N

Central Place Office and Garage



4747 Bethesda Avenue

500 L'Enfant Plaza

VHB

VHB has depth of knowledge in the design-build and transit arenas to help facilitiate management of the Project. More specifically, VHB has a strong understanding of WMATA requirements, holding two on-call support contracts with WMATA. VHB will rely upon past experience working for WMATA as a client to inform decision-making in developing and overseeing the design for the Crystal City Metrorail East Entrance.

Examples of VHB's past design-build and transit projects are highlighted on the following pages.

Washington Union Station Expansion Project & EIS

Washington, DC

The Washington Union Station Expansion Project and Environmental Impact Statement (EIS) seeks to better integrate the second busiest station on the Northeast Corridor with its surrounding neighbors and land uses and provide adequate facilities for current and anticipated operations. An initial Vision Plan, completed in 2012, is the starting point for the current 2nd Century Master Development Plan to coordinate multiple near- and long-term public and private projects at the Station as they are further developed and implemented.

VHB is leading the transportation and rail planning in support of this Vision Plan and leading the project through the complicated NEPA process in preparing an EIS. In this role, VHB is coordinating with Amtrak's design team for the project to be implemented over the next 15 to 20 years to rejuvenate and expand the historic rail station as a signature regional transportation hub in the Metro DC region. The proposed improvements will significantly improve the passenger experience with a sustainable multimodal transit facility, incorporating urban placemaking with improved connections to adjacent neighborhoods, while opening the door for new retail and mixed-use facilities as part of the overall development of the station.

The project includes expanding and modernizing the multimodal transportation facilities at Washington Union Station while preserving the historically-significant station building and will be subject to the requirements of Section 106 of the National Historic Preservation Act. Improvements include reconstructing and relocating tracks, developing new concourse facilities, maintaining multimodal services, and improving and expanding infrastructure and other facilities.

VTrans Design-Build Program Management

Statewide Vermont

VHB has served as the owner representative on seven design-build projects that the state advertised, procured, and constructed. From the first project in 2011 to the ongoing projects under construction, VHB worked side by side with VTrans to establish a new design-build program with expedited project delivery and construction of some of the largest transportation infrastructure projects in the state. Throughout this time and under the leadership of Mark Colgan, VHB advised and assisted VTrans in delivering $130 million in projects in record time. VHB's responsibilities included performing a variety of planning and engineering, program and project management, process development and documentation, owner advisory services, design-build team procurement, and technical and administrative services from design through construction.

For the last 7 years, VHB has provided similar services as are needed for the East Entrance project with exemplary performance feedback from the client. This contract was also managed by **Mark Colgan**, Project Management Team lead for the East Entrance Project.

CC2DCA Feasibility Study

Arlington County, VA

The vision of the project (CC2DCA) is to directly link Crystal City with DCA and the National Airport Metrorail station via a context-sensitive pedestrian connection that enhances economic development opportunities, strengthens the neighborhood's hotel community, and offers new opportunities to link the thousands of workers and residents of Crystal City to a growing regional rail network and a one-of-a-kind multimodal connection.

To explore the opportunity, the project team developed a three-step approach to understand the benefits, constraints, and considerations surrounding such a connection: DISCOVER, SYNTHESIZE, and PLAN. DISCOVER focused on collecting data from stakeholders, the public, and all available data sets. The DISCOVER phase aimed to establish stakeholder issues and identify opportunities to build on. SYNTHESIZE analyzed all the collected data to better understand the feasibility of the connection. This included developing and studying a series of alignments both horizontally and vertically and evaluating options. PLAN culminates the planning process and offers a vision of how the project can move forward. The plan phase paints a road map on how the project would be implemented, including preliminary costs, and potential funding sources.

Challenges and solutions encountered in this project included:

» Leading a working group with varying interests, including economic development, airport operations, parks and recreation, and transit operations. VHB scheduled a series of one-on-one meetings with working group members to gain a better understanding of specific hurdles and to ask for input on conceptual options prior to convening as a working group.

» Conveying complex information regarding conceptual options and constructability and feasibility to everyday citizens. VHB developed user-friendly and concise public presentation material, along with visually inspiring imagery that helped convey the future experience of the new connection. Meetings were also hosted on Facebook Live.

» Making sure that conceptual options were grounded in engineering. VHB relied on our interdisciplinary project team with expertise in land use and urban design, multimodal planning, landscape architecture, structural engineering, and tunnel construction.

» Delivering the study in a 4-month timeframe, staying on budget, and managing three subconsultant teams. VHB established milestones with the client within the first week, and kept in routine communication both internally and externally.

VHB key staff on this project included **Joyce Tsepas** and **Mark Colgan**, who are both on the proposed East Entrance team for the Project.

Clark

Clark has more combined experience working with WMATA than any contractor in the local market. Clark has been working with WMATA for decades, since the inception of the Metrorail System.

WMATA Ballston-MU Access Improvements

Arlington, VA

The WMATA Ballston-MU Access Improvements was a design-build project for various improvements to the existing Metrorail station including the installation of three elevators and an underground passageway to connect to the existing mezzanine street entrance. The contract included an elevator on the north end and an exercised option to install an additional two elevators and a connecting underground passage on the south end. In total, Clark's efforts resulted in approximately 1,100 SF of renovated space, 2,300 SF of newly constructed space, and 5,100 SF of surface modifications.

Montgomery County-MD 355 Crossing (BRAC)

Bethesda, MD

The Montgomery County Department of Transportation awarded Clark Civil a $81 million design-build contract for the MD 355 Crossing in Bethesda, MD. Clark Civil leads an effort to design and construct a new below-grade pedestrian tunnel under Rockville Pike (MD 355), connecting the National Institutes of Health campus with the Walter Reed National Military Medical Center campus.

The team is also constructing a 49-foot-diameter, 128-foot-deep shaft with a 30-footlong connector tunnel into the existing Medical Center Metrorail Station. The shaft will contain a new elevator system allowing passengers access to the Metrorail from the Walter Reed campus.

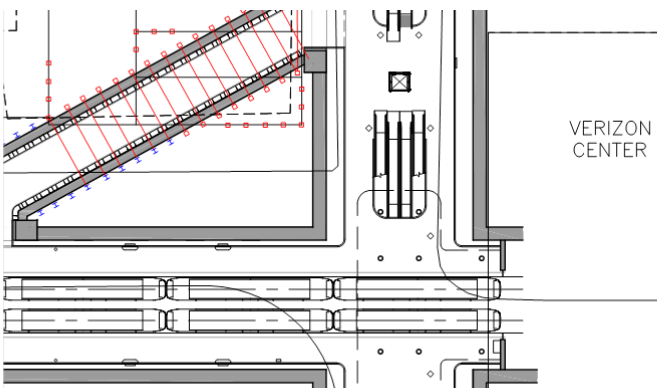
Atkinson, Clark Foundations, and C3M Power Systems are also a part of the project team. Atkinson is performing shaft excavation, tunneling, and break through work to the WMATA Station; Clark Foundations is providing excavation support; and C3M is performing electrical work throughout the project.

CSX Camden Street Storm

Baltimore, MD

Clark is providing design-build services for CSX Transportation to construct new drainage infrastructure to alleviate flooding in the Howard Street Tunnel in downtown Baltimore, MD. Stormwater currently flows through an existing 48-inch storm sewer directly beneath the CSX tracks in the tunnel before discharging into the Inner Harbor. This existing storm sewer regularly floods the tracks inside the tunnel, occasionally stopping train operations completely. The objective of this project is to install a gravity siphon system and new 60-inch storm drain approximately 10 feet below the existing track level and plug the old 48-inch storm drain to alleviate flooding inside the Howard Street Tunnel.

Shafts were excavated on the East (Howard Street Transition Structure, HSTS) and West (Camden Street Shaft, CSS) sides of the existing tunnel and three new storm drains were installed from the Camden Street Shaft: 48-inch carrier pipe from an existing manhole structure, 18" carrier pipe from new Howard Street Tunnel inlet structure, and 60-inch carrier pipe from CSS to the HSTS. The CSS took stormwater from the existing manhole structure and new Howard Street Tunnel intake structure, channel the flow under the tunnel to the HSTS, and discharge into the existing 48-inch storm drain.

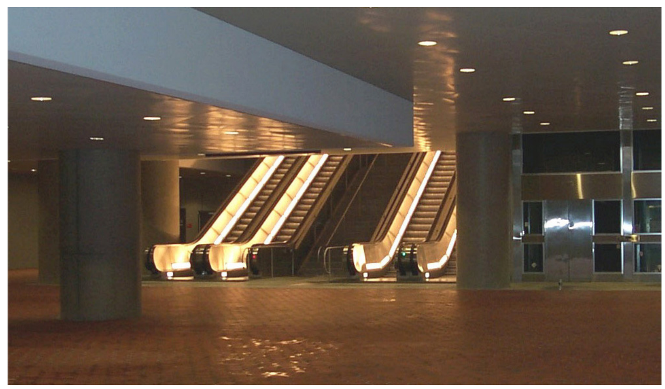


WMATA Gallery Place-Chinatown Passageway

Washington, DC

Clark developed a feasibility study for the design and construction of WMATA's new Gallery Place-Chinatown Station Passageway project, addressing the station's capacity constraints in light of high levels of crowding and increased safety risk. The recommended solution was the construction of a diagonal pedestrian passageway between the westbound Red Line platform and the Green/Yellow Line mezzanine.

The passageway would allow passengers to bypass the crowded tunnel junction and provide additional area to alleviate platform crowding and facilitate efficient movement through the station, especially in the critical area on the westbound Red Line platform. The passageway significantly reduces the severe congestion on the westbound Red line platform and distributes passengers along the full length of the platform. The percentage of passengers experiencing severe crowding (less than 7 square feet per person) in the AM and PM peak periods would be reduced from 51% to 27%. The passageway configuration includes provision for emergency egress to street level via a stairway and a hatch that would open onto the sidewalk, likely along G Street NW.



WMATA Mount Vernon Square Station Modifications

Washington, DC

Clark provided general contracting services for the Mount Vernon Square Metrorail expansion, which connects to the Washington, D.C. Convention Center, making the convention center the first in the United States to have its own subway station. The expansion included a 9,000 GSF enlarged passageway area highlighted by the Metrorail's characteristic paver tile and metal pan ceiling design. Passengers can reach their destination via one of four escalators or two stainless steel clad and glass-enclosed elevators. An upper level of the expansion, beyond the view of the public, included miscellaneous maintenance and operations rooms including mechanical, electrical, and communications equipment and facilities. A utility tunnel also was constructed beneath 7th Street, bringing necessary power and communications from the existing station to the new facility.

WMATA Capital One Arena Metrorail Entrance

Washington, DC

The MCI Metrorail Entrance was developed in order to accommodate the anticipated increase in passenger volume due to the construction of the new MCI Arena. Clark Construction was the primary design-build contractor for the project, which involved the demolition and relocation of the original Gallery Place–Chinatown Metrorail entrance. The new Metrorail entrance was upgraded from one staircase and an elevator to one staircase, two elevators, and four escalators. The station's HVAC chiller plant was modified to handle the station's increased usage. Sixteen farecard gates and 10 fare vending machines were also included. The Metrorail project was an integral part of the work of the MCI Arena, also constructed simultaneously by Clark in a joint venture. In addition to the modifications that were made for the new Metrorail entrance, work was incorporated into a complex foundation for the MCI Arena. Clark was responsible for coordinating all work for the Metrorail entrance with the MCI Arena.

800/900 N. Glebe Road

Arlington, VA

Clark provided preconstruction and general contracting services for the construction of 800 North Glebe, a 326,000 SF office building with ground-level retail. The 10-story tower has a post-tensioned concrete frame rising above a three-level, below-grade parking garage built by Clark under a separate contract. 800 North Glebe achieved LEED Gold certification, focusing on using regional and recycled materials. 800 North Glebe features a precast concrete and curtain wall facade, which on the eastern and southern sides are segmented at an equal spacing and are on a radius. The smooth, curvilinear appearance created by this segmenting creates the illusion of a full sail in the wind. Special care was taken to form the edge of the slab on a radius in order to ensure each façade piece fit perfectly into the curve.

900 North Glebe is a seven-story, 297,000 GSF research and office building, including ground-floor retail space and a 6,600 SF public plaza south of the building. The new facility, built for Virginia Polytechnic Institute and State University (Virginia Tech) features a pre-cast concrete skin with curtain wall and punched windows. The building's main lobby showcases dolomite limestone also known as "Hokie Stone"—a material commonly used on Virginia Tech's Blacksburg campus.

KGP

Current projects include the Union Station Concourse Modernization and the Master Plan. The Concourse is a complete overhaul of the existing train waiting area and services, preparing for the new Acela trains being introduced in 2020. In New York City, the firm is modernizing Penn Station with an upgraded Club Acela and general waiting area. Other projects include bridge design for the Belmont Bridge in Charlottesville, VA; Woodland Bridge at the National Cathedral; two bridges over the C&O Canal; and a VRE pedestrian bridge at Manassas, VA.

KGP has provided design services for Maryland Transit Administration initiatives since 2006. The Purple Line is a light rail connecting four segments of the Washington

Metrorail. The firm designed the stations as well as connections to Metrorail and MARC. This interface includes coordinating pedestrians, bikes, buses and joint development at the station sites. For the Baltimore Red Line, KGP led the urban design, integrating the light rail into the existing city fabric. Corridor Cities Transitway is a BRT where KGP is designing the stations/stops that will serve as transit connections. The firm is also designing several MARC stations and maintenance facilities in Maryland. The scope of these projects includes full station designs, canopies and pedestrian bridges as well as furnishings and graphics.

For District Department of Transportation, KGP designed the first Bicycle Transit Center for Washington, DC at Union Station. In another part of the city, the firm designed a pedestrian bridge connection from the Kennedy Center to the Potomac River, creating an important urban link for pedestrians in the city. KGP also won a competition for the design of Pennsylvania Avenue West of the White House, creating a "complete" street with sustainable landscape and enhanced pedestrian space.

The firm completed the planning and development of all the stations for the EIS documents for the Silver Line. Upon the issuance of the EIS, the McLean Chamber of Commerce hired KGP in a joint venture with ARUP and Dr. Sauer Tunneling to design a four-station tunnel alignment through Tysons, which was completed

Union Station Bicycle Transit Center

through Preliminary Engineering. At the same time the firm produced a master plan called Taming Tysons that assumed a tunnel version of Metrorail through the area.

In Honolulu, the firm designed all the prototype stations and canopies for the Honolulu Rail Transit project. The principals of the firm have been involved in this project since its inception in the 1990s. As part of the 1993 EIS Study, KGP's founding Principals designed six of the stations along with planning for all stations with transit-oriented development (TOD).

Other major transit projects include the design/build construction of a 17-km, 13-station system for Manila Metro Rail Transit as the architectural consultant to Mitsubishi Heavy Industries. This project involved joint development at stations and TOD in the surrounding

Union Station Concourse Modernization

Silver Spring Purple Line Station

areas. In addition, the firm developed a Master Plan TOD for 35 Hectares next to EDSA Central Station that builds 2.5 million SM of new construction. In Tel Aviv, KGP provided planning and station design for the Red Line as architectural consultants to Deleuw Cather International. The design of this light rail system entails an underground central section and an on-grade alignment beyond.

AECOM

Washington Dulles International Airport Metrorail Extension, Silver Line Phase 2

Washington, DC

The 23-mile Dulles Corridor Metrorail Project (DCMP) is a $6.2 billion investment for improved mobility and access in the Washington, DC metropolitan region. The project is being constructed by the Metropolitan Washington Airports Authority (MWAA) and will be operated by WMATA. The DCMP is being implemented in two phases: the recently opened DCMP Phase 1, running from the current Orange Line, to the station at Wiehle Avenue, the interim terminus; and DCMP Phase 2, which begins at the Wiehle Avenue station tail tracks and extends to the terminus in eastern Loudoun County.

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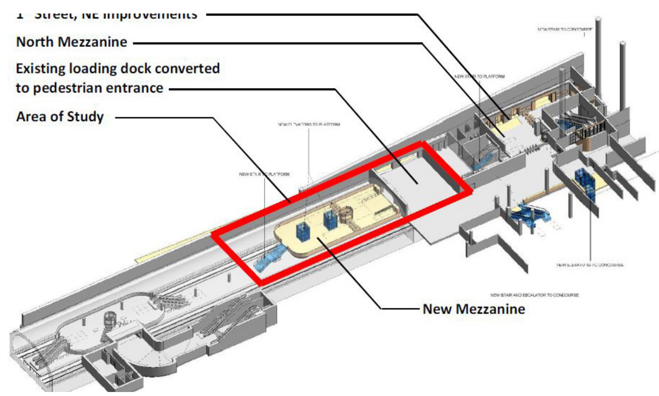

Union Station Metrorail Station New Center Mezzanine Study

Washington, DC

AECOM, collaborating with KGP, evaluated the technical feasibility of proposed alternatives and advanced the preferred design for a new center mezzanine at Union Station Metrorail Station. Major design elements included a new central floating mezzanine with a pair of platform-mezzanine elevators, a single monumental stair, two ADA-compliant ramps, Ticket Vending Machines (TVMs), and a station manager's kiosk.

The study encompassed a multidisciplinary evaluation of the preferred design including the architecture, life safety, structure, mechanical, plumbing, electrical. communications, estimating, and constructability disciplines.

A final report summarizing the project's overall technical feasibility was developed and included egress calculations, preliminary project drawings, construction schedule, and Rough Order-of-Magnitude cost estimates.

White Flint North Entrance Feasibility Study

Rockville, MD

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Major design elements include a new north entrance, entrance canopy, public restrooms, station ancillary rooms, platform canopy extension, two elevators and a 10-foot double-wide stair. The study includes a multidisciplinary evaluation including the architecture, structural, mechanical, electrical, plumbing, egress/life safety, estimating and constructability disciplines. The task will complete with a Final Report summarizing the project's overall technical feasibility and include egress calculations, preliminary project drawings, construction schedule, and Rough Order of Magnitude cost estimates.

Court House Metrorail Station Second Elevator Feasibility Assessment

Arlington, VA

AECOM, collaborating with KGP, led an engineering study to examine the feasibility of constructing a second elevator to the Court House Metrorail Station to support WMATA's and Arlington County's goals to provide high-quality access for those with mobility challenges. This particularly applies at the Court House Metrorail Station because of high ridership and heavy elevator usage. Engineering considerations included structural, geotechnical, mechanical and electrical systems, and constructability (including property impacts) for the refined alternative concept. The study team worked in close coordination with WMATA engineering staff to assess the potential impacts to the facility and station operations during construction.

B. Appendix B—Resumes

Jay Corbalis

Project Director

Education

MPS, Real Estate Development, Georgetown University, 2014

BS, Urban and Regional Studies, Cornell University, 2007

Jay is Vice President of Public Affairs for JBG SMITH, specifically focused on the company's efforts in National Landing. In that capacity, he works with a diverse range of public stakeholders to create long-term value by aligning priorities and investments around shared goals, particularly related to major transportation projects. Prior to joining JBG SMITH, Jay was part of the Mixed-Use Development Team at Federal Realty Investment Trust, where he worked on large-scale redevelopment projects, including Pike & Rose.

11 years of professional experience

Relevant Project Experience

- Pike & Rose, Montgomery County, MD
- Montrose Crossing, Rockville, MD
- Pike 7 Plaza, Vienna, VA
- National Landing, VA

JBG SMITH

Andy VanHorn

Executive Management Team

Education

MBA, Georgetown University, 2004

BS, Civil Engineering, Lehigh University, 1998

Andy has more than 15 years of experience in various aspects of real estate and is responsible for the entitlement oversight and planning of JBG SMITH's development activities in National Landing, including Amazon's HQ and the associated infrastructure improvements. He has completed more than two million square feet of entitlement in Arlington County, including the Rosslyn Gateway and Central Place projects in Rosslyn.

He is very active in both Arlington and Alexandria, through participation on public and private committees and boards in those two markets. Andy currently serves as an Executive Committee Member and Board Member of both the Rosslyn BID and the Crystal City BID and as a Board Member of Virginia NAIOP and the Arlington Partnership for Affordable Housing.

The JBG Companies merged with Vornado DC, and formed JBG SMITH, the largest publicly-traded REIT in the Washington Metro region, in July 2017. Prior to his current role with JBG SMITH, Andy was a Principal with The JBG Companies. Andy also worked for two years in real estate private equity with Buvermo Properties, and for Charles E. Smith and Clark Construction in various roles after completing his undergraduate degree.

15 years of professional experience

Relevant Project Experience

- Central Place Tower, Arlington, VA
- Central Place Residential, Arlington, VA
- Notch 8, Alexandria, VA
- Courthouse Metro, Arlington, VA
- Land Bay F-Potomac Yard, Alexandria, VA

JBG SMITH

Taylor Lawch

Executive Management Team

Education

BS, Business Administration, Washington & Lee, 2009

Taylor is a Vice President of Development at JBG SMITH and has spent the last 10 years in commercial real estate finance and development. Taylor joined JBG SMITH in 2014 to focus on the acquisition, design, entitlement, financing, and delivery of mixed-use urban infill projects. After delivering Central Place, a two-phase high-rise project comprised of a 377-unit apartment building and 530,000 SF office tower, he focused on the master planning of JBG SMITH's National Landing portfolio, in conjunction with the Amazon HQ2 pursuit. Taylor is also managing the development of Central District Retail, JBG SMITH's first phase of Crystal City redevelopment that includes a nine-screen Alamo Drafthouse Cinema, specialty grocer, 50,000 SF of new street-fronting retail, and a public park that sits adjacent to the proposed Project site. Taylor is active in Arlington County civic activities; he is an Arlington County Board appointed Commissioner to the Crystal City Citizen Review Council and is an active participant in the Crystal City and Rosslyn BID activities.

Prior to joining JBG SMITH, Taylor worked for Walker & Dunlop and MidCap Financial, financing multi-family, senior housing, and skilled nursing projects throughout the country.

10 years of professional experience

Relevant Project Experience

- 1770 Crystal Drive, Arlington, VA
- 1900 N Street, Washington, DC
- 1831 Wiehle Avenue, Reston, VA
- RTC West, Reston, VA
- National Cancer Institute Lab, Bethesda, MD

JBG SMITH

Greg Trimmer

Executive Management Team

Education

MBA, Northwestern University, 2006

BS, Civil Engineering, University of Virginia, 1999

Greg has nearly 20 years of experience overseeing mixed-use and build-to-suit office development. He currently oversees large-scale development projects in multiple jurisdictions, including Arlington, Montgomery, and Fairfax Counties, as well as the District of Columbia. He previously served as Project Executive for the successful delivery of 575,000 SF for The National Cancer Institute, 935,000 SF for Health and Human Services, and 491,000 SF for the National Institute of Allergy and Infectious Diseases. Currently, he oversees JBG SMITH's development of a 215,000 SF trophy building at 500 L'Enfant Plaza, a 260,000 SF trophy office building at 1900 N Street NW, the Central District Retail project, and the redevelopment of the 260,000 SF office at 1770 Crystal Drive, both in National Landing. Prior to joining The JBG Companies in 2007, Greg was a Development Executive at Clark Realty Capital and had a previous tenure with JBG as an Associate. He is a member of ULI and NAIOP, and is an accredited member of the Congress for New Urbanism. He is currently serving on the Phase 2 Dulles Rail Transportation Improvement Advisory Board, ULI's national Office Development Council, and NAIOP's national Urban Redevelopment Forum. In the community, he is a member and former Chair of the Special Gifts Committee for the Arlington Free Clinic.

20 years of professional experience

Relevant Project Experience

- 1770 Crystal Drive, Arlington, VA
- Central District Retail, Arlington, VA
- Central Place Tower, Arlington, VA
- Central Place Residential, Arlington, VA

JBG SMITH

Charles E. “Chuck” Wall

Legal Advisor

Education

JD, University of Richmond, 1989 (*University of Richmond Law Review)*

BA, The College of William and Mary, 1986

Admissions

Admitted only in Virginia. Practice supervised by members of the District of Columbia Bar.

Presentations

Panelist, “The Contractor’s Role on the P3 Project Team”, March 2019

Panelist, “Troublesome Design and Construction Risk Transfers in P3s”, July 2018

Presenter, “P3s in Transportation: Developments Affecting the Construction Industry”, June 2018

Presenter, “Follow the Money – New Rules for Construction Funding and Public-Private Partnerships”, July 2017

Panelist, “Leaders Predict the Future,” 6th Annual Real Estate Forum, April 2015

Moderator, “Public-Private Partnerships for Infrastructure in Virginia: What’s the Deal?”, July 2014

SEYFARTH SHAW

Chuck is a partner in the Washington, D.C. office of Seyfarth Shaw LLP and a member of the firm’s national Construction practice. Recognized by Best Lawyers in America as 2019 “Lawyer of the Year” in Construction Law in Richmond, Chuck is a trusted advisor on complex public-private partnerships (P3s or PPPs), infrastructure development, and general construction law. Building on the common ground between business and government, he helps clients craft successful partnering arrangements for a wide range of infrastructure projects.

Chuck lived and practiced in Virginia for 29 years before joining Seyfarth Shaw in 2018. He has been involved in numerous PPEA and PPTA projects across the Commonwealth, including representation of a variety of developers and contractors in successfully pursuing and negotiating Interim and Comprehensive Agreements with state agencies, regional authorities, and local governments.

Chuck assists clients in all aspects of public-private partnerships and infrastructure development, from initial concept through procurement, design, construction, post-completion, and long-term operation and maintenance. His work focuses on crafting project-specific risk-sharing arrangements involving the design, construction, financing, operation, and maintenance of high-priority public facilities. Chuck has advised both private- and public-sector clients on numerous concession arrangements (greenfield and brownfield) and other alternative project deliveries and procurement-related matters. Through this work, he has developed a deep understanding of the substantial risks and opportunities these ventures can present developers, equity members, construction firms/JVs, lenders, designers, operation and maintenance providers, and public agencies.

In addition to P3s, Chuck advises clients on a vast array of construction and corporate matters, including design-build and other construction-related contracts, joint ventures and teaming arrangements, and issues that arise through procurement, project execution, O&M, and beyond. His comprehensive understanding of the construction industry, combined with his corporate and government relations experience, enables him to proficiently work through the details and subtleties of a project while also helping parties keep focused on the big picture.

Representative Engagements (Virginia PPEA and PPTA)

- Serves as special counsel to the Hampton Roads Transportation Accountability Commission in relation to its funding of the expansion of the Hampton Roads Bridge-Tunnel being procured by VDOT under the PPTA. The project size is approximately $3.3 billion.
- Served as lead counsel to the Hampton Roads Transportation District Commission for the development of new transit facilities under the PPEA. The project included a 65-year ground lease (of property previously occupied by the commission) to be redeveloped as a commercial property. The project size was approximately $62 million.
- Served as lead counsel to the developer on a PPEA project in Warren County to design and construct a new high school and redevelop an existing middle school

Charles E. "Chuck" Wall

Publications

Co-Author, "Navigating Risk Allocation in P3 Agreements," Construction Executive, January 11, 2019

Co-Author, "Public-Private Partnerships," chapter of the Virginia Construction Law Deskbook, 2016

Affiliations

American Road & Transportation Builders Association (ARTBA) (P3 Conference Planning Committee, 2016–present)

Virginia Transportation Construction Alliance (Design-Build Committee, 2009–2015, 2017–present)

Virginia Bar Association Transportation Law Section (Chair, 2017–2019)

Virginia Governor-Elect's Transition Council on Transportation Policy (2013–2014)

American Bar Association Public Contract Law Section, Forum on Construction Law

Virginia State Bar Standing Committee on Professionalism (Past Chair)

Virginia State Bar Young Lawyers Conference (Past Member, Board of Governors)

American Heart Association Regional Heart Walk (Past Member, Executive Leadership Team)

Community Brain Injury Services (Past Member, Board of Directors; recognized as an inaugural member of Honorary Board in 2018)

into a second high school. The project size was approximately $78 million.

- Served as lead counsel to the developer on a PPEA project to design and construct a maintenance and operations facility for the Harrisonburg Department of Public Transportation. The project size was approximately $14 million.
- Served as lead counsel to the developer on a PPEA project to design and construct new correctional facilities (Western Virginia Regional Jail) for a regional jail authority in Virginia. The project size was approximately $78 million.
- Served as lead counsel to the City of Falls Church and the City's school board on proposed commercial development in conjunction with a proposed new high school and additional educational facilities, all pursuant to the PPEA.
- Served as lead counsel to one of VDOT's two private partners on the Coalfields Expressway PPTA project, a four-lane limited access highway currently under construction in southwestern Virginia. The project size is approximately $2.3 billion.
- Served as lead counsel to a design-build joint venture in its pursuit of "Transform 66-Outside the Beltway," a $2 billion multimodal project in Northern Virginia procured under the PPTA (managed lanes along with rapid bus and park-and-ride facilities).
- Served as lead counsel to the developer on VDOT's PPTA project to develop, design, and construct major improvements to 36 miles of the Route 58 corridor (Hillsville to Stuart). The project size was approximately $339 million.

Representative Engagements (National)

- Represented a design-build joint venture through commercial and financial close of the $2.3 billion I-4 Ultimate in Florida. This availability-payment P3 will add four tolled express lanes, rebuild 15 major interchanges, and add or replace 127 bridges.
- Represented the EPC contractor for a shortlisted consortium pursuing Maryland's 16-mile Purple Line, a 21-station light rail project connecting four branches of the Metrorail system, Amtrak, and all three MARC commuter rail lines.
- Advised the design-build joint venture to a shortlisted proponent pursuing a P3 for a highly-sophisticated electronic train system at Los Angeles International Airport known as the Automated People Mover, the first APM system procured through an availability payment delivery model.
- Advised an equity member of a shortlisted proponent pursuing the I-10 Mobile River Bridge P3 in Alabama. The 11-mile revenue-risk project involves a new six-lane cable-stayed bridge, replacement of the existing interstate bayway, and five interchange modifications.

Mark Colgan, PE, DBIA

Project Management Team

Education

BS, Civil Engineering, University of New Hampshire, 1995

Registrations

Professional Engineer VA, 2002

Professional Engineer DC, 2016

Professional Engineer MD, 2016

Professional Engineer NC, 2015

Professional Engineer (Structural I) VT, 2002

Professional Engineer FL, 2015

Professional Engineer RI, 2015

Professional Engineer CT, 2015

Professional Engineer GA, 2015

Professional Engineer NJ, 2017

Professional Engineer MA, 2015

Professional Engineer ME, 2016

Professional Engineer NH, 2000

Professional Engineer NY, 2009

Designated Design-Build Professional, 2015

Mark is the Mid-Atlantic Transportation Market Leader as well as VHB's corporate Structures Service Leader. He has nearly 30 years of project management, transportation, and construction-related experience as both a private contractor and a consultant engineer with VHB and has been involved in the planning, design, and construction of a wide variety of project types along the East Coast. His emphasis has been in the design and construction of roadways, bike/ped facilities, structures, and bridges while managing large multidisciplinary projects. He also has extensive experience leading Design-Build (DB) and Construction Manager/General Contractor (CM/GC) efforts, having led or supported more than 15 projects for VHB.

32 years of professional experience

WMATA, Potomac Yard Metro Station Design-Build Project, Alexandria, VA

As a subconsultant to Balfour Beatty Infrastructure & Lane Construction JV Team, VHB was lead designer for this $170M design-build pursuit. As Design Manager, Mark provided overall management of the design team, as well as serving as lead structures and bridge engineer. The design included a new bridge over three CSX freight lines and two WMATA Metro lines, as well as the new station and numerous retaining walls and culvert structures. $769,968

Virginia Railway Express, Midday Layover, Washington, DC

VHB is providing permitting and design services for the addition of a midday layover facility in Washington, DC. Project includes bridges, retaining walls, and extensive federal agency, DDOT, and railroad coordination. Mark is Structures Lead for VHB services for this complex project. $15 million range (early construction cost estimates)

VTrans, Middlebury Main Street & Merchants Row Tunnel, Middlebury, VT

Mark served as Design Manager for an ongoing Construction Manager General Contractor (CMGC) project to lower 3,500 feet of track by up to 15 feet and construct a new 350-foot-long rail tunnel in downtown Middlebury. The project will establish passenger rail in the corridor, improve pedestrian mobility, and lower the track during 12-hour shutdowns while returning tracks to service for the passage of daily trains. Mark provided coordination between the design team, contractor, and Vermont Railway to develop sequencing of work around live railroad tracks. Extensive drainage infrastructure will be installed via large diameter micro-tunneling through bedrock. The project includes complex traffic control during construction, significant impacts to residents and businesses adjacent to the work area, more than 1,000 feet of retaining walls along the railroad, an innovative modular tunnel section to allow accelerated construction, and associated bridge, roadway, and rail improvements along the corridor. Mark led the design team efforts, including the development of complex maintenance of traffic for construction access based on more than three dozen public outreach meetings, design charrettes, and multiple design modifications to accommodate businesses and residents immediately adjacent to the construction.

Mark Colgan, PE, DBIA

Affiliations/Memberships

American Society of Civil Engineers

American Council of Engineering Companies, American Society of Structural Engineers—North Carolina Chapter

Design-Build Institute of America, 2019 Legislative Committee

Design-Build Institute of America, 2019 Transportation & Aviation Markets Committee

VDOT, APM Terminals New I-164 Interchange, Portsmouth, VA

Mark was the Structures Design Manager for the twin bridges that extended Virginia Route 164 to a major marine terminal. This was VDOT's first design-build project, and Mark was the EoR responsible for the structural design for the bridges and walls. He was closely involved in the roadway and traffic engineering design, as well as the development of the maintenance of traffic solutions for I-164. Mark worked with the construction staff to develop as-built drawings and ensure the final product was consistent with the design intent.

MassDOT, Route 79/I-195 Interchange Improvements, Fall River, MA

Mark was VHB's Structures Service Leader for the design and construction of seven bridges for this complex, multidisciplinary design-build project for MassDOT. The project consisted of the reconstruction of the Route 79/I-195 Interchange in Fall River, and structure types included roll steel beams, steel plate girder, and pre-stressed concrete slab spans. The bridge structures ranged from single-span structures to multi-span, curved flyovers along with design and construction over live railroads. Foundation types consisted of driven steel piles and micropiles. Mark coordinated with VHB's Project Manager and Structures Task Manager to ensure sufficient bridge design resources were available. Five of the bridge structures cross Mass Coastal railroad tracks and included project elements such as close railroad coordination, special clearances, crash walls, unique pier layouts, and support of excavation to accommodate Mass Coastal Railroad.

VTrans, I-91 Bridges Design-Build Support, Brattleboro, VT

Mark assisted VTrans with preparation of preliminary design, permitting, RFQ, RFP, and contract documents for its first design-build project. VHB and VTrans worked collaboratively to develop the documents and oversee the selected contractor through construction.

NYSDOT, Accelerated Bridge Design-Build Program, Statewide, NY

Mark managed design and permitting efforts for NYSDOT's first design-build project, which involved 13 bridges. He worked with construction personnel and subconsultant design firms to deliver design services to NYSDOT's satisfaction. VHB provided survey, hydraulic, traffic and safety, geotechnical, highway, traffic control, and structural engineering services. Bridges included a wide variety of structure types and materials, and required complex maintenance of traffic solutions in urban locations and the use of accelerated bridge construction (ABC) methods.

Town of Middlebury, Cross Street Bridge, Middlebury, VT

Mark served as Project Manager for this project to alleviate major traffic congestion, improve safety, and provide additional pedestrian and bicycle access by the construction of a second bridge over Otter Creek for the Town of Middlebury. VHB was part of the design-build team providing engineering, environmental, and construction services for the new roadway, roundabout, and bridge, along with associated streetscaping and intersection improvements. The project involved the longest pre-stressed post-tensioned bulb-tee concrete girders in the country and spanned a local river and active railroad with design and construction taking place around daily trains that could not be interrupted.

Sarasota County, Sarasota County Rails-to-Trail, Sarasota, FL

Mark was the Lead Bridge Engineer for the rehabilitation and replacement of six bridges on the former rail line between Venice Train Depot and Sawyer Loop in Sarasota County, Florida. The project included 11 miles of new bike and pedestrian multi-use path facilities, along with the bridges. The bicycle and pedestrian bridges included steel truss structures as part of a design-build contract with Sarasota County. Mark's responsibilities included leading management activities, permitting, field inspection, coordinating with VHB's design-build partner, and developing design and construction plans for the preferred bridge replacements.

MaineDOT, Passenger Rail Upgrade, Statewide, ME

Mark was Design Manager for $38M improvements to a 79-mile freight rail corridor that included track reconstruction, bridge rehabilitation and replacements, crossing upgrades, and new sidings to initiate Downeaster passenger rail service, a 59-mph service between Portland, ME, and Boston, MA. Mark's responsibilities included managing the design team members, developing construction drawings, and providing construction support services.

VTrans, Vermont Design-Build Program, Statewide, VT

VHB has completed seven design-build projects along the East Coast that were firsts in the state, including VA, FL, NY, VT, NH, MA, NH, and RI. As VHB's leader for design-build services, Mark supported or managed design and permitting efforts on all seven of those first-in-the-state projects. As part of these services, after serving as Design Manager on Vermont's first design-build project, VHB was selected for a 5-year contract to serve as the state's Owner's representative as they started their design-build program. Mark served as project and design manager for the first 5 years of these efforts and assisted the state in design-build as Vermont completed more than a $100M in construction under Mark's guidance.

Drew Morrison

Project Management Team

Education

Graduate Coursework, City Planning & Business Administration, Massachusetts Institute of Technology, Ongoing

BA, Economics and Political Science, Concentration in Urban Studies, Yale University, 2014

Drew is a Transportation Planner. Prior to joining VHB, he worked for the Montgomery County Council on transportation, environmental, and energy issues. Since joining VHB, Drew has focused on project management, station planning, and data analysis for large transit and rail projects in the Washington, DC, area.

5 years of professional experience

USRC, Washington Union Station Expansion Project and Environmental Impact Statement, Washington, DC

For the Union Station Redevelopment Corporation and the Federal Railroad Administration, VHB is providing transportation and rail planning and leading the project through the NEPA approval process, and Drew has served as Project Manager. The Union Station Expansion Project facilitates the introduction of MARC-VRE run-through service through changes to the track and platform plan at the station. VHB has extensively assessed the changes to commuter rail operations envisioned in the region and as part of this Project through our analysis work.

Drew has helped to lead the station concept screening process to identify alternatives for the Environmental Impact Statement (EIS). Drew has managed the environmental analysis and the multimodal planning components of the project. This analysis has included pedestrian, bicycle, bus, and vehicular operations and capacity planning. He has been centrally involved in coordinating the public and agency engagement of the project. This agency engagement has involved the major transportation agencies in the region, rail operators, and major transportation-focused advocacy organizations.

Montgomery County DOT, MD 355 Bus Rapid Transit (BRT) Planning, Montgomery County, MD

For the Montgomery County Department of Transportation, Drew is helping to manage the planning for a 22-mile BRT corridor. Drew manages a team of three planners focused on identifying and assessing locations of station stops. He is leading a formal screening of previously proposed station stops as a component of the project's environmental documentation. He has used his understanding of Montgomery County and Maryland's planning, budgetary, and political environment to help advance the project strategically and is the lead for project implementation. He has also assessed proposed side alignments to the main BRT route and led portions of public meetings regarding the project.

JBG SMITH, Crystal City/National Landing Preliminary Amtrak Market Study, Arlington, VA

For JBG SMITH, the main owner and developer of National Landing, VHB performed a preliminary market analysis of potential Amtrak service at the current Crystal City VRE Station. This analysis considered socioeconomic factors, including jobs and population, and station accessibility to estimate a preliminary market demand for Amtrak service. Drew served as the Project Manager on this project. In that role, he coordinated and oversaw the technical assessment performed and provided analysis on implementation strategies for Amtrak service. He served as an advisor to the client on how to advance the proposed service with appropriate stakeholders.

Office of Councilmember Roger Berliner, Rockville, MD

Prior to joining VHB, Drew served as the transportation, infrastructure, energy, and environment legislative aide for Councilmember Roger Berliner, chair of Montgomery County's Transportation and Environment Committee and 2016 chair of the Metropolitan Washington Council of Governments. This position included both budgetary and policy responsibilities. Drew led policy initiatives on major regional transportation initiatives, including WMATA dedicated funding, American Legion Bridge expansion, and MARC Brunswick Line improvements. Drew coordinated interjurisdictional policy initiatives with counterparts in the District of Columbia, Fairfax County, and Prince George's County.

Kelsey Robertson

Project Management Team

Kelsey is an urban planner focusing on environmental and transportation projects in the Washington, DC, area.

10 years of professional experience

Education

MPS, Urban and Regional Planning, Georgetown University, 2016

BA, International Relations with Specialization in Environmental Policy, Connecticut College, 2009

Registrations

Envision™ Sustainability Professional, 2019

LEED Green Associate, 2019

Affiliations/Memberships

Urban Land Institute

American Planning Association, National Capital Area

DDOT, Long Bridge Environmental Impact Statement Task 4, Washington, DC

Kelsey is providing technical planning guidance and project management support for the NEPA process for the Long Bridge Project. The project provides additional railroad capacity in the Long Bridge Corridor, which is a critical link in the rail network, connecting the developing Southeast High Speed Rail Corridor to the Northeast Corridor. Kelsey serves as the resource specialist for the navigation analysis, as well as executing project documentation, quality control, and public and stakeholder outreach.

USRC, Washington Union Station Expansion Project and Environmental Impact Statement, Washington, DC

Kelsey is providing technical experience and project management support to the NEPA process and multimodal transportation analysis for the Washington Union Station Master Redevelopment Project EIS. She also serves as the resource specialist for the land use and property impact analysis. The project includes expanding and modernizing the multimodal transportation facilities at Washington Union Station while preserving the historically significant station building.

AVANGRID, Washington, DC

Prior to joining VHB, for a company that operates eight regulated utilities and 6.3 GW of renewable energy, Kelsey was a Manager of Federal Government Affairs from 2015 to 2017 where she:

- Analyzed legislation and federal agency proposals, determine the potential effects upon AVANGRID businesses (the "Company")
- Met with Members of Congress, congressional staff, and federal officials to lobby on behalf of the Company; lead lobbyist for all siting, permitting, wildlife, and environmental issues
- Served as Project Manager of the Company's grassroots program, arrange tours of the Company conducted by Members of Congress
- Represented the Company within the wind and utility trade associations, advanced Company interests, and disseminated information
- Ensured administrative functions are executed; submitted compliance reports for the Federal Election Commission and the federal lobbying disclosure offices, managed consultant contracts and subscriptions, executed invoice payments, and other internal duties
- Served as Treasurer of the ~$200,000 USD AVANGRID PAC; administered disbursements to political campaigns, managed employee contributions, and attended fundraisers for Members of Congress

Kelsey Robertson

American Wind Energy Association (AWEA), Washington, DC

Prior to joining VHB, Kelsey was Grassroots Advocacy & WindPAC Coordinator (2013–2015); Administrative Coordinator, Public Policy (2011–2013); and Administrative Associate, Public Policy (2010–2011). She:

- Fundraised and executed event planning logistics for WindPAC; raised, bundled, and distributed more than $600,000 in five years
- Mobilized members and public wind energy advocates to deliver more than 1,000,000 communications to Congress since 2012
- Leveraged databases, including AWEA's wind market database, association management software, and the Power of Wind advocacy network, to compile strategic information to inform our lobbying efforts and decision-making processes
- Served as Liaison for AWEA Policy Committee, where she authored and compiled weekly legislative memo for 250 wind industry executives, managed four Committee meetings throughout the year, and compiled Committee's policy recommendations for the Board of Directors
- Managed $2 million budget for the Federal Legislative team in coordination with the Vice President of Federal Legislative Affairs
- Coordinated Public Policy intern program consisting of 15 interns over two years

Georgetown University Energy Prize, Washington, DC

Prior to joining VHB, Kelsey was Community Liaison (2014–2015) where she assisted 13 US communities in developing and executing energy efficiency programs to increase sustainability.

Solar Energy Industries Association, Washington, DC

Prior to joining VHB, Kelsey was Government Affairs Intern (2010) for which she synthesized information and wrote concise memos on solar power that were distributed to more than 1,000 member companies.

R. Neville Reynolds, PWS

Environmental Documentation

Neville is a Principal and Senior Environmental Scientist with extensive experience in planning, design, and permitting major infrastructure projects such as bridges, roadways, drinking water reservoirs, landfills, quarries, and marine terminals. His professional responsibilities include oversight and project management for complex projects requiring acquisition of local, state and federal permits, natural systems restoration projects, and National Environmental Policy Act (NEPA) compliance. Neville's strengths include the development of effective permit strategies using innovative ideas and superior negotiation skills with regulatory personnel. He has successfully obtained environmental approvals for a wide range of utility, transportation, infrastructure, and other land development projects. He and his staff have a reputation among regulatory agencies for providing technically sound, practical, and thorough submittals whether in support of permit applications, NEPA documents, or construction plans and specifications.

35 years of professional experience

Education

MS, Oceanography, Coastal Geology, Old Dominion University, 1990

BA, Geology, Earth Sciences, Millersville University, 1984

Registrations

Professional Wetland Scientist, 1996

Affiliations/Memberships

Society of Wetland Scientists, 1996

Virginia Association of Wetland Professionals

American Shore & Beach Preservation Association

Virginia Marine Industry Advisory Committee

Virginia Mitigation Banking Association

Virginia Tidal Wetland Mitigation Banking Advisory Committee

Virginia Maritime Association, Tidewater

Virginia Marine Resources Commission, Living Shoreline General Permit Committee

NPS, George Washington Memorial Parkway Dyke Marsh Restoration, Fairfax County, VA

For the National Park Service (NPS), Neville is serving as Project Manager and subject matter expert in support of this $26M freshwater tidal marsh restoration effort in the Potomac River. Working with the NPS and Baltimore District U.S. Army Corps of Engineers, Neville is guiding regulatory coordination and strategy, as well as developing design alternatives with the goal of restoring up to 100 acres of marsh habitat previously destroyed by mining activities. Key issues include balancing marsh restoration and the placement of fill material in the Potomac River with impacts to existing aquatic resources such as submerged aquatic vegetation and anadromous fish habitat. His role has required extensive coordination with all Virginia regulating agencies, the Norfolk District U.S. Army Corps of Engineers, National Marine Fisheries Service, and Maryland environmental regulatory agencies.

NPS, George Washington Memorial Parkway, Belle Haven Marina Improvement Planning and Environmental Assessment, Fairfax County, VA

Under contract with the NPS, Neville was Project Manager for an Environmental Assessment (EA) in accordance with NEPA requirements of potential improvements to a marina on the west bank of the Potomac River in Alexandria, Virginia, at the George Washington Memorial Parkway. The project involved creating multiple alternatives for future uses of the existing marina prior to the issuance of new concessionaire contracts. Specific issues involved archaeological resources, visual resources, transportation, visitor experience, and concessionaire services. Neville prepared four alternative designs for marina modifications and improvements, as well as oversaw development of a NEPA EA to document NPS compliance with applicable state and federal environmental regulations, including the Affected Environment and

R. Neville Reynolds, PWS

Environmental Consequences sections of the draft EA pertaining to tidal wetlands, floodplains, wildlife habitat, and rare/ endangered species.

Rivanna Water and Sewer Authority, Environmental Support, Albemarle, VA

For the Rivanna Water and Sewer Authority (RWSA), Neville served as Environmental Project Manager involved in the overall development of alternatives analysis, impact assessments, and permitting for a major water supply project for the City of Charlottesville and Albemarle County. He provided overall project management, including client and attorney coordination, in the development of permitting and mitigation strategies. He was also lead author for permit support documentation, which included detailed alternatives analysis, impact assessment, and development of a mitigation proposal. Neville directed a technical team in the assessment of aquatic resource impacts associated with alternatives, including rigorous evaluation of streams and wetlands for the Ragged Mountain Reservoir expansion alternative and the James River Pipeline alternatives. He developed a wetland and stream mitigation strategy that improved existing RWSA land holdings in watersheds flowing to water supply reservoirs, and his team developed detailed construction plans and specifications for several miles of riparian stream habitat and more than 6 acres of wetlands. As part of this project, Neville conducted numerous public and interagency meetings to gain public support and final local, state, and federal approvals for the selected alternative.

VADCR, Widewater State Park, Stafford County, VA

Under contract with the Virginia Department of Conservation and Recreation (VDCR), Neville is Principal-in-Charge of VHB's integrated services team that is planning, permitting, and developing construction plans and specifications for this new state park on the Potomac River. Efforts include drawings, bidding, and construction-phase services associated with the development of 1,100 acres of land on the widewater peninsula. The project includes roadway and transportation infrastructure improvements, shoreline stabilization, stormwater drainage improvements, a visitor center, ranger cottages, canoe and kayak launches, picnic shelters, and related amenities. The construction budget for the project is an estimated $7.5 million.

James R. Long, PE

Support Services

Education

MS, Public Works Engineering, George Washington University, 1985

MS, Engineering Management, Air Force Institute of Technology, 1981

BS, Environmental and Natural Resource Engineering, State University of New York, 1980

BS, General Engineering, Syracuse University, 1980

Registrations

Professional Engineer VA, 1987

Professional Engineer DC, 1998

Professional Engineer MD, 1986

Professional Engineer WV, 1989

Professional Engineer NY, 2006

Affiliations/Memberships

American Society of Civil Engineers, Maryland

Jim is a Professional Engineer with close to four decades of experience on a wide range of land development, infrastructure, and transportation projects throughout the Mid-Atlantic region. He has a wealth of experience in all phases of project delivery including due diligence investigations, concept development, construction documents, permitting/entitlements, construction administration, and turnover/commissioning. He is also a veteran who completed five years of military service in the USAF Civil Engineering Corps with the rank of captain.

38 years of professional experience

WMATA, Largo Blue Line Extension, Washington, DC

Prior to joining VHB, Jim was Senior Civil Engineer for the civil/site portion of three contracts for the construction of a 3-mile extension of the WMATA system to include two new stations.

WMATA, New York Avenue Infill Station, Washington, DC

Prior to joining VHB, as Senior Civil Engineer, Jim directed and/or prepared civil plans for two contracts related to the construction of an infill station on the WMATA red line. He prepared sediment and erosion control and stormwater management plans.

VRE, Manassas Park Station Parking Expansion, Manassas Park, VA

Served as VHB's Project Manager for the preliminary design of a 560-space parking garage, associated roadway improvements, and pedestrian bridge/platform extension to increase parking capacity on this heavily used commuter station. Construction of the new facilities is slated to begin in 2019.

VRE, Midday Layover Yard, Washington, DC

Served as VHB's Lead Civil Engineer for the design of new storage tracks for VRE train sets in Washington, DC. Initial work on the project included coordination with permitting agencies and utility companies that will be involved in approval of the project.

City Center DC Mixed Use Development, Washington, DC

Prior to joining VHB, Jim served as Civil Project Manager for the design of a new 10-acre mixed-use development on the site of the old DC Convention Center for Hines. The project included the construction of 10th and Eye Streets NW on their original historical alignments; construction of new storm, sanitary, water, electric, and telephone lines; construction of a new public park; and the construction of two rental housing towers, two condominium towers, and two office building towers, all having first-floor retail components. The project required numerous permits and approvals from various District of Columbia government agencies.

4th Street SW Reconstruction, Washington, DC

Prior to joining VHB, Jim served as Project Manager for Vornado for the design of roadway and utility improvements for the reopening of 4th Street SW between M and Eye Streets. The improvements included new bicycle lanes, parking and lay-by lanes, streetscape improvements, new traffic signal and street lights, storm drainage system upgrades, and mid-block speed table. Improved pedestrian access was also provided to the existing Waterfront Metrorail Station, which fell within the limits of the project.

VDOT, Elizabeth River Tunnels Retrofit, Portsmouth, VA

Prior to joining VHB, Jim worked on a project for the Virginia Department of Transportation (VDOT) that included miscellaneous repairs and upgrades to the existing Downtown and Mid-town tunnels, in addition to the installation of four new guard booths for truck and large-vehicle inspections. The project also included the installation of over-height detection equipment at each of the new guard booths, as well as closed-circuit television camera systems.

Tim Smith, PE, ENV SP

Utility Coordination

Education

BS, Civil Engineering, Virginia Polytechnic Institute and State University, 2010

Registrations

Professional Engineer VA, 2015

Professional Engineer MD, 2017

Professional Engineer DC, 2017

Envision™ Sustainability Professional, 2013

Affiliations/Memberships

International Council of Shopping Centers, Next Generation

Tim is a Project Manager and Lead Site/Civil Engineer with a focus on retail and institutional programs across the Mid-Atlantic region. He has developed strong relationships with both the public and private sector across various jurisdictions throughout the Washington, DC, region. He has an excellent record of client service and commits to delivering the highest level of quality for all client needs. His experience ranges from concept plan and due diligence through as-built and bond release support, with a focus in utility design, grading, water quantity design, water quality design, and any stormwater management obligation design that is required for various jurisdictions across the metropolitan Washington area. He takes pride in his ability to understand the importance of the design elements, but also the importance of understanding the challenges of the reviewing agencies and knowing how to anticipate and overcome those challenges.

9 years of professional experience

Children's National Research and Innovation Campus, Washington, DC

Tim is providing lead site/civil engineering service and assistance in plan preparations in accordance with the DC regulatory and reviewing agencies for the redevelopment of a 12-acre portion of the former Walter Reed Army Medical Center campus. Working alongside the architect-led team, Tim has gained invaluable experience and developed strong relationships with parties immersed in the DC permit and approval processes, with a focus in the DOEE stormwater obligation requirements.

West Broad Marketplace, Richmond, VA

Tim was the lead Civil Engineer for the planning and civil design for an approximately 60-acre development in Richmond that will ultimately consist of a Cabela's, Wegmans, two retail shopping centers, and four pad sites. The site was comprised of eight existing parcels, which were consolidated into one and then later broken out into five parcels, and Plans of Development, all of which required full site engineering design and concurrent permitting. Tim provided engineering support for roadway design, site design, water quality and stormwater management, erosion and sediment control, site grading and utility design. In addition to the design services, Tim also provided services for permitting, stormwater as-builts, planning commission hearing preparations, easement and plat recordation, and construction related services.

Carter's Grove Plantation, Williamsburg, Virginia

Tim provided stormwater management and site drainage conveyance design and site engineering services on the Carter's Grove Plantation Project. This project required VHB to provide site/civil engineering, surveying, and environmental services. This integrated approach required a high level of coordination and adaptability as the design and project progressed. The project included a master plan for the 486-acre property to serve as the roadmap to more than 15 small- to large-scale projects. Projects included historic renovation of the mansion;

renovation of the existing Caretakers Cottage; addition of the new two-story wing with the basement control room; installation of the new sanitary sewer system with six wastewater pump stations and more than 10,000 linear feet of force main; implementation of four stream restorations; redesign and upgrade to more than a mile of internal roads and two property entrances; installation of an excessive storm drain system; and the reconstruction and expansion of an existing farm pond.

NPS, Thomas Jefferson Memorial Targeted Accessibility Improvement Program Project, Washington, DC

For the National Park Service (NPS), Tim is providing lead site/civil engineering services and assistance in plan preparation and permitting for the stormwater component of this accessibility improvement project at the Thomas Jefferson Memorial. This project has given him the opportunity to showcase his knowledge and ability to navigate the stormwater obligation and erosion and sediment control approval process with DOEE. With his experience, he has added significant value to the entire project team by providing information on the challenges and risks that are likely to materialize through the approval process. This information has allowed the NPS team to anticipate and prepare for these challenges and keep the project on schedule.

Cathedral Commons, Washington, DC

Tim provided site/civil engineering services and assistance in plan preparations for a complex mixed-use site in Northwest DC. The site development features a 64,000 SF Giant Supermarket, 128 apartment housing units, eight townhouses, and 60,000 SF of retail space. Cathedral Commons is a unique development that has transformed a previously underutilized site, fronting Wisconsin Avenue, into a vibrant urban community.

Catholic University of America, West Campus Gateway, Washington, DC

Tim provided lead civil engineering for the planning and civil design for a new entrance road that will be known as the Campus Gateway at Catholic University of America, connecting North Capitol Street NE to Harewood Road NE. The design addressed CUA's difficult topography issues and drainage constraints.

LeDroit Park Green Infrastructure Project, Washington, DC

Tim supported design services for a stormwater management project using low-impact development techniques in the LeDroit Park neighborhood, which had been experiencing flash flooding and stormwater ponding during heavy rainfalls due to an over-capacity combined sewer network.

World War I Memorial Renewal, Washington, DC

Tim is supporting the multidisciplinary design team by providing site/civil engineering services in support of the design of the National World War I Memorial, known as the "The Weight of Sacrifice" World War I Memorial.

Peter A. Clary, PE

Quality Management

Education

BS, Civil Engineering, Clarkson University, 1987

Registrations

Professional Engineer (CE-HWY) NH, 1992

Professional Engineer ME, 2001

Affiliations/Memberships

American Society of Civil Engineers

New Hampshire Public Works and Municipal Engineering Association

American Society of Highway Engineers, Virginia

Pete is the Director of Transportation Engineering in VHB's Tysons, VA, office. With a varied background in the transportation industry, his planning, preliminary, and final design experience for transportation infrastructure facilities, along with his construction experience on highway and bridge projects, enable him to balance the needs of each project. Pete's previous employment with the New Hampshire Department of Transportation has equipped him with a comprehensive understanding of overall project development from concept preparation through construction. His project experience includes interchanges, arterials, intersections, roundabouts, trails, and parkways including design-bid-build and design-build project delivery.

32 years of professional experience

DDOT/Long Bridge Environmental Impact Statement Task 4, Washington, DC

Pete is assisting with the development of materials, engineering analysis, and coordination activities for the NEPA process for this project.

NHDOT, I-293 Exits 6 and 7 Improvements, Manchester, NH

For the New Hampshire Department of Transportation (NHDOT), Pete is the Highway Task Manager for the I-293 improvements project as it passes through Manchester. The project involves consideration of the widening and realignment of the mainline, the reconfiguration of Exit 6, and the relocation of Exit 7, as well as Transportation Demand Management (TDM) and Transportation System Management (TSM) measures including the assessment of alternative modes of travel. A key element in the development and evaluation of alternatives is maintaining an open and consensus-driven public outreach process.

NHDOT, Spaulding Turnpike/ Little Bay Bridges Final Design, Newington-Dover, NH

For NHDOT, Pete was Project Manager for the roadway and bridge final design for the $270M Spaulding Turnpike Improvements Project. The project included roadway design, right-of-way, a retaining wall, environmental design and analysis, landscape design, and traffic engineering, including ITS integration. The focal point of the project was two 1,600-foot-long Little Bay Bridges. The new bridge design was a dual design of both steel and concrete girder superstructures. The project included an extensive public involvement process through many public meetings and the development of the newsletter and website.

Maine Turnpike Authority, Exit 63 Interchange Improvements, Gray, ME

Pete is the Project Manager for the reconstruction of the Exit 63 interchange in Gray, Maine. The project involves relocating the southbound ramps to the west side of the interchange, removing the existing southbound ramps bridge, and realigning the northbound ramps. It also includes parallel acceleration lanes entering the turnpike, widening Route 202 and Route 26A to accommodate the projected traffic patterns, providing minor repairs to the Route 202 bridge, and interconnecting the two signals at the interchange with the two signals in Gray Village. Pete is responsible for overseeing the feasibility study, preliminary and final design, and construction support services.

Langley Parkway Construction, Concord, NH

Pete was Project Manager for the roadway design and construction of Langley Parkway South and the reconstruction of Clinton Street. The project encompassed preliminary design through final design, including the public meeting process, environmental permitting, right-of-way negotiation, and bid document development.

NHDOT, Design-Build Procedures Development, Bedford, NH

For NHDOT, Pete was Client Representative and Highway/Utility/Right-of-Way Discipline Representative on setting design parameters for assisting NHDOT with the development of contract documents needed to engage a design-build team to complete the design and construction of a template design-build project in Bedford, NH.

Wire Road at Daniel Webster Highway Intersection Improvement Study, Merrimack, NH

Pete was Project Manager for a project to identify alternatives to improve the Wire Road intersection, which has been the site of multiple car crashes for years. The project involved such alternatives as a roundabout or realigning the road to form a conventional 90-degree intersection. VHB also studied the driveway to determine if it should be an exit-only approach or a two-way approach. The current driveway, which is several hundred feet south of the intersection, was also examined to determine if full, partial, or no-access should be provided. VHB also evaluated the traffic volumes and turning movements for both alternatives to establish the appropriate lane usage and queue lengths approaching the intersection.

Woodbury Avenue Roadway Improvements, Newington, NH

Working closely with both the Town of Newington and NHDOT, Pete is the Project Manager for two intersection improvements. Currently, VHB is working with the Town on a project to include right-turn lanes along Woodbury Avenue at the signalized intersections of Piscataqua Dive and the Fox Run Crossing. The westbound right-turn lane will be added at the Piscataqua Drive intersection, and the eastbound right-turn lane will be added at the Fox Run Crossing intersection. The project involves coordination with NHDOT, as it is closely related to the larger project to improve the Spaulding Turnpike from Newington to Dover.

Joyce Tsepas, AICP

Agency/Stakeholder Coordination

Education

MCRP, City and Regional Planning, Georgia Institute of Technology, 2005

BS, Architecture, Georgia Institute of Technology, 2003

Registrations

American Institute of Certified Planners, 2014

Affiliations/Memberships

American Planning Association, National Capital Area Chapter

Urban Land Institute

WTS International

Lambda Alpha International, George Washington Chapter

Joyce is a Senior Project Manager and stakeholder engagement specialist in the Washington, DC, region. She has managed a range of complex plans and studies while working for both the public and private sectors. She regularly works on interdisciplinary teams and is familiar with the collaborative effort that leads to successful implementation through planning and consensus building. Joyce has led and supported neighborhood revitalization plans, corridor plans, environmental studies, feasibility studies, transit-oriented development plans, pedestrian and bicycle network studies, and transit access plans.

15 years of professional experience

Crystal City Station Multimodal Study, Crystal City, VA

Joyce was the Project Manager for a study for JBG SMITH to evaluate the potential of building a direct connection between Reagan National Airport and Crystal City over the George Washington Memorial Parkway and CSXT corridor. Tasks included developing a walkshed analysis, evaluating future market potential associated with multimodal improvements, and determining design opportunities and engineering constraints for the connection. Joyce is currently managing a follow-up study, which includes facilitating Working Group conversations with the National Park Service, CSXT, VRE, Amtrak, and the Metropolitan Washington Airports Authority (MWAA).

USRC, Washington Union Station Expansion Project and Environmental Impact Statement, Washington, DC

For the Union Station Redevelopment Corporation (USRC), Joyce is providing station access and multimodal design services for the Union Station EIS, which seeks to expand and modernize the multimodal transportation facilities at Washington Union Station, while preserving the historically significant building. The project includes reconstructing tracks, developing new concourse facilities, and improving multimodal transportation services and connectivity.

WMATA, Metrorail Station Area Improvement Strategic Investment Plan, Washington, DC

Prior to joining VHB, Joyce was Project Manager for the Washington Metropolitan Area Transit Authority (WMATA) Strategic Investment Plan to prioritize pedestrian and bicycle investments surrounding all 91 Metrorail stations in the region. Key elements of the study included review of local plans for pedestrian and bicycle improvements near Metrorail stations, development of capital cost estimates, and evaluation of projects based on their potential to increase ridership, improve safety, serve minority and low-income populations, and change modes of station access. A walkshed analysis was developed to demonstrate the value of new pedestrian linkages, and an interactive map was developed so that jurisdictions could review and comment on pedestrian and bicycle improvements.

Joyce Tsepas, AICP

VRE, L'Enfant Station Improvements, Washington, DC

Joyce was Project Manager for the Virginia Railway Express (VRE) project to replace the platform at L'Enfant Station to improve railroad operations and alleviate platform crowding. Tasks include origin-destination analysis, walkshed, analysis, land use and property ownership research, and coordination with stakeholders like the Southwest BID, WMATA, NCPC, GSA, DDOT, and OP. Future phases of the effort will assess the feasibility of improving connections to WMATA's L'Enfant Plaza Metrorail Station and the bus network.

Crystal City BID, Crystal City to Ronald Reagan Washington National Airport Pedestrian Connection Feasibility Study, Crystal City, VA

Joyce served as Project Manager for a study to evaluate the potential of building a pedestrian walkway between Reagan National Airport and Crystal City to reduce the walk time between these two destinations from 20 minutes to 5 minutes and create an aerotropolis. Tasks included conducting an alternatives assessment with a walkshed assessment and constructability assessment; and leading outreach through public meetings (broadcast through Facebook Live) and working group meetings with WMATA, VRE, CSXT, Amtrak, MWAA, NPS, NCPC, and JBG SMITH. VHB also developed a business brochure to promote the project and a final report with an implementation roadmap.

William B. Gallagher, Jr., FAIA

Principal Architect

Education

MArch, Urban Design, Harvard University, 1986

BA, University of Tennessee, 1976

BS, Mathematics, Wake Forest University, 1970

Registrations

Registered Architect in the District of Columbia, the State of Maryland, Hawaii, and the Commonwealths of Massachusetts and Virginia

Affiliations/Memberships

American Institute of Architects—Fellow

National Council of Architectural Registration Boards

Lambda Alpha International

KGP design studio

As one of the founding principals of KGP Design Studio, Bill leads the firm's transit, urban design, and planning studio. He has more than 40 years of experience designing and managing projects including architecture, master planning, and multiple transportation modes. As chief facilities designer for several transit systems he has worked with many international corporations in the United States, Asia, and the Middle East. He has been involved in creating and integrating transit systems that have played vital roles in the development of communities in local and regional environments.

Currently, Bill and KGP are the architects for the renovation of Washington Union Station Concourse and a member of the Master Plan team. The Concourse will have expanded patron areas, additional egress with a new First Street Entrance, improved garage access, and a new Club Acela. Also for Amtrak at Penn Station NYC, the Club Acela and "fishbowl" are being rehabilitated. Through multiple task order contracts with the Washington Metropolitan Area Transit Authority (WMATA), Bill is leading many facility designs and planning projects: the new Potomac Yard Station, the design and construction of the Rosslyn and Medical Center Deep Rock Station Entrances, the new Assembly Building for the Dulles rail cars, and new bicycle storage buildings at multiple stations. Current planning projects include the Crystal City, Foggy Bottom, Court House, and White Flint new station entrances and the Farragut Pedestrian Passageway.

Since 2000, Bill has been designing WMATA projects including the Dulles Corridor Rapid Transit Project, General Plans, and Environmental Impact Statement. He led the production of all the station drawings and master plan concepts for the station areas, including the creation of urban plazas, bicycle facilities, and pedestrian connections. For the Tysons Tunnel, Bill led the architectural design creating the Preliminary Engineering Drawings for the four underground stations. Other projects from design through construction include:

- Design of new station entrances completed at King Street, Ballston, and Navy Yard. Ongoing designs include Union Station, New Carrollton, Anacostia, Congress Heights, Forest Glen, Glenmont, Gallery Place, L'Enfant Plaza, Shady Grove, and Brookland;
- Design of pedestrian tunnel connections from Farragut North to West and Metro Center to Gallery Place;
- Facilities designs for the Revenue Collection Facility, the Operations Control Center, Police Training Facility, Greenbelt Test Track, and various bus facility renovations in the system;
- Design of the "station of the future"—prototype refurbishment for all the underground Metro Stations.

Related planning projects include Taming Tysons, a Master Plan for all of Tysons Corner created by Bill. This was an attempt to help Fairfax County come to grips with the new urban form that needs to evolve as Metrorail comes to Tysons. The introduction of an urban pedestrian grid, bicycle paths, and urban housing are key to making this plan a reality.

William B. Gallagher, Jr., FAIA

Honors/Awards

Tysons Tunnel, AIA|DC Honor Awards Un-built Projects

Purple Line Bridges, AIA|DC Honor Awards, Un-built Projects

Clemson University Performing Arts Center (Honorable Mention)

Korean War Memorial, Washington, DC (Honorable Mention)

Teaching

University of Hawaii School of Architecture, Studio Instructor, 1990–1993

Harvard University Graduate School of Design, Teaching Assistant, 1985–1986

Boston Architectural Center, Studio Instructor, 1985–1986

For DDOT, projects have included a pedestrian bridge connection to the Potomac River from the Kennedy Center, an urban plan for Pennsylvania Avenue west of the White House, the Bicycle Transit Center at Union Station, bike trails, and the stations for DC Streetcar.

With MTA (Maryland Transit Authority), Bill led the station facilities and urban design for 12 stations on the Purple Line connecting Bethesda to New Carrollton, including intermodal stations and joint development projects. He also served as the lead Urban Designer for all the station areas of the Baltimore Red Line and led public outreach for the Canton Stations and MARC Stations at West Baltimore and Bayview. For BRT, he led the urban design for the Corridor Cities Transit BRT.

In Honolulu, Bill worked on the transit system for 27 years. Starting in 1991, he led the design of four stations and the urban design and public outreach for all the stations. In the late 1990s, he worked on the light-rail version of the project. In 2008, he and KGP became the prototype station designers for the entire transit system, working architectural consultants to Parsons Brinkerhoff. In Seattle, Bill and KGP were brought in to bring the City's monorail back in budget and potentially extend it through the city.

Other international transit design includes the EDSA Line III Metro Rail Project in Manila, Philippines, where Bill's management and station design responsibilities included the entire system as consultants to Mitsubishi Heavy Industries. Bill also served as the designer and manager for all the transit facilities and urban integration of the Tel Aviv Red Line Transit System in Israel in 2000 as the architectural design consultant for Parsons Transportation Group.

In Manila, KGP and Bill created the first joint development project covering a recently designed station, also by Bill. All access to the Shaw Metro Station passes through the joint development, which serves as an entry point into a 24-hectare brownfield transit-oriented development site. A new master plan was created by KGP for a mixed-use community surrounding a large urban park with commercial on the ground levels and housing, recreation, and cultural institutions all within walking distance of the transit station. When complete, the site will contain 20 million square meters of new space.

Ethan Marsh

Architectural Design

Ethan is a Project Manager and Architectural Designer at KGP, with more than a decade of experience in the field. As Supervising Manager of the technical/production team, Ethan manages the daily activities of the project's production team, including delivery schedule, construction detailing, and coordination with engineers and other specialty contractors. His training and expertise includes a broad range of BIM, 3D modeling, environmental analysis/simulation, and visualization software packages. This skillset, combined with more than 10 years of experience in architecture, has allowed Ethan to develop a streamlined workflow and design process where quantitative analysis, design alternatives, and document production are forged into a single, unified design product.

Education

MArch, Southern California Institute of Architecture, 2010

BA, Architecture, Lehigh University, 2000

Teaching Positions

Visiting Critic, Washington-Alexandria Architecture Center, Virginia Tech (2013)

Visiting Instructor, UCLA-AUD Crash Course Revit Workshop UCLA (2011) Graduate Design Development Class

Teaching Assistant, Southern California Institute of Architecture (2010) Graduate Design Studio

Teaching Assistant, Southern California Institute of Architecture (2009)

Montgomery County DOT, MD355 Bethesda Medical Center Station, Bethesda, MD

Ethan acts as the Architectural Project Leader, coordinating the architecture, construction documents, and construction administration for the $80 million Metro project comprising a new all elevator entrance to the Medical Center Station, related modifications to the existing station, and a pedestrian tunnel under Route 355. A new mezzanine was created 115 feet below grade with service rooms below. The pedestrian tunnel has two elevators and stairs on both sides of the street for 24-hour ADA access. Stakeholders include WMATA, Montgomery County, MDOT, Navy Medical, and NIH. The project is being built under a design-build contract led by Clark.

WMATA, Potomac Yard Metro Station Design-Build Project, Alexandria, VA

Ethan served as Project Manager for the 30% concept design development of the infill station on the Blue/Yellow Line of the Washington Metrorail. He led the design of several design alternatives for the alignment and station configuration within a fully developed and environmentally complex urban location, requiring the approval of multiple stakeholders. The station must visually blend into the George Washington National Parkway (controlled by the National Park Service) on one side, while offering close access and an urban presence on the other side, accommodating the developers who will help finance the station's construction. At the same time, the City of Alexandria's historic corridor requirements must be met, and the federal wetlands must be protected that are owned by the NPS. The new station is located next to operating passenger and freight railways which must remain operational. Under Ethan's direction, all these criteria were successfully met.

WMATA, Union Station First Street Entrance, Washington, DC

As Project Manager and Designer, Ethan led the first of three long-term strategies to expand the capacity of Union Station—an improved entrance on First Street. The design removed an internal ramp outside to the sidewalk, which created additional space in a crowded mezzanine area. A new stair is added to bring patrons up to the Amtrak Concourse and additional fare gates to improve passenger flow. A new large entrance opening is created in the

KGP design studio

Ethan Marsh

Honors/Awards

AIA BIM Award: Herbert C. Hoover Building Modernization Washington, DC (2006)

Design Journal Platinum Award: 2131 K St. NW , Washington, DC (2009)

BISNOW DC "35 under 35" One to Watch: Ethan Marsh, Washington, DC (2007)

IIDA Mid-Atlantic Chapter Silver Award: PBGC Office Interior (2006)

SCI-Arc Scholarship Winner, 2010

Publications & Exhibitions

SCI-Arc ONRAMP, No. 2, 2007-2009 Entry, Los Angeles, CA (2009)

Sci-Arc Spring Show, Los Angeles, CA (2009)

National BIM Lecture Series: BIM—Changing the Design and Construction Paradigm Lecture, Chicago, New Orleans, Washington, DC (2007)

"historic" stone wall surrounding Union Station train yard. This also allows natural light and air into the North Mezzanine. A new 116-foot-long stainless steel and glass entrance canopy will cover the new exterior ramp and stair, greatly improving passenger access and overall aesthetics. Numerous stakeholders and approvals were needed to compete this project, including WMATA, Union Station Redevelopment Corporation, DDOT, Amtrak, CFA, NCPC, and SHPO.

Brandon Blount

Designer/CAD

Education

MArch, Texas Tech University of Architecture

Brandon is a CAD Manager and Architectural Designer at KGP with a decade of experience in the field. Brandon oversees the daily activities of the project production teams, including the delivery schedule, construction detailing, and coordination with engineers and other specialty contractors. His expertise includes a broad range of BIM, 3D Modeling, and visualization software packages. These skills enable Brandon to streamline workflow for the design process and produce a single, unified design package for KGP's clients.

Washington Union Station Passenger Phase 1 Concourse Design, Washington, DC

In July 2012, the 2nd Century Partners released the Washington Union Station Master Plan. The Master Plan established a framework for creating a multimodal transportation center that would serve the needs of a growing customer base through the 21st century. Phase 1 of the Master Plan addresses current passenger and functional deficiencies in order to immediately improve passenger and visitor amenities. The major improvements revolve around renovating the existing passenger concourse and improving connections within the concourse and to the neighboring communities. As BIM Manager for the project, Brandon is charged with coordinating various disciplines, from the preliminary design through 100% construction documents.

WMATA On-Call Projects, Washington, DC

Brandon has been integral to several major capital projects, including: the infill station at Potomac Yards; the new Rosslyn Metrorail Station entrance, and the new metro entrance and pedestrian underpass for the NIH and Naval Medical Center complex. Additionally, Brandon has contributed his expertise to numerous WMATA planning projects. As Senior Designer, he was instrumental in conducting feasibility studies and developing design alternatives for new entrances to the Crystal City Metrorail Station, Navy Yard Metrorail Station, and L'Enfant Plaza Metrorail Station.

MTA Projects, Maryland

The Purple Line will use a new mass transit line to connect four Metrorail stations in Maryland in a crescent surrounding Washington, DC. This proposed line is projected to have 21 stations, many in areas currently under-served by public transportation. Brandon produced the drawing sets for the project team and designed various elements of the transit stations and public areas. He worked closely with the project manager to produce a final package of drawings, renderings, and alternatives analysis that fully presents the station facilities and alignment through local communities.

As a member of the Urban Design team, Brandon facilitated public involvement in the MTA Red Line by acting as a resource for both the public and the project team. He coordinated with the project manager to develop the overall station design, and he produced drawings and renderings that demonstrate how the design and alignment provide for greater accessibility to the station and integration into the surrounding communities.

KGP design studio

Manuel E. Feijoo, AIA, LEED AP

Project Architect

Manuel is a Registered Architect in New York, Virginia, DC, and Perú, and he is a LEED AP, with more than 30 years of experience in the USA and Latin America. He possesses strong management and people skills, as well as extensive knowledge of conceptual design through construction administration on commercial, mixed-use, hospitality, residential, and institutional projects.

Education

BA, Architecture and Urban Planning, Ricardo Palma University

MArch with Honors, Ricardo Palma University

Affiliations

American Institute of Architects, NY, DC, VA Chapters

National Council of Architectural Registration Boards (NCARB)

U.S. Green Building Council, USGBC, LEED AP

Peruvian National Board of Architects (CAP), Lima, Peru

Architectural Review Board, Kingstowne, VA

KGP design studio

Washington Union Station Passenger Phase 1 Concourse Design, Washington, DC

In July 2012, the 2nd Century Partners released the Washington Union Station Master Plan. The Master Plan established a framework for creating a multimodal transportation center that would serve the needs of a growing customer base through the 21st century. Phase 1 of the Master Plan addresses current passenger and functional deficiencies in order to provide an immediate improvement to passenger and visitor amenities. The major improvements revolve around the renovation of the existing passenger concourse and improving connections within the concourse and to the neighboring communities. Manuel serves as Project Architect for an accomplished multi-disciplinary team taking the redesign of the concourse through 100% construction documents.

Silver Line Dulles Corridor Metrorail Project, Washington, DC

The Dulles Corridor Metrorail Project is a 23-mile extension of Washington's existing Metrorail System by the Metropolitan Washington Airports Authority (MWAA). Phase 1 runs from East Falls Church with four stations in Tysons Corner and on Wiehle Avenue in Reston. Phase 2 picks up at the Phase 1 terminus location, Wiehle-Reston East, and continues in the median of the Dulles Toll Road and the Dulles Access Highway with three Metrorail stations: Reston Town Center, Hardon, and Innovation Center, including an aerial station at Dulles Airport and continuing on with two stops in Loudoun County. Manuel was the Project Architect for the Herndon Station of the new Silver Line, a ground-level station consisting of the Main Station, the Pavilion Entrances, Pedestrian Bridges, and a new elevator tower to connect to the existing parking facility.

CityCenter DC (with Shalom Baranes Associates), Washington, DC

Ten acres in the heart of the District have become a 2.5 million SF space with a mix of condos, apartments, offices, public spaces, hotel, restaurants, and shops. The signature neighborhood serves as a model for responsible, environmentally sensitive multi-use developments and has been accepted into the U.S. Green Building Council's pilot program for LEED Neighborhood Development. CityCenter Jewel Box was designed in conjunction with Foster + Partners. Manuel served as Project Architect, coordinating with all stakeholders on this $950 million project.

Joe Abidin

Construction Services

Education

BS, Civil Engineering, University of Virginia

Joe is responsible for achieving the client's goals through consistent communication and coordination with the client and architect, and direct management of Clark's project team throughout all phases of construction. With access to the full range of corporate resources, Joe will make sure that the project receives the personnel and equipment required to meet set objectives.

34 years of professional experience

WMATA, Dulles Corridor Metrorail Project—Phase II, Loudoun and Fairfax Counties, VA

$1.2B | Design-Build

Role: Executive Management

Clark's design-build services, as the lead member of the Capital Rail Constructors joint venture, include the extension of WMATA's Silver Line 11.4 miles west into Loudoun County, VA, from the Wiehle-Reston East Metrorail Station. The design-build scope of work includes six stations in Fairfax and Loudoun Counties, including an aerial station at Dulles International Airport.

WMATA, Rosslyn Station Access Improvements, Arlington, VA

$32.8M | GC

Role: Executive Management

Improvements to increase the safety and accessibility of Virginia's busiest Metrorail station, including the installation of three new high-speed, high-capacity elevators, an additional below-grade entrance mezzanine, a new kiosk, and a new emergency evacuation stairwell.

WMATA, Blue and Orange Line Rehabilitation, Washington, DC

$331M | Design-Build

Role: Executive Management

Design-build delivery for the rehabilitation of the Blue and Orange Lines, which entailed the upgrade and replacement of the electrical systems (including automatic train control systems, tunnel lighting systems, tie-breaker stations, and traction power supply), and mechanical systems. The project also required extensive track work and the improvement of several Metro stations along the Orange and Blue Lines extending from the National Airport to the Stadium Armory stations. These improvements included the upgrade and rehabilitation of elevators, escalators, architectural finishes, restrooms, and kiosks.

Montgomery County, MD 355 Crossing (BRAC), Bethesda, MD

$81.5M | Design-Build

Role: Officer-in-Charge

Clark's scope includes the design and construction of a below-grade pedestrian tunnel under Rockville Pike (MD 355), connecting the National Institutes of Health campus with the Walter Reed National Military Medical Center campus.

WMATA, Navy Yard Station Upgrades, Washington, DC

$17M | Design-Build

Role: Executive Management

Clark provided design-build services in response to anticipated ridership increases with the completion of the nearby Nationals Ballpark. Once all improvements to the site were completed, the Navy Yard Station, serving Metrorail's Green Line, tripled its capacity to accommodate

CLARK CONSTRUCTION

15,000 persons per hour. To accommodate this dramatic increase, the station entrance was relocated to street level and expanded, a new elevator (street level to the mezzanine) and new stairway (between the mezzanine and platform) were installed, and additional fare gates and fare card machines were provided. In all, 54 micropiles were installed through the vent shaft as a deep foundation to transfer load to suitable soil below the track invert.

WMATA, Brentwood Shop Expansion, Washington, DC
$46M | Design-Build
Role: Executive Management

Clark provided design-build services for the Brentwood Shop Expansion, an existing heavy maintenance shop that has been converted to a 12-car service/inspection shop with the addition of three new tracks, the consolidation of the heavy maintenance function from Brentwood yard into the existing Greenbelt rail yard, and relocation of light maintenance and office areas to the new Greenbelt facility. The scope of work encompassed upgrades of the electrical, mechanical, traction power, train control, communications, and other systems, and featured the installation of 45 micropiles (60 feet in length) with low headroom conditions. The project was recognized by the Design-Build Institute of America (DBIA) with a National Award of Excellence.

WMATA, Cheverly Abutment and Aerial Structure Rehabilitation, Cheverly, MD
$10.4M | Design-Build
Role: Executive Management

Clark provided design-build services to return the bridge and railroad, located close to the Cheverly Orange Line station, to their original location. The project included the rehabilitation of bridge piers, restoring proper drainage to the site, realigning approximately 500 LF of railroad tracks, and reworking the buried power, communication, and train control cabling.

WMATA, Metro Transit Police Department (MTPD) District II Substation and Training Facility, Springfield, VA
$23.8M | Design-Build
Role: Executive Management

Clark provided design-build services for the construction of the District II Substation and Training Facility. The scope included the construction of a 25,000 SF police station, a 30,000 SF training facility, and surface parking for 152 vehicles.

Fairfax County, Noman M. Cole PCP MCC and DC Replacement, Fairfax, VA
$72M | GC
Role: Executive Management

Clark's general contracting services for this project consist of replacing/upgrading 25 MCCs and 18 DCs and associated electrical appurtenances while the NMCPCP remains in continuous operation 24 hours a day, 7 days a week. The equipment is located in 15 different buildings throughout the NMCPCP. In addition to electrical work, the project includes new structures, instrumentation and controls, process mechanical, building services, offices, control rooms and locker rooms.

Mahmoud “Mo” Hosseini, PE

Construction Services

Education

DSC, ABC, Structural Dynamics, The George Washington University

MS, Structural Engineering, The George Washington University

BS, Civil Engineering, The George Washington University

Registrations

Registered Professional Engineer

As part of executive management, Mo is responsible for achieving the client’s goals through consistent communication and coordination with the client and architect, and direct management of Clark’s project team throughout all phases of construction. With access to the full range of corporate resources, he will ensure that the project receives the personnel and equipment required to meet set objectives.

36 years of professional experience

WMATA, Dulles Corridor Metrorail Project—Phase II, Loudoun and Fairfax Counties, VA

$1.2B | Design-Build

Role: Executive Management

Clark’s design-build services, as the lead member of the Capital Rail Constructors joint venture, include the extension of WMATA’s Silver Line 11.4 miles west into Loudoun County, VA, from the Wiehle-Reston East Metrorail Station. The design-build scope of work includes six stations in Fairfax and Loudoun Counties, including an aerial station at Dulles International Airport.

WMATA, Navy Yard Station Upgrades, Washington, DC

$17M | Design-Build

Role: Executive Management

Clark provided design-build services in response to anticipated ridership increases with the completion of the nearby Nationals Ballpark. Once all improvements to the site were completed, the Navy Yard Station, serving Metrorail’s Green Line, tripled its capacity to accommodate 15,000 persons per hour. To accommodate this dramatic increase, the station entrance was relocated to street level and expanded, a new elevator (street level to the mezzanine) and new stairway (between the mezzanine and platform) were installed, and additional fare gates and fare card machines were provided. In all, 54 micropiles were installed through the vent shaft as a deep foundation to transfer load to suitable soil below the track invert.

WMATA, Brentwood Shop Expansion, Washington, DC

$46M | Design-Build

Role: Executive Management

Clark provided design-build services for the Brentwood Shop Expansion, an existing heavy maintenance shop that has been converted to a 12-car service/inspection shop with the addition of three new tracks, the consolidation of the heavy maintenance function from Brentwood yard into the existing Greenbelt rail yard, and relocation of light maintenance and office areas to the new Greenbelt facility. The scope of work encompassed upgrades of the electrical, mechanical, traction power, train control, communications and other systems, and featured the installation of 45 micropiles (60-feet in length) with low headroom conditions. The project was recognized by the Design-Build Institute of America (DBIA) with a National Award of Excellence.

WMATA, Largo Town Center and Morgan Boulevard Stations, Largo, MD

$95M | Design-Build

Role: Executive Management

In a joint venture, Clark provided design-build services for the construction

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of two station facilities at Morgan Boulevard and Largo Town Center. The project included new station platforms and mezzanine canopies that mark a departure from WMATA’s standard design, wider platforms (34-feet compared to the existing 28-feet on current platforms), escalator stairpairs, elevators from the platform to the mezzanine, design and construction of “kiss and ride” and bus bays at both stations, child care facility at the Morgan Boulevard Station, surface parking for 596 park-and-ride vehicles at Morgan Boulevard, and two parking structures at the Largo Station that accommodate 2,100 vehicles.

WMATA, Mount Vernon Square Station Modifications, Washington, DC
$15M | GC
Role: Executive Management

Clark provided general construction services for a 9,000 GSF station expansion, including an enlarged passageway area highlighted by Metro’s characteristic paver tile and metal pan ceiling design, four escalators, two elevators, and miscellaneous maintenance and operations rooms including mechanical, electrical, and communications equipment and facilities. A utility tunnel also was constructed beneath 7th Street, bringing necessary power and communications from the existing station to the new facility.

San Diego State University, Tunnel & Station, San Diego, CA
$105M | GC
Role: Executive Management

Constructed under and through the San Diego State University (SDSU) campus, the $105 million, 4,000-foot SDSU Tunnel and Station connects to the 5.9-mile, Mission Valley East extension project. The SDSU Tunnel and Station project consists of four main areas: the west box, 900 feet of open cut and cover box culvert construction; 1,070 feet of New Austrian Tunneling Method (NATM) tunnel; the station, 670 feet of open cut and cover box support of excavation for the construction of the main station; and the east box, 1,000 feet of open cut and cover box culvert construction. The 50,000 SF trolley station is highlighted with a serpentine brick paving pattern and multiple other artistic elements including sculptures in the station and etched botanical images.

MTA, Light Rail Sections 7 & 8, Baltimore, MD
$16M | GC
Role: Executive Management

Clark provided a $16 million addition to a second light rail track between Linthicum Station and Cromwell Station, as well as to the spur to BWI Airport. The project included three single crossovers, one double crossover, five turnouts, one diamond crossing, one relocated turnout, and one salvaged turnout. Several retaining walls, grade crossings, platforms and related facilities, utility, drainage, and landscaping features were also constructed. Mo was also responsible for a number of underground duct banks, as well as a surface cable trough for signaling, power and communication cables, installation of new and removal of existing catenary, and signal pole foundations. The project team worked closely with MTA to develop a revised phasing plan that delivered the project ahead of schedule.

Phil Sheridan, PE, DBIA

P3/Design-Build Delivery

Bringing 35 years of experience, having worked on nearly $3 billion of design-build projects, Phil is a recognized industry leader in infrastructure design-build delivery. He is familiar with WMATA standards and systems and has worked on numerous WMATA projects in the past 16 years. From his experience on major projects, such as MWAA's Dulles Corridor Metrorail Project, Phase 2, Package A and WMATA's Orange and Blue Line Rehabilitation, Phil brings a problem-solving attitude with a strong appreciation of managing risk. He will lead the team with a strong emphasis on collaboration and the goal of maximizing the benefits of design-build delivery to produce a highly successful project.

Education

BS, Civil Engineering, Worcester Polytechnic Institute

Registrations/Certifications

Registered Professional Engineer

Design-Build Professional (DBIA)

Confined Space Entry Competent Person

OSHA 10-Hour Trained

Globally Harmonized System (GHS)

35 years of professional experience

WMATA, Dulles Corridor Metrorail Project—Phase II, Loudoun and Fairfax Counties, VA

$1.2B | Design-Build

Role: Design and Construction Integration Manager

Clark's design-build services, as the lead member of the Capital Rail Constructors joint venture, include the extension of WMATA's Silver Line 11.4 miles west into Loudoun County, VA, from the Wiehle-Reston East Metrorail Station. The design-build scope of work includes six stations in Fairfax and Loudoun Counties, including an aerial station at Dulles International Airport.

WMATA, Rosslyn Station Access Improvements, Arlington, VA

$32.8M | GC

Role: Executive Management

Improvements to increase the safety and accessibility of Virginia's busiest Metrorail station, including the installation of three new high-speed, high-capacity elevators, an additional below-grade entrance mezzanine, a new kiosk, and a new emergency evacuation stairwell.

WMATA, Blue and Orange Line Rehabilitation, Washington, DC

$331M | Design-Build

Role: Executive Management

Design-build delivery for the rehabilitation of the Blue and Orange Lines, which entailed the upgrade and replacement of the electrical systems (including automatic train control systems, tunnel lighting systems, tie-breaker stations, and traction power supply), and mechanical systems. The project also required extensive track work and the improvement of several Metro stations along the Orange and Blue Lines extending from the National Airport to the Stadium Armory stations. These improvements included the upgrade and rehabilitation of elevators, escalators, architectural finishes, restrooms, and kiosks.

CSX, Virginia Ave Tunnel, Washington, DC

Contract Cost Confidential | Design-Build

Role: Officer-in-Charge

Clark, in a joint venture with Parsons, led both design and construction efforts for a new freight rail tunnel system that operates under Virginia Avenue. The Virginia Avenue Tunnel Reconstruction project was one of the most complex and sensitive infrastructure projects recently constructed in the greater Mid-Atlantic Region, with a footprint stretching more than 10 city blocks from South Capitol Street to 14th Street. The massive undertaking included fully reconstructing the 110-year old, 3,800-foot-long tunnel, increasing the clearance of the tunnel to make room for double-stack intermodal container trains, and installing a second track. This project dramatically increased freight rail capacity through the I-95 corridor and to the Midwest.

WMATA, Navy Yard Station Upgrades, Washington, DC

$17M | Design-Build GMP

Role: Executive Management

Clark provided design-build services in response to anticipated ridership increases with the completion of the nearby Nationals Ballpark. Once all improvements to the site were completed, the Navy Yard Station, serving Metrorail's Green Line, tripled its capacity to accommodate 15,000 persons per hour. To accommodate this dramatic increase, the station entrance was relocated to street level and expanded, a new elevator (street level to the mezzanine) and new stairway (between the mezzanine and platform) were installed, and additional fare gates and fare card machines were provided. In all, 54 micropiles were installed through the vent shaft as a deep foundation to transfer load to suitable soil below the track invert.

Montgomery County, MD 355 Crossing (BRAC), Bethesda, MD

$81.5M | Design-Build

Role: Officer-in-Charge

Clark's scope includes the design and construction of a below-grade pedestrian tunnel under Rockville Pike (MD 355), connecting the National Institutes of Health campus with the Walter Reed National Military Medical Center campus.

WMATA, Brentwood Shop Expansion, Washington, DC

$46.5M | Design-Build

Role: Executive Management

Clark provided design-build services for the Brentwood Shop Expansion, an existing heavy maintenance shop that has been converted to a 12-car service/inspection shop with the addition of three new tracks, the consolidation of the heavy maintenance function from Brentwood yard into the existing Greenbelt rail yard, and relocation of light maintenance and office areas to the new Greenbelt facility. The scope of work encompassed upgrades of the electrical, mechanical, traction power, train control, communications and other systems, and featured the installation of 45 micropiles (60 feet in length) with low headroom conditions. The project was recognized by the Design-Build Institute of America (DBIA) with a National Award of Excellence.

WMATA, Cheverly Abutment and Aerial Structure Rehabilitation, Cheverly, MD

$10.4M | Design-Build

Role: Executive Management

Clark provided design-build services to return the bridge and railroad, located close to the Cheverly Orange Line station, to their original location. The project included the rehabilitation of bridge piers, and restoring proper drainage to the site.

Matt Ellis

Constructability

Education

BS, Civil Engineering, Bucknell University

Registrations/Certifications

OSHA 10-Hour Trained

Matt oversees the total field construction effort and field staff to ensure the project is constructed in accordance with design, budget and schedule. He supervises and coordinates Clark trades and all project subcontractors to ensure contract compliance. Matt facilitates communication between field engineers and subcontractors to make certain construction complies with drawings and specifications. He is responsible for project safety and quality control.

13 years of professional experience

WMATA, Dulles Corridor Metrorail Project—Phase II, Loudoun and Fairfax Counties, VA

$1.2B | Design-Build

Role: Senior Superintendent

Clark's design-build services, as the lead member of the Capital Rail Constructors joint venture, include the extension of WMATA's Silver Line 11.4 miles west into Loudoun County, VA, from the Wiehle-Reston East Metrorail Station. The design-build scope of work includes six stations in Fairfax and Loudoun Counties, including an aerial station at Dulles International Airport.

Montgomery County, MD 355 Crossing (BRAC), Bethesda, MD

$81.5M | Design-Build

Role: Superintendent

Clark's scope includes the design and construction of a below-grade pedestrian tunnel under Rockville Pike (MD 355), connecting the National Institutes of Health campus with the Walter Reed National Military Medical Center campus.

WMATA, Navy Yard Station Upgrades, Washington, DC

$17M | Design-Build GMP

Role: Project Engineer

Clark provided design-build services in response to anticipated ridership increases with the completion of the nearby Nationals Ballpark. Once all improvements to the site were completed, the Navy Yard Station, serving Metrorail's Green Line, tripled its capacity to accommodate 15,000 persons per hour. To accommodate this dramatic increase, the station entrance was relocated to street level and expanded, a new elevator (street level to the mezzanine) and new stairway (between the mezzanine and platform) were installed, and additional fare gates and fare card machines were provided. In all, 54 micropiles were installed through the vent shaft as a deep foundation to transfer load to suitable soil below the track invert.

WMATA, Brentwood Shop Expansion, Wahsington, DC

$46M | Design-Build

Role: Project Engineer

Clark provided design-build services for the Brentwood Shop Expansion, an existing heavy maintenance shop that has been converted to a 12-car service/ inspection shop with the addition of three new tracks, the consolidation of the heavy maintenance function from Brentwood yard into the existing Greenbelt rail yard, and relocation of light maintenance and office areas to the new Greenbelt facility. The scope of work encompassed upgrades of the electrical, mechanical, traction power, train control, communications and other systems, and featured the installation of 45 micropiles (60 feet in length) with low headroom conditions. The project was recognized by the Design-Build Institute of America (DBIA) with a National Award of Excellence.

Little Patuxent Water Reclamation Plant Addition No. 7—ENR Expansion and Improvements, Savage, MD
$92M | GC
Role: Superintendent

Clark, in a joint venture, provided preconstruction and construction phase services for various improvements, expansion, and process addition to the existing waste water treatment facility, including expanding the daily average treatment capacity of the plant by 8 million gallons per day with the addition of a new process reactor and final clarifier. The largest portion of the project was the addition of new denitrification filters, UV treatment system, methanol storage and pumping facilities, and fire suppression systems as part of the Enhanced Nitrogen Removal (ENR) facilities.

Washington Dulles International Airport, Main Terminal East and West Baggage Basements, Dulles, VA
$105M | GC
Role: Superintendent

Clark, as managing joint venture partner, provided general contracting services for the Main Terminal East and West Baggage Basements EDS In-Line High Volume Baggage Screening project. Construction spanned the entire main terminal and integrates the most advanced technology in baggage handling and inspection devices, including Explosive Detection Systems (EDS). The project team was responsible for reconfiguring and replacing the existing baggage conveyor systems, as well as upgrading the conveyor controls.

Washington Dulles International Airport, International Arrivals (IAB) Expansion, Dulles, VA
$101.9M | GC
Role: Project Engineer

Clark provided general contracting services for this phased expansion of the existing International Arrivals Building (IAB). The project encompassed site development and demolition, followed by the addition of 204,000 GSF, including 101,000 SF to the existing arrivals hall area and 93,000 SF to the baggage claim area.

John Munson

Construction Management

Education

BS, Mechanical Engineering, Virginia Polytechnic Institute and State University

Registrations/Certifications

OSHA 10-Hour Trained

John provides overall management direction for the project, establishing objectives and policies while maintaining liaison with the client and architect. He monitors construction and financial activities and serves as Clark's representative with primary financial and contractual responsibility for the project. With broad authority to commit Clark on matters of cost and schedule, John has the ability to reserve personnel and corporate resources to facilitate the project's success. He will attend all executive-level oversight meetings with the client and actively participate in the selection of the Clark project staff and subcontractors. Ultimately, John has principal responsibility for subcontractor performance in building a high-quality project safely, within schedule and to the satisfaction of the client.

10 years of professional experience

WMATA, Dulles Corridor Metrorail Project—Phase II, Loudoun and Fairfax Counties, VA

$1.2B | Design-Build

Role: Senior Project Manager

Clark's design-build services, as the lead member of the Capital Rail Constructors joint venture, include the extension of WMATA's Silver Line 11.4 miles west into Loudoun County, VA, from the Wiehle-Reston East Metrorail Station. The design-build scope of work includes six stations in Fairfax and Loudoun Counties, including an aerial station at Dulles International Airport.

Montgomery Country, MD 355 Crossing (BRAC), Bethesda, MD

$81.5M | Design-Build

Role: Senior Project Manager

Clark's scope includes the design and construction of a below-grade pedestrian tunnel under Rockville Pike (MD 355), connecting the National Institutes of Health campus with the Walter Reed National Military Medical Center.

WMATA, Rosslyn Station Access Improvements, Arlington, VA

$32.8M | GC

Role: Project Engineer

Improvements to increase the safety and accessibility of Virginia's busiest Metrorail station, including the installation of three new high-speed, high-capacity elevators, an additional below-grade entrance mezzanine, a new kiosk, and a new emergency evacuation stairwell.

WMATA, Cheverly Abutment and Aerial Structure Rehabilitation, Cheverly, MD

$10M | Design-Build

Role: Project Engineer

Clark provided design-build services to return the bridge and railroad, located close to the Cheverly Orange Line station, to their original location. The project included the rehabilitation of bridge piers, restoring proper drainage to the site, realigning approximately 500 LF of railroad tracks, and reworking the buried power, communication, and train control cabling.

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John Munson

Bart Hayward Maintenance Facility Phase I, Hayward, CA
$106.9M | GC
Role: Senior Project Manager

Clark's general contracting services include the renovation of an existing service existing service and inspection shop for the San Francisco Bay Area Rapid Transit District (BART) and construction of a new component repair shop facility. A 135,000-square-foot industrial component repair shop replaces the existing warehouse building. The existing truck, wheel, and axle shop equipment will be housed in the new facility. Additionally, the installation of 4,000 linear feet of new track connects the yard to the shop.

Clarendon Center North, Arlington, VA
$29M | GC
Role: Office Engineer

The north block includes a six-story, 98,000-square-foot office building with an additional 14,000 square feet of ground-floor retail space and three levels of below-grade parking. Clark Foundations performed the excavation, sheeting, and shoring work for Clarendon Center. The site posed distinct challenges for the team. The Metrorail Orange Line runs under the north side of the project site, and at places, the Metrorail tunnel is just 3 feet beneath the below-grade structure.

Arena Stage at the Mead Center for American Theater, Washington, DC
$103M | GC
Role: Office Engineer

Clark provided preconstruction and general contracting services for the 260,000 GSF renovation and expansion of Arena Stage at the Mead Center for American Theater. Arena Stage's two current stages—the Fichandler and the Kreeger—were completely restored and renovated to improve acoustics and upgrade technical equipment. The theaters were enclosed by a new 45-foot-high glass curtain wall supported by custom wood columns. The glass allows transparency from the exterior to the interior space, showcasing the historic theaters. Additionally, Clark constructed the Arena Stage's third performance space, the concrete Cradle Theater. The Cradle also supports the new roof structure, which creates an expanded lobby serving all three theaters. The expansion also includes support facilities, offices, underground parking, and a café.

U.S. Coast Guard Headquarters, Washington, DC
$652M | GC | LEED Gold
Role: Office Engineer

Clark provided design-build services for the construction of the U.S. Coast Guard Headquarters, the first stage of the Department of Homeland Security's consolidation program. The new building provides 1.2 million GSF of office space, a central utility plant, and one seven-story, stand-alone parking garage. In addition to core and shell construction, Clark was also responsible for the interior fit-out of the headquarters building. The project originally targeted LEED Silver, but ultimately acheived LEED Gold certification.

Ryan McBride, PE

Construction Management/Construction Engineering

Education

BS, Civil Engineering,
University of Maryland

Registrations/Certifications

Registered Professional
Engineer

Ryan plans, monitors, and supervises on-site construction engineering and administration activities and advises on any preconstruction effort. He maintains liaison with the client and architect regarding project progress. Ryan ensures that project administration activities comply with company and client requirements, providing interpretation of design and application of construction methods. Additionally, he oversees project management staff and supervises all activities related to contract administration, including any small business administration programs, shop drawing reviews, submittals, procurement, payment requisition, and schedule.

8 years of professional experience

WMATA, Dulles Corridor Metrorail Project—Phase II, Loudoun and Fairfax Counties, VA
$1.2B | Design-Build
Role: Senior Project Manager

Clark's design-build services, as the lead member of the Capital Rail Constructors joint venture, include the extension of WMATA's Silver Line 11.4 miles west into Loudoun County, VA, from the Wiehle-Reston East Metrorail Station. The design-build scope of work includes six stations in Fairfax and Loudoun Counties, including an aerial station at Dulles International Airport.

WMATA, Rosslyn Station Access Improvements, Arlington, VA
$32.8M | GC
Role: Project Manager

Improvements to increase the safety and accessibility of Virginia's busiest Metrorail station, including the installation of three new high-speed, high-capacity elevators, an additional below-grade entrance mezzanine, a new kiosk, and a new emergency evacuation stairwell.

WMATA, Cheverly Abutment and Aerial Structure Rehabilitation, Cheverly, MD
$10M | Design-Build
Role: Project Manager

Clark provided design-build services to return the bridge and railroad, located close to the Cheverly Metrorail station, to their original location. The project included the rehabilitation of bridge piers, restoring proper drainage to the site, realigning approximately 500 LF of railroad tracks, and reworking the buried power, communication, and train control cabling.

Reconstruct National Mall Turf and Soil—Phase II, Washington, DC
$22M | GC
Role: Project Manager

Clark's general contracting services for the second phase of turf and soil rehabilitation on the National Mall included soil re-engineering, granite curb replacement, installation of underground water collection and drainage systems, and the re-establishment of the turf. A new drainage and irrigation system replaced the existing irrigation system, including the installation of two stormwater cisterns under the new sodded turf panels.

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Jim Gast, AIA

Station Design Manager

Education

BArch, Cornell University, 1982

Professional Activities, Publications and Presentations

Member, Transportation Research Board (TRB) Standing Committee on Passenger Intermodal Facilities—AP045

Co-author: Viva: A Case Study and Evaluation of Branded BRT Infrastructure, presented at the Transportation Research Board's (TRB) 2009 Conference

Co-author: Planning & Implementation Guidelines for Bus Rapid Transit, Transit Cooperative Research Board (TCRP) Publication A-23

Presenter: Transit in North American Suburbs: Planning Opportunities & Challenges, presented at the Canadian Institute of Planners—Ontario Professional Planners Institute (CIP-OPPI) 2004 Conference

Presenter: Facilities Planning & Design Considerations for BRT, presented at the 2002 APTA Rail Transit Conference

Jim is an Associate Vice President and Senior Project Manager. He has extensive experience in planning, design, and implementation of multimodal transportation facilities, station-area urban design, and transit-oriented development (TOD). His broad project experience includes passenger and maintenance facilities for commuter rail, heavy rail, light rail transit and bus rapid transit, and transit facility asset management. He has practiced in all phases of planning and project implementation, and in facility design from schematic design through construction administration. He has worked in both traditional design-bid-build and design-build project-delivery environments.

37 years of professional experience

Dulles Corridor Metrorail Project (DCMP), Fairfax and Loudoun Counties, VA

Jim managed facility design for the DCMP General Plans and environmental impact statement (EIS). Subsequently, he managed preliminary engineering for the 2.5-mile airport segment, which includes an aerial station directly opposite the historic main airport terminal. In this role he oversaw the work of civil, structural, track, architectural, and system disciplines. Previously, he served as deputy project manager for facilities. In this role, Jim supported the project's planning and environmental documentation process by preparing and evaluating designs for BRT and heavy rail passenger stations under various technology and alignment alternatives, as well as ancillary facilities such as maintenance and storage facilities for rail and bus, and parking structures.

Washington Metropolitan Area Transit Authority (WMATA), Potomac Yard Metrorail Station, Alexandria, VA

The Potomac Yard Station is being added as a new infill stations on the Metrorail Blue Line between the National Airport and Braddock Road stations. Jim managed concept design development and 30% design documentation for the station's entrance pavilions. He also supported WMATA during procurement of the project's design-build contractor.

MTA Purple Line, Montgomery and Prince George's Counties, MD

The Purple Line is a 16-mile Light Rail Transit (LRT) line with 21 passenger stations extending inside the Capital Beltway.The Purple Line will connect the major business districts and activity centers of Bethesda, Silver Spring, College Park, and New Carrollton. The line will provide direct connections to Metrorail at Bethesda, Silver Spring, College Park, and New Carrollton, as well as connect to all three MARC lines, Amtrak, and local bus routes. As an extension of Maryland Transit Administration (MTA) staff, Jim is providing oversight of the General Engineering Consultant (GEC) architectural and urban design team and is preparing procurement documents for design, construction and operation of the project under a Public-Private Partnership (P3).

Denver Union Station, Denver, CO

As part of a contractor-led design-build team, Jim managed final design of station architecture for the terminal facilities at Denver Union Station. The new facility

Jim Gast, AIA

serves as a multimodal transportation hub for the region by integrating light rail, commuter rail, and Amtrak, as well as intercity, regional, express and local bus service, the 16th Street Mall shuttle, Downtown Circulator, taxis, bicycles, and pedestrians. The Master Plan is configured to integrate the transportation facilities with transit-oriented development.

Amtrak Master Developer Technical Support, Baltimore, Chicago and Philadelphia

Jim is managing architecture and engineering services to support and advise on the review and evaluation of Master Developer Proposals to redevelop Amtrak's Baltimore Penn Station, Chicago Union Station, and Philadelphia-30th Street Station. AECOM is supplementing Amtrak's core team with the technical evaluation of submitted materials related to each proposal's master planning, design, phasing, construction, project management, budgeting, scheduling, and ongoing lifecycle operations and maintenance plans.

Houston METRO (Metropolitan Transit Authority of Harris County, Texas)

Jim served as Director, Urban Design & Intermodal Facilities for the METRO Solutions Program, a 30-mile LRT expansion including 49 passenger stations, intermodal terminals and maintenance facilities. His responsibilities included management of planning and design for two intermodal facilities serving LRT, BRT, commuter rail, express and local bus, and incorporating significant TOD components. He led coordination of facilities design with an ongoing environmental assessment and transit operations planning.

East Side Access Project—Grand Central Terminal, Long Island Rail Road (LIRR), New York, NY

Jim served as Task Manager for the proposed Madison Concourse at Grand Central Terminal (GCT). His responsibilities included programming, existing conditions analysis and conceptual design for conversion of approximately 300,000 SF of existing tracks and platforms into LIRR passenger facilities and support space. The ESA project will extend LIRR service to midtown Manhattan at GCT; AECOM is responsible for facilities design at the new terminal.

Viva—York Rapid Transit Project, Ontario, Canada

Jim served as Manager for Urban Design and Architecture for this new-start BRT system north of Toronto. Viva is being implemented in phases. Phase I, or "Quickstart," was designed and constructed on an accelerated timetable to deliver early public transit improvements, entering revenue service in September 2005. Future phases will see the construction of a complete BRT system with dedicated transitways.
Jim was involved in the project starting with the planning and environmental assessment process through the start of revenue service. During the planning phase he developed alternate alignment concepts and prototype plans for guideways, stations, terminals and maintenance facilities. During design-build implementation of Phase 1 of the project, he was responsible for architectural and urban design of 60 new stations and terminals, for development of the system's overall visual identity, and application of "branding" elements to stations, vehicles, fare systems, and signage.

Mike Hance, RA

Deputy Station Design Manager

Education

MArch, University of Michigan, 2008

BSArch, Lawrence Technological University, 2004

Registrations

Registered Arch., 2011, MD, #16703

NCARB Certified, 2014, #49718 LEED AP,2009, #10305366

Mike is a Transit Architect and Project Manager with a career exclusively focused in the field of transportation. His experience includes planning, design, and implementation of multiple project types including transit passenger stations, rail maintenance yards, and multimodal transportation facilities. He has practiced in all phases of project implementation from early conceptualization through construction administration and has experience working for both owners and contractors in the traditional design-bid-build and design-build project-delivery environments.

11 years of professional experience

Washington Metropolitan Area Transit Authority (WMATA), Potomac Yard Metrorail Station, Alexandria, VA

Mike served in the role of Project Architect, supporting the design of this new infill station located on the Blue and Yellow Lines between the Reagan National Airport Station to the north and the Braddock Road Station to the south. For the development of the environmental impact statement (EIS), Mike supported design efforts and managed consultant parties in the development of three station alternatives and was heavily involved in the estimating, code compliance, and impact analyses of each alternative. As the project progressed to the bid phase, Mike supported WMATA through multiple rounds of extensive value engineering, subsequent analyses, and in responding to bidder RFIs. Other specific tasks on this project have included developing multiple passenger station and pedestrian crossing alternatives, assessing compliance with NFPA 130 and WMATA requirements, evaluating impacts on existing wetlands, protected viewsheds, noise, and vibration, and liaising between WMATA and the City of Alexandria.

Metropolitan Washington Airports Authority (MWAA), Dulles Corridor Rapid Transit Project, Fairfax and Loudoun Counties, VA

In a joint venture as Dulles Rail Consultants, AECOM provided complete 30% Preliminary Engineering (PE) and prepared the design-build procurement solicitation package for construction of the $3.8 billion 11.4-mile Phase 2 extension of the Silver Line from Wiehle Avenue to Dulles International Airport. Major project elements included at-grade, and aerial segments, five median running stations and associated auto and bus access/egress, and parking garages at the park-and-ride facilities serving Reston/Herndon, northern Loudoun County, and an aerial station at the airport. Mike served in the role of Project Architect for the aerial station located directly opposite the historic main terminal of Dulles International Airport. In this role, he led the architectural development of the station design and coordinated engineering disciplines including structural, mechanical, electrical, plumbing, and systems to integrate all technical requirements in to the station design. The Dulles International Airport Metrorail station is currently under construction.

AECOM

Mike Hance, RA

Washington Metropolitan Area Transit Authority (WMATA), Washington Union Station New Mezzanine Feasibility Study, Washington, DC

Mike served in the role of Project Manager and Project Architect developing the conceptual design for a new center mezzanine within the existing WMATA station at Washington Union Station. Mike developed the 15% mezzanine design and lead the multi-disciplinary feasibility evaluation which included civil, structural, mechanical, electrical, plumbing, utility, communications, fire protection, constructability and estimating disciplines. To demonstrate the improvements to station egress that the new mezzanine would bring, Mike conducted a NFPA 130 egress analysis on both the baseline (no build) condition and the configuration of the proposed improvements.

Washington Metropolitan Area Transit Authority (WMATA), Application of Codes & Standards Guidelines, Washington, DC

Mike is currently co-authoring WMATA's internal guidelines for the Application of Codes & Standards for the Design of New Metrorail Stations and the Design of Improvements to Existing Metrorail Stations. The guidelines will provide WMATA with a consistent approach of how to apply NFPA 130 in conjunction with underlying locally adopted building codes when evaluating the compliance of proposed station improvements ranging from new entries and mezzanines in existing stations to completely new stations such as Potomac Yard in Alexandria, VA.

Amtrak, Washington Union Station Platform 22 Rehabilitation, Washington, DC

Mike served as Project Architect leading the architectural design and coordination of engineering disciplines to deliver 100% Construction Documents (CDs) for the rehabilitation and repurposing of Platform 22 from existing maintenance platform to passenger boarding platform at Washington Union Station. The completed design included a revised platform and track geometry, addition of a passenger skywalk with stairs, elevators and escalators, and refurbishment of the historic platform canopy. Washington Union Station is a major multimodal transit hub serving Amtrak, Maryland Area Regional Commuter (MARC), Virginia Railway Express (VRE), and WMATA. Future Amtrak High Speed Rail (HSR) service, major renovations to the historic terminal building, and significant joint development are planned for the station with this project playing an important role in increasing revenue service and platform access capacities at the station.

Amtrak, New Carrollton High Speed Rail (HSR) Platform, New Carrollton, MD

Mike served as Project Architect leading the architectural design and coordination of engineering disciplines to deliver 30% Preliminary Engineering design for the new HSR platform at the existing New Carrollton station. The design included a new side-platform, platform canopy, platform headhouse, and complete renovation and repurposing of the existing Amtrak waiting and support rooms at grade/entry level. New Carrollton is a multimodal transit hub serving Amtrak, MARC, and WMATA. Future Amtrak HSR and Maryland Transit Administration (MTA) Purple Line light rail service are under development with this project, playing a critical role in introducing HSR service to the station.

Toronto Transit Commission (TTC), Spadina Highway 407 Subway Station, Spadina, ON

Mike served in the role of Station Architect and was responsible for leading efforts in the development, coordination, production, assembly, and QAQC of 100% Construction Documents for the underground station facilities. Specific tasks included organizing and leading design team coordination meetings in Toronto, collaborating with engineers to develop feasible design solutions, establishing CADD production guidelines based on TTC standards, and managing interoffice design and production teams. The Highway 407 Station is a multimodal transportation hub with TTC Subway, TRT and GO Transit accessible bus service and accommodations for a future 407 Transitway. The station opened for revenue service on December 17, 2017.

Elliot Mandel, PE

Underground Structures

Education

MS, Structural Engineering, University of Texas at Austin, 1989

BS, Civil Engineering, University of Texas at Austin, 1984

Registrations

Professional Engineer: VA, NC, CA

Elliot has extensive experience leading structural projects in the Arlington area, including design of new structures, modification to and evaluations of existing structures, and projects in congested urban settings. His problem-solving capabilities have benefited a diverse range of projects, from technically-complex to environmentally-sensitive, and from initial concept development through final design and construction. Elliott is a 27-year resident of Arlington County and was a member of the Neighborhood Conservation Advisory Committee (NCAC) for 10 years. He also served as President of Arlington's Lyon Park Citizens Association (LPCA).

31 years of professional experience

WMATA, L'Enfant Metrorail Station, New Underground Entrance Study, Washington, DC

Elliot was Task Manager responsible for conceptual studies and constructability analyses for new entrances for an existing underground metro station. He developed and evaluated options for various subsurface construction scenarios for a tightly constrained site. Elliot considered adjacent buildings and current Metro pedestrian, mechanical, and rail operations while determining feasibility of options.

WMATA, NOMA Metrorail Station Pedestrian Tunnel Feasibility Study, Washington, DC

Elliot was Project Manager for the feasibility of a dedicated pedestrian tunnel beneath the Northeast Corridor tracks to provide safe and efficient access to the NoMa-Gallaudet U Metrorail Station from areas to the east. The study explored a range of initial alignment options, conducted a screening, and developed three alignment options in detail for the engineering assessment.

N. Carlin Springs Road Bridge Rehabilitation and Sewer Replacement, Arlington, VA

Elliot provided oversight for review of design plans, specifications, and for the replacement bridge and adjacent sewer project. The two projects were designed separately with the County requesting AECOM services for general review of plan sets, as well as combining the two projects into one contract.

DDOT, Dupont Circle Dupont North Plaza Infrastructure Feasibility Study, Washington, DC

As Lead Structural Engineer for the study of installing a pedestrian deck over a depressed roadway, Elliot analyzed the existence of adjacent tunnels which required evaluation of underground construction techniques including foundation strengthening and retrofit, as well as installation of deep foundations for support of the new structure.

New York Avenue Metrorail Station, Washington, DC

Elliot led a multidisciplinary team of 50 engineers and 23 subconsultants for feasibility studies, alternatives analysis, and 30% design for this elevated urban transit station and approach structure.

Elliot Mandel, PE

WMATA, Station Access Planning, Crystal City, Court House, and New Carrollton Metrorail Stations, VA and MD

Elliot was Structural Task Manager for concept design and constructability analysis. He worked with architects and planners on the development of access scenarios, performed preliminary structural evaluations, developed construction scenarios, and worked with cost estimators to determine costs to build various alternatives. The work considered adjacent structures, utilities, and operational aspects.

DDOT, 31st Street Bridge Replacement, DDOT A/E On-Call Services, Washington, DC

Elliot provided structural oversight for the replacement of this structure over the C&O Canal in Georgetown. Congested site conditions and numerous underground utilities necessitated development of unique design concepts. including deep foundations with small footprints and development of supporting elements that span over or avoid utilities.

Aberdeen Station Pedestrian Tunnel, Aberdeen, MD

Elliot was Task Manager responsible for conceptual studies and constructability analyses for a railroad station pedestrian underpass. As a part of an overall feasibility study, he developed several tunnel alternatives including jacked boxes, cut and cover precast concrete, and microtunneling.

Mark Zimpleman, PE

Entrance Structures

Education

MS, Structural Engineering, Cornell University, 1983

BS, Civil Engineering, Villanova University, 1980

Registrations

Professional Engineer: DC, AL, CT, FL, MD, TX

Mark leads AECOM's Washington, DC, structural design practice. He has extensive experience in planning, organizing, and directing structural design and evaluation activities on commercial, institutional, and government building projects. Mark has been a key member on interdisciplinary project teams and has closely managed the preparation of construction documents and condition assessment reports. He has participated in meetings with clients, consultants, and contractors during all project phases.

32 years of professional experience

Architect of the Capitol, Task Order 11 Heating, Ventilation, and Air Conditioning Air Handling Unit (AHU) Modernization Hart Senate Office Building, Washington, DC

Mark was Structural Engineering Design Manager responsible for HVAC renovations to the existing building. He directed staff engineers in the structural analysis of existing framing members and the design of new framing members. Under a second IDIQ with the Architect of the Capitol, AECOM surveyed the 1,095,000-square-foot building and the existing HVAC system. The building is serviced by 26 AHUs and associated return fans located in mechanical rooms throughout the building. Due to higher ventilation requirements in the mechanical standards, the AHUs were no longer providing the proper outside air control or humidification for building occupants. AECOM provided the design for replacing all 26 AHUs including controls, actuators, supply, return and applicable fans, and steam and chilled water coils.

U.S. Army Corps of Engineers Baltimore, Multi-discipline A-E Services 2013-2018, Building 4118, Design, Fort Detrick, MD

Mark was Lead Structural Engineer for development of a nominal criteria design-build request for proposal package for the planned renovation of Building 4118, an aged barracks into a three-story, 49,700-square-foot office facility.

Metropolitan Partnership, LTD, One Light Street Mixed-Use Development, Baltimore, MD

Mark served as Lead Structural Engineer during preconstruction for a new high-rise mixed-use building called One Light Street.

U.S. Army Corps of Engineers Baltimore, Intelligence Community Campus, Roberdeau & Erskine Halls Facades, Bethesda, MD

Mark was Lead Structural Engineer for A-E support for demolition and replacement of the facades at Roberdeau and Erskine Halls on the Intelligence Community Campus.

U.S. Army Corps of Engineers Baltimore, Multi-discipline A-E Services, Building 4220 Design-Build, Aberdeen Proving Ground, MD

Mark served as Lead Structural Engineer for preparing a nominal criteria design-build request for proposal package for conversion and repair through replacement of a "rolling pin" barracks into a three-story, 49,700-square-foot office facility.

U.S. National Transportation Safety Board, Training Academy, Ashburn, VA

Mark was Lead Structural Engineer for the new 72,000-square-foot academy on the Northern Virginia campus of George Washington University.

AECOM

Howard Cohen, AIA

Station Egress

Education

BArch, City College of the City University of NY, School of Architecture, 1969

BSArch, City College of the City University of NY, 1968

Registrations

Registered Architect: NY, MD, NJ

Howard is a specialist in the application of fire life safety and accessibility codes and standards to rail transportation projects. He has a broad range of architectural experience working on rail transportation, commercial/industrial, educational, hotel, and housing projects.

49 years of professional experience

WMATA, Feasibility Assessments for Improvements to Existing Metrorail Stations, Washington, DC

Howard was Senior Architect and Fire Life Safety and ADA Accessibility Specialist for this project. He provided guidance for egress analyses for the evaluation of alternative design proposals for improvements to several Metrorail stations. NFPA 130 spreadsheet timed-egress analyses were undertaken for both the no-build and alternative build scenarios. A summary report was prepared for each station which provided the code bases for the incremental application of NFPA 130 used in conjunction with the applicable adopted building code, and he provided an evaluation of the results of the egress analyses. Metrorail Stations studied include Crystal City, Farragut North & Passageway, Farragut West, Foggy Bottom, and White Flint (currently in progress).

WMATA, Study of the Application of Codes and Standards for the Design of Metrorail Stations, Washington, DC

Howard was Senior Architect and Technical Lead for this study of the system-wide application of code and standards for Metrorail station design projects. He prepared a Technical Memorandum which described the basis and methodologies for applying NFPA 130 in conjunction with the applicable adopted building codes, for the design of new Metrorail stations and for the incremental application of NFPA 130 and the adopted building codes for the design of improvements to existing Metrorail stations. The Technical Memorandum, which was developed and coordinated with Metrorail staff, provides explanatory information for the application of codes and standards, which is intended to form the basis for the preparation of a WMATA Metrorail Guidelines for the Application of Codes and Standards.

WMATA, Potomac Yard Metrorail Station, Alexandria, VA

Howard was Senior Architect and Fire Life Safety Lead for the preliminary design of this new Metrorail station comprised of at-grade side platforms and elevated concourses and pedestrian bridges. NFPA 130 spreadsheet timed-egress analyses demonstrated compliance of the proposed design with the means of egress criteria of NFPA 130 used in conjunction with the Virginia Construction Code, and the need to establish the portals onto the pedestrian bridges as the points of safety as per NFPA 130 criteria.

MTA/LIRR, Penn Station Critical Improvements Project, NY

Howas was Senior Architect and Technical Lead for fire life safety and ADA accessibility. This project included the reconfiguration and rehabilitation of the LIRR Concourses of Penn Station. He prepared the fire life safety and accessibility

AECOM

Howard Cohen, AIA

design criteria and performance requirements for the preliminary design of the project, based on the incremental application of NFPA 130 used in conjunction with the Building Code of New York State, and the other applicable codes of the Uniform Code of NYS. He developed the code basis and occupant load premises for the pedestrian evacuation simulation modeling, using Legion SpaceWorks software, in order to evaluate the life safety performance of the reconfigured LIRR concourses, based on passenger demand forecasts for the station.

Riyadh Metro Project, Kingdom of Saudi Arabia

Howard was Senior Architect and Discipline Lead for fire life safety and code compliance. This project included the design and construction of two of the six metro lines in the city of Riyadh, KSA, which form the backbone of the future Riyadh public transport network. The 40 stations of the project include underground, at-grade and elevated stations. He prepared the Fire Life Safety Criteria for the RMP stations and trainways under NFPA 130 and the Saudi Building Code, which is based on the ICC/International Building Code. He also prepared the Accessibility Criteria for the stations of the project under the U.S. ADA/ABA Accessibility Guidelines (ADAAG) and ICC/ANSI A117.1. Howard prepared the Preliminary Fire Life Safety Report for deep underground, shallow underground, at-grade, and elevated prototype stations developed during the preliminary design phase. Howas was also the Fire Life Safety Lead for the final design of the Deep Underground Stations of the Project. He prepared the Deep Underground Station Fire Life Safety Report and the Tunnel Fire Life Safety Report, with oversight of the egress analyses and evacuation modeling under the criteria of NFPA 130 and the Saudi Building Code.

Los Angeles Regional Connector Transit Corridor Project, L.A. Metro, CA

Howard was Senior Architect and Technical Lead for life safety and ADA accessibility assessment. The Regional Connector Transit Corridor Project will connect the Metro Gold Line, Blue Line, and Expo Line of the Los Angeles County Metro Rail transit system and includes three new underground transit stations. Howard prepared the Preliminary Fire Life Safety Report for the three stations in accordance with NFPA 130 and with the California Building Code (CBC) and other codes of the California Building Standards Code; and the Preliminary Accessibility Report for the three stations in accordance with the requirements of the Federal ADA/ABA Accessibility Guidelines (ADAAG) and the CBC.

Dulles Corridor Metrorail Project, Phase 2, MWAA and WMATA, Washington, DC

Howard was Senior Architect and Technical Lead for life safety review. This project included a 23.1-mile extension to the existing 106-mile Metrorail system past Washington Dulles International Airport. Phase 2 of the project includes 6 stations. Howard prepared a Revised Phase 2 Fire Life Safety Report for the five at-grade partially-enclosed stations, and the Dulles Airport segment underground station and aerial station alternative. He addressed life safety code compliance in accordance with NFPA 130 and the Virginia Uniform Building Code.

Second Ave Subway (SAS), MTA/New York City Transit (NYCT), NY

Howard was Senior Architect for a Best Practices Review for the 72nd Street and 86th Street Stations, which was a high-level review of the construction documents for the stations with emphasis on an evaluation of the overall organization of the construction drawings and the inter-disciplinary coordination reflected in the drawings.

Howard Cohen, AIA

PATH World Trade Center Transportation Hub, New York, NY

Howard was Senior Architect for the $2.2 billion PATH Station reconstruction at the World Trade Center in New York City. He reviewed and updated the Final Design Fire Life Safety Report for the PATH WTC Transportation Hub Project, including a review of emergency egress requirements and fire separations within the Hub, and between the Hub and other buildings and facilities of the WTC Development. This included the review and update of the code compliance drawings. He drafted the Final ADA Accessibility Compliance Plan updating the preliminary plan to reflect final designs and compliance with ADAAG.

ARC/Trans Hudson Express Project, NJ TRANSIT and Port Authority of NY & NJ, NY & NJ

Howard was Senior Architect for a $8.7 billion project that would provide two new rail tunnels under the Hudson River directly into a new deep cavern commuter rail station in mid-town Manhattan under 34th Street, adjacent to the existing NY Penn Station and connecting to the NYCT Subway Stations at Herald Square, 7th Avenue, and 8th Avenue. Other facilities included the expansion of the existing Frank R. Lautenberg Station in NJ, and five fan plants in Manhattan and Hoboken. Howard was Architectural Lead in code research and analyses for fire life safety, emergency evacuation, first responder access, and ADA accessibility for the new 34th Street NJ Transit Station (New York Penn Station Expansion) and the Frank R Lautenberg Station in NJ, and for the fire life safety of five project fan plants.

East Side Access (ESA) Grand Central Terminal (GCT) Concourse and Caverns, MTA/Long Island Rail Road (LIRR), NY

Howard was Senior Architect and Technical Lead for ADA accessibility review for this $7.2 billion project that will bring the LIRR to GCT. The project includes mezzanine and platform levels in a dual cavern under Park Avenue, a concourse built into the GCT Madison yard, and connections to the existing GCT and north-end access passageways. Howard prepared the ADA Accessibility Report for the ESA Grand Central Terminal Concourse and Caverns at the GCT complex, and he supervised the preparation of the accessibility diagrams demonstrating compliance with the accessibility provisions of ADAAG and the accessible means of egress provisions of the Building Code of New York State (BCNYS).

MTA/Metro-North Railway System-Wide Code Compliance Study, New York, NY

Howard was Senior Architect and Technical Lead for professional services to the MTA/Metro-North Railroad to prepare a Metro-North Code Compliance Program Manual consisting of detailed procedures, flow charts, checklists, and documents for Metro North's compliance with the 2010 Building Code of New York State and the other codes of the Uniform Fire Prevention and Building Code (the Uniform Code) of NYS, and with the Federal ADAAG as adopted by USDOT. The application of NFPA 130 was integrated into the Manual.

Sean Yaghobi

Vertical Transportation

Education

BS, Mechanical Engineering, Tehran Institute of Technology, 2007

Certifications

QEI Certification No.: C-5656

OSHA 10 Certification

Amtrak Track Training

Sean is a skillful Senior Project Engineer and Department Manager with more than sixteen years of experience and a broad vertical transportation background. He has managed several local and international projects across various disciplines in both new and existing structures, while keeping up with the latest in technology and traffic analysis. Sean has been responsible for vertical transportation design, development, and coordination in both new and existing structures; traffic analysis; preparation of construction drawings, budget, and specifications; project bidding and negotiation; construction period services; elevator inspections and witness testing; and engineering of hydraulic and traction elevator systems and components.

16 years of professional experience

MTA, New York City Transit Vertical Transportation Engineering, NY & NY

Sean will review, analyze, and evaluate the entire elevator and escalator program that is included in capital projects at various NYCT facilities. The scope includes an in-depth review of activities pursuant to design criteria, design process, procurement, manufacturing, construction, acceptance, and useful life replacement. Based on industry standards and experience, Sean will evaluate the effectiveness of each component of NYCT's process in the delivery of services to NYCT customers. This evaluation will include recommendations, where appropriate, to modify and improve NYCT's process.

Second Avenue Subway, New York, NY

Sean will provide construction services support for the 35 escalators and 16 elevators for the four stations composing Phase I of the project. Frequent coordination between multiple design teams and stakeholders, as well as multiple client departments, is required.

TransLink Escalator Specification Review, British Columbia, Canada

Sean performed a complete assessment of the current escalator specification and current Master Service Agreement for TransLink, the authority responsible for regional transportation of metro-area Vancouver. Comparisons were made against industry best-practices. Recommendations focused on improving escalator safety, equipment longevity, uptime, installation procedures, and contractual issues.

Metropolitan Electric Network (French: REM), Montreal, Canada

Sean conducted a preliminary feasibility VT study of the new three-branch rapid transit system. Analysis included utilizing elevators for emergency evacuation of deep-underground stations, sizing of elevators and escalators for constructability, and determining the proper quantity of VT equipment to ensure minimal passenger queueing. This project has 27 stations and 67 km of Metrorail driverless system

AECOM

Sean Yaghobi

Long Island Rail Road (LIRR) East Side Access, New York, NY

Sean is providing construction management services for the largest construction project ever undertaken by the MTA. The project includes 18 elevators and 47 escalators to be operated by separate stakeholders spread over multiple contracts. All equipment is APTA-compliant and includes traction elevators, hydraulic elevators, and material lifts.

Los Angeles Metropolitan TA, Los Angeles, CA

Sean was Senior Vertical Transportation Engineer for the design through construction services of 10 elevators for the four stations composing phase 1 of the project. Frequent coordination between multiple design teams and the client is required.

North County Transit District Modernization, San Diego, CA

Sean surveyed existing conditions of elevators at three high-use, high-abuse locations in the NCTD system. Modernization design included full replacement of two elevators, and specified equipment & electrical upgrades for the third.

Bay Area Rapid Transit BART, Various, MA

Sean was Senior Project Engineer responsible for vertical transportation design phase for the existing stations.

AMTRAK, Various

Sean was Senior Project Engineer responsible for vertical transportation design phase for the existing stations across the country.

New York City Transit Cortlandt Street Station, New York, NY

Sean is providing construction services support for the rehabilitation of the subway station underneath the World Trade Center site. The project includes the installation of new elevators for ADA compliance, as well as the installation of an escalator to aid in the anticipated high passenger flow.

PANYNJ, World Trade Center Transportation Hub, New York, NY

Sean contributed to review of elevator and escalator shop drawings to ensure conformance with codes and standards.

PANYNJ Bus Terminal Rehabilitation of Elevators and Escalators, NY

Sean assessed three high-use traction elevators and five escalators at the Bus Terminal for potential code violations and maintenance upgrade opportunities to extend the useful life of the equipment. He crafted the Port Authority's first detailed design guidelines for use throughout their various facilities.

James A. Musick Phase 1&2, Orange County, CA

Sean is Senior Vertical Transportation Engineer for the design phase of the vertical transportation, including eight elevators and six escalators for this project.

Port of Los Angeles, Berth 93, Los Angeles, CA

Sean is Senior Vertical Transportation Engineer for the design through construction services of two elevators for this project. Frequent coordination between multiple design teams and the client is required.

Sean Yaghobi

Thurgood Marshall Federal Judiciary Building, Washington, DC

Sean designed the modernization of the facility's 13 basement-drive traction and five in-ground hydraulic elevators. Modernization design included replacing 12 of the basement traction elevators with MRL-type elevators and in-kind upgrades for the remaining traction and hydraulic elevators. Sean is providing construction services support throughout construction.

San Diego International Airport, Arrival Terminal 2, San Diego, CA

Sean is providing vertical transportation services for the drafted Basis-of-Design and planning documents for all elevators and escalators. This project includes six new passenger/service elevators and six new escalators at the arrival terminal.

San Diego International Airport, New Terminal, San Diego, CA

Sean is providing vertical transportation services for the drafted Basis-of-Design and planning documents for all elevators and escalators. This project includes 20 new passenger/service elevators and 10 escalators at a new terminal.

U.S. Postal Service Elevator, Assessment/ Upgrade, Various Locations

Sean performed site condition assessments and upgrade alternatives analyses for seven USPS mail facilities across the country. Facilities have included passenger elevators, freight elevators, and escalators. He drafted construction documents based on findings and is performing construction services support.

Philadelphia International Airport, Headhouse, Philadelphia, PA

Sean is providing vertical transportation services for the drafted Basis-of-Design and planning documents for all elevators and escalators. This project includes 20 new passenger/service elevators, 24 new escalators, and two moving walkways at International Arrival Wing Planning.

Kuwait International Airport Terminal, Kuwait

Sean is Senior Vertical Transportation Engineer for the design services of a new international terminal. The project includes 180 elevators, 84 escalators, and 100 moving walks.

Seattle–Tacoma International Airport, Seattle, WA

Sean is Senior Vertical Transportation Engineer for the review of design and specification documents of a new international arrivals facility. This project includes 15 new passenger/service elevators, 13 new escalators, and one moving walkway at a new international arrival facility.

Logan International Airport, Terminal E, Boston, MA

Sean is Senior Vertical Transportation Engineer for the design through construction services of a new addition to terminal E to service all new A-380 international arrivals. The project includes six elevators and 12 escalators.

MDTA, Maryland Transportation Authority, MD

Sean is providing vertical transportation services for the complete modernization and replacement of vertical transportation elements at the existing stations. Services include design phase of the new equipment, engineer layouts and coordination, construction documents and procurement, and construction services.

Paul Sabatiuk, LEED AP

Mechanical Engineering

Education

BS, Mechanical Engineering, Princeton University, 1973

Registrations

LEED Accredited Professional

For more than 35 years, Paul has practiced mechanical engineering, currently serving as the Director of Mechanical Engineering for AECOM's Arlington office. He has been responsible for all aspects of mechanical design, analysis, specification, and cost estimating. His projects have included HVAC, refrigeration, plumbing, fire protection, building systems evaluation, life cycle cost analysis, transit system design, solar energy system design, and other mechanical specialties. Paul has written several papers on solar energy system design and analysis, energy-conserving building systems, components, and materials.

35 years of professional experience

WMATA, Crystal City Metrorail Station Second Entrance Conceptual Design Study, Arlington, VA

Paul is Lead Mechanical Engineer for the planning and technical analysis for conceptual design and the feasibility study of a second Metrorail station entrance and access improvement alternatives to improve multimodal connectivity.

WMATA, Metrorail Stations Design and Analysis, Washington, DC

Paul was Lead Mechanical Engineer for a program of studies that evaluated passenger capacity and access and tested alternative design solutions at Foggy Bottom and Farragut North/West.

WMATA, McPherson Metrorail Station Design and Engineering Feasibility Assessment, Arlington, VA

Paul was Lead Mechanical Engineer for the analysis of the technical opportunities and challenges of providing station improvements to address passenger congestion and circulation at the McPherson Square Metrorail Station.

National Guard Bureau, Army National Guard Readiness Center, Arlington, VA

Paul is Lead Mechanical Engineer for the new 250,000 SF headquarters building for the National Guard. The $128 million project (three phases and over $24 million of FF&E and specialty audiovisual facilities) is being designed to meet LEED-NC silver certification on a very tight site. A five-story triangular tower and three levels below grade meet the design challenges of site restrictions, including force protection and zoning height requirements on a constrained site, creating an architecturally compelling signature facility that amplifies the site's landscape. Below grade stories underneath a landscape park roof include an auditorium, conferencing center, gymnasium, office spaces and a command center. The project also includes a garage for 550 cars.

General Services Administration/ JBG SMITH, U.S. Department of Transportation Headquarters, Washington, DC

Paul is Lead Mechanical Engineer for the new headquarters building consisting of 1,422,000 SF of above grade office and special spaces and 541,000 SF of below grade special spaces and parking garage. The mechanical systems consist of two central chiller plants with a total of 6,000 tons of cooling and two central heating plants with approximately 1,000 boiler-horsepower capacity located on top of the two building towers. The central cooling and heating plants utilize variable primary pumping systems with redundant capacity, as well as backup mechanical systems for the 24/7 mission critical operation spaces. Both cooling and heating water are pumped skid-mounted packaged pumping units consisting of variable speed pumps, variable frequency drives, and pre-piped hydronic specialties. Air distribution systems include variable air volume, constant air volume, and dedicated exhaust systems. Both atriums are provided with engineered smoke exhaust systems. A BAC net-based building automation system will integrate the life safety, building pressurization, smoke removal, lighting controls, security (such as cameras and card access), conference room reservation, energy monitoring, and temperature control systems. Ventilation air for the entire facility is pre-filtered and pre-treated for cooling and heating by dedicated outside air handling units with provisions for future biohazard filtration systems.

Ramsey County (Metropolitan Council), Central Corridor Light Rail Transit Operations and Maintenance Facility, Minneapolis/St. Paul, MN

Paul is Lead Mechanical Engineer for the 180,000 SF adaptive reuse of a manufacturing plant to a commuter electric train maintenance facility. The new building consists of a transit car storage area; maintenance area; administrative offices; and a loading dock area requiring a truck fume exhaust removal system. AECOM is providing design services for HVAC and plumbing systems and quality assurance review for the electrical design. The project includes complete roof replacement while keeping the perimeter walls intact. The building's design incorporated principles from the Minnesota Sustainable Building Guidelines (MSBG). Utilizing MSBG, the team will achieve a documented energy savings of 50 percent over ASHRAE 90.1-2004. The HVAC trade will contribute to more than 80 percent of the design's energy savings. In addition, AECOM is providing mechanical and plumbing design for train stations along the rail line, including engineering for storm drainage; water distribution; and heating and air conditioning station elevators and platform control equipment.

Northstar Corridor Maintenance Facility, Big Lake, MN

Paul is Lead Mechanical Engineer for the design of the Northstar Corridor Maintenance Facility, a 63,506 SF commuter rail car maintenance facility. The building consists of a single story with mezzanine storage. The building's organization includes a low bay office, locker room, high bay maintenance area, storage structure, and train wash structure. Heat is provided throughout the entire building with cooling in the office and locker area. The HVAC system in the office/locker area includes perimeter hot water radiation with a VAV system. The train wash facility has an in-floor radiant heating system, and the maintenance facility has gas-fired infrared heating. The design also includes an air curtain at doors, exhaust with heat recovery, and direct gas-fired heating. The building's design incorporated principles from the MSBG. Utilizing MSBG, the team achieved a documented energy savings of 50 percent over ASHRAE 90.1-2004. The HVAC trade contributed to more than 80 percent of the design's energy savings.

Paul Sabatiuk, LEED AP

WMATA, General A/E Task Order Contract, Washington, DC

Paul is responsible for mechanical design reviews and quality assurance/quality control for the following tasks:

- Substation Ventilation Improvement. Design for the upgrade to the ventilation systems serving 20 AC power substations at WMATA passenger stations. This involved replacement and reconfiguration of the air handling and filtration systems to improve system performance and minimize maintenance.
- Air Quality and Noise Abatement, Northern Bus Garage. Conducted environmental impact study for noise and air quality. Designed corrective actions to mitigate the bus emissions and traffic noise in a residential neighborhood. The design entailed provision of bus ramp enclosures, new bus service lanes, stack design based on dispersion modeling analysis, ventilation upgrades, and application of state-of-the-art controls for particulate matter concentration in bus garages.
- Air Compressors at Bladensburg Garage. Design for the expansion and renovation of the compressed air system for maintenance service at an existing bus garage. Design included new 125-horsepower compressors, distribution system upgrades, and control system modifications.
- Cooling Towers Replacement. Design for the replacement/upgrade of 22 cooling towers serving various Metro passenger stations. This required detailed system and site evaluation to improve system efficiency and to minimize maintenance requirements.
- Rehabilitation of the Heating System at Montgomery Bus Garage. Design for the rehabilitation of the existing hydronic heating system including boiler renovation and replacement of piping, valves, pumps, and water treatment system.
- Bus Facility Exhaust Extraction System Assessment. Evaluation of the exhaust emissions systems at nine WMATA bus depots. Evaluation included concept designs for the upgrade and replacement of the existing collection and discharge systems.
- Operations Control Center, Carmen Turner Facility. AECOM is providing full architectural and engineering services for a new 18,200 SF operations control center to be built within an existing administrative and maintenance facility. This two-story center with state-of-the-art communications is one of WMATA's key elements in its current program of upgrades. A main rear projection cube wall approximately 20 feet high and 60 feet wide will provide information on Metro's five rail lines, the Metrorail power management system and video camera security monitoring, as well as bus lines and maintenance operations. Approximately 40 work stations will be used to track information on subway lines, passenger operations, and maintenance, with additional work stations for Metro's bus operations and transit police. A new second floor mezzanine will be created inside the existing facility. The raised floor center will be served with full UPS backup and a dedicated emergency generator backup. A new communications center will be created for the radio network and information systems.

Yoseph Solomon, PE

Electrical Engineering

Education

MS, Information Technology, Virginia Polytechnic Institute and State University, 2008

BS, Electrical Engineering, Virginia Polytechnic Institute and State University, 2003

Registrations

Professional Engineer, MD, VA

LEED Green Associate

Yoseph is an engineer with 13 years of experience in electrical engineering, controls, and automation. He has worked for construction and engineering firms as a controls and automation engineer in commercial, government, and industrial facilities, and as an electrical engineer with a mechanical, electrical, and plumbing firm specializing in renovation of commercial and government facilities.

13 years of professional experience

WMATA, Metrorail Station Renovations, Washington, DC, and Arlington, VA

Yoseph is the Electrical Engineer for an engineering analysis and feasibility study for renovations of four Metrorail stations:

- Courthouse Station Elevator Additions
- Crystal City East Entrance Addition
- Union Station Mezzanine Addition
- Farragut North Passage Way

The projects consisted of preparing design documents and engineering analysis for multiple proposed alternatives.

Arriyadh Development Authority, Riyadh Metro—Prime Contract 2, Riyadh, KSA

Yoseph is Electrical Engineer and BIM Coordinator for three deep underground stations for a rapid transit system in Riyadh, Saudi Arabia.

U.S. Federal Emergency Management Agency, Campus Power Monitoring SCADA System, VA

Prior to joining AECOM, Yoseph provided engineering, installation, and testing for a campus power monitoring SCADA system. The project included monitoring of generators, fuel oil systems, substations, and switchboards. SCADA system design included network layout, human machine interface (HMI) application, and redundant input/output data servers.

U.S. Department of Veterans Affairs, Atlanta Veterans Affairs Medical Center, Atlanta, GA

Prior to joining AECOM, Yoseph was Lead Control Engineer for a hospital campus power monitoring SCADA system. The SCADA system monitored newly upgraded electrical infrastructure, including five generators and eight distribution switchboards. He wrote the SCADA software application using Wonderware's InTouch software platform.

Various U.S. Government Clients, Office Renovation Projects, Various Locations

Prior to joining AECOM, Yoseph was Electrical Engineer for various government office renovation projects. He performed electrical infrastructure reliability studies for a government data center to determine the feasibility of possible upgrades to comply with Uptime Institute's tier standards.

Metropolitan Washington Airports Authority, Dulles International Airport, Main Terminal Automated People Mover Station, VA

Prior to joining AECOM, Yoseph was Senior Commissioning Engineer for the construction of an automated people mover (APM) station at the main terminal of Dulles International Airport.

AECOM

Mark Thayer

Plumbing Engineering

Education

BS, Pastoral Studies

AS, Architectural Technology

Registrations

Certified in Plumbing Engineering

Certified in Plumbing Design

Mark is a Senior Plumbing Systems Designer for secure government buildings, museums, educational facilities, libraries, dining facilities, and other projects under traditional and design-build procurements. His design responsibilities include domestic and non-potable water; pool water; sanitary and storm drainage; acid and decontamination waste; inert, cryogenic, and fuel gases; and compressed air, vacuum, and medical gas systems. He is an industry leader in engineered alternative vacuum waste plumbing systems, and he developed the design concept and engineering for vacuum waste plumbing for one of the first LEED certified jails in the U.S. Mark brings extensive experience with the evaluation of building energy performance and implementing enhancements such as solar-powered water heater systems.

40 years of professional experience

Eisenhower Executive Office Building Modernization, Phase I, II + III, Washington, DC

Mark was Plumbing Designer, responsible for all aspects of this phased modernization project. The project transformed the 692,000 SF building into a modernized facility, incorporating security enhancements to meet the needs of the executive branch of the federal government, while preserving the building's most important historic features. Upgrades to the utility design include back-up power systems, a new chilled water plant, and a new electrical distribution system to increase redundancy, reliability, and energy efficiency. Modern mechanical, electrical, communications, and IT systems are added and concealed within the building's historic fabric. A new, complex audiovisual system supports intelligence mission execution. Mark was Lead Plumbing Systems Designer for the Phase I central utility plant and Phase III renovations. The plumbing scope included design of RO and potable water systems, sanitary waste, and vent and pumped waste systems.

Smithsonian Institution, National Museum of Natural History, Washington, DC

Mark was Plumbing and Fire Protection Designer, responsible for more than 10 tasks under the IDIQ contract to restore the historic NMNH museum. He developed the Comprehensive Facility Development Plan in 2005, which covers $140M in construction costs and enables the museum to remain in constant operation during each phase of the renovation. Mark designed plumbing systems for the renovation of Halls 11 and 12, the renovations of the East and West Wing basements, Hall 30 renovation, and the Attic Systems restoration. He performed plumbing and fire protection design of the many exhibit spaces and support infrastructure. Mark conducted a Master Plan effort on the entire facility which is more than 1.1M-SF. Mark led the design effort to replace the main building fire pumps which provides boost pressure to fire suppression systems throughout the building.

AECOM

Sameer Shukla, PE

Site/Civil Design

Education

BS, Civil Engineering, 1993

Registrations

Professional Engineer, MD, DC

Sameer has more than 24 years of experience in the design and project/program management of diversified and multidisciplined design-build and design-bid-build projects, with an emphasis on major, as well as minor, highway/roadway projects, major arterials, complex interchanges and intersections, civil site and facilities, feasibility, preliminary, and detail design and plan production. He has thorough knowledge of industry practices, regulations, current technologies and design procedures and standards of AASHTO; FHWA regulations; DOTs of VA, MD, DC; and regional counties. He has hands on experience on projects in the Metro area and has been actively involved in concept/feasibility studies and preliminary and detailed design of various facilities, highways, expressways, urban roads, at-grade signalized and un-signalized intersections, grade-separated interchanges, and county roads.

24 years of professional experience

WMATA, Farragut West and Foggy Bottom Station Feasibility Assessments, Washington, DC

Sameer is Civil/Transportation Lead for this project which involves planning for station accessibility improvements. He developed the budget and schedule and provided civil engineering design and report review services.

WMATA, Farragut North Feasibility Assessment, Washington, DC

Sameer is Civil/Transportation Lead for this project which involves planning for station accessibility improvements. He provided the civil engineering design/ planning and report review services.

WMATA, On-Call Planning Services 2011-2016—Bike & Rite Site Plan, Washington, DC

Sameer is Civil/Transportation Lead for this project which involves designing and developing construction documents for bike and ride facilities at two metro stations. He developed the budget and schedule, and he provided civil engineering design and report review services.

WMATA, Rehabilitation of Bus Turnouts Project, Washington, DC

Sameer is Civil/Transportation Lead ofr this project which involves rehabilitation of three WMATA bus turnouts in DC. He developed the budget and schedule, and he provided civil engineering design and report review services.

WMATA, BUS I Project, Washington, DC/MD

Sameer is Lead Civil Engineer for this design-build project that requires the maintenance of four WMATA bus facilities located in the state of Maryland and Washington, DC. Maintenance work included the civil design, parking lot design, SWM facilities, building maintenance, and MEP maintenance services. He developed the parking lot design, utility coordination, grading plans, MOT plans, storm drainage design, erosion and sediment control plans, and SWM facilities design. Sameer coordinated the permit process with various agencies, including DC Water and WSSC.

AECOM

Joe Huesmann, PE

Drainage/Stormwater

Education

MS, Environmental Engineering, University of Maryland, 1996

BS, Civil Engineering, University of Maryland, 1992

Registrations

Professional Engineer, MD, VA, DC

Joe has experience with applications of hydrology and hydraulics, including ditch and channel design and analysis, storm drain inlet and pipe system design and analysis, culvert design and analysis, stormwater management and best management practices design, river mechanics/floodplain analysis and bridge scour computations, and erosion and sediment control design. He is responsible for drainage design for roadway and development projects, from conceptual development through computation and final design, including drafting of plans. Joe also has experience with concrete and soil field and laboratory inspection and testing, structural steel erection, as well as soil boring operations supervision.

26 years of professional experience

VRE, Brooke and Leland Road Stations Parking Lot Expansions, Baltimore, MD

Joe assisted in the design of grading, storm drainage, and erosion and sediment control for parking lot expansions at two VRE stations (Brooke and Leland Road).

WMATA, On-Call Planning Services 2011-2016—New Carrollton Station Environmental Compliance, MD

Joe produced calculations of impervious areas for existing and proposed conditions as part of a determination of environmental compliance for potential station expansion plans.

VDOT, Route 50/10th Street/Courthouse Road Interchange, Arlington, VA

Joe performed complete drainage design along 2/3-mile of heavily-traveled urban arterial with a complex ramp system, including stormwater management facilities and a storm drain. His work included an analysis of an existing mile-long box culvert storm drain system.

WMATA, Potomac Yard Metro Station, Alexandria, VA

Joe advised the project team on floodplain issues with respect to the planned Potomac Yard Metro station, evaluating three alternatives for potential impact to the Potomac River floodplain. He also prepared preliminary stormwater management design services to establish a baseline for SWM approval.

Potomac Yard Development, LLC, Monroe Avenue (US 1) Bridge Replacement, Alexandria, VA

Joe served as Project Civil Engineer, responsible for the drainage design on a proposed pedestrian trail and slip ramp reconfiguration for construction of this design-build project that includes realignment of US Route 1 via a new 4-span bridge, for development of a former rail yard. Responsibilities included fielding requests for redesign during construction. Joe was Engineer-of-record working as a subconsultant to another firm.

FHWA/NPS, George Washington Memorial Parkway North Design, Arlington and Fairfax Counties, VA

Joe was Engineer Task Leader for drainage design throughout the 7.6-mile project encompassing the rehabilitation and widening of the southbound and northbound roadways. Tasks included redesign and upgrades of the existing storm drainage and culvert systems, reconstruction of extremely deteriorated storm drain outfalls, and meeting with NPS and FHWA.

Eisenhower Memorial Commission, National Dwight D. Eisenhower Memorial, Washington, DC

Joe performed stormwater management design, storm drain design, grading design, stormwater reclamation design, erosion and sediment control design, and other site/civil tasks for the Dwight D. Eisenhower Memorial project.

MTA, Purple Line and Corridor Cities Transitway On-Call Program Management Consultant, MD

Joe was Lead Stormwater Management Designer performing preliminary stormwater management design and calculations for a proposed bus rapid transit line in Montgomery County, between Shady Grove Metro Station and COMSAT in Germantown.

WMATA, Braddock Road, Washington, DC

Joe produced an impervious area and stormwater management calculation for determination of stormwater management requirements for potential development of a Metrorail station site.

US Naval Facilities Engineering Command Northwest, National Naval Medical Center Landscape Design, Bethesda, MD

Joe was a member of the project team to improve pedestrian facilities at NNMC, including landscaping and drainage improvements. His work included site/civil design, LID stormwater management, and erosion and sediment control design to meet Maryland Department of the Environment permitting requirements.

Crystal City Metrorail Station
EAST ENTRANCE

C.

Appendix C— Financial Statements

Section 1: 10-K (10-K)

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, 2018
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 001-37994

JBG SMITH

JBG SMITH PROPERTIES

(Exact name of Registrant as specified in its charter)

Maryland	**81-4307010**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
4445 Willard Avenue, Suite 400 **Chevy Chase, MD**	**20815**
(Address of principal executive offices)	(Zip Code)

Registrant’s telephone number, including area code: **(240) 333-3600**

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

Common Shares, par value $0.01 per share	**New York Stock Exchange**
(Title of each class)	(Name of exchange on which registered)

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. 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. 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. Yes ☒ No ☐
Indicate by check mark whether the Registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulations S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). 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 the 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, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of

the Exchange Act.
Large accelerated filer ☒ Accelerated filer ☐ Non-accelerated filer ☐ Smaller reporting company ☐
Emerging growth company ☐
If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐
Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act) Yes ☐ No ☒
As of February 20, 2019, JBG SMITH Properties had 122,593,995 common shares outstanding.
As of June 30, 2018, the aggregate market value of common stock held by non-affiliates of the Registrant was approximately $4.1 billion based on the June 30, 2018 closing share price of $36.47 per share on the New York Stock Exchange.

DOCUMENTS INCORPORATED BY REFERENCE

Part III incorporates by reference information from certain portions of the registrant's definitive proxy statement for its 2019 annual meeting of shareholders to be filed with the Securities and Exchange Commission within 120 days after the end of the fiscal year to which this report relates.

JBG SMITH PROPERTIES
ANNUAL REPORT ON FORM 10-K
YEAR ENDED DECEMBER 31, 2018

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PART I

ITEM 1. BUSINESS

The Company

JBG SMITH Properties ("JBG SMITH") is a real estate investment trust ("REIT") that owns, operates, invests in and develops real estate assets concentrated in leading urban infill submarkets in and around Washington, D.C. We own and operate a portfolio of high-quality commercial and multifamily assets, many of which are amenitized with ancillary retail. In addition, our third-party asset management and real estate services business provides fee-based real estate services to third parties and the legacy funds formerly organized by The JBG Companies ("JBG Legacy Funds"). References to "our share" refer to our ownership percentage of consolidated and unconsolidated assets in real estate ventures.

As of December 31, 2018, our Operating Portfolio consists of 62 operating assets comprising 46 commercial assets totaling approximately 12.9 million square feet (11.3 million square feet at our share) and 16 multifamily assets totaling 6,315 units (4,531 units at our share). Additionally, we have (i) nine assets under construction comprising five commercial assets totaling approximately 1.2 million square feet (927,000 square feet at our share) and four multifamily assets totaling 1,476 units (1,298 units at our share); and (ii) 41 future development assets totaling approximately 23.1 million square feet (19.6 million square feet at our share) of estimated potential development density. We present combined portfolio operating data that aggregates assets that we consolidate in our financial statements and assets in which we own an interest, but do not consolidate in our financial results. For more information regarding our assets, see Item 2 "Properties".

We define "square feet" or "SF" as the amount of rentable square feet of a property that can be rented to tenants, defined as (i) for commercial assets, rentable square footage defined in the current lease and for vacant space the rentable square footage defined in the previous lease for that space, (ii) for multifamily assets, management's estimate of approximate rentable square feet, (iii) for assets under construction and near-term development assets, management's estimate of approximate rentable square feet based on current design plans as of December 31, 2018, or (iv) for future development assets, management's estimate of developable gross square feet based on its current business plans with respect to real estate owned or controlled as of December 31, 2018. "Metro" is the public transportation network serving the Washington, D.C. metropolitan area operated by the Washington Metropolitan Area Transit Authority, and we consider "Metro-served" to be locations, submarkets or assets that are generally nearby and within walking distance of a Metro station, defined as being within 0.5 miles of an existing or planned Metro station.

Corporate Structure and Formation Transaction

JBG SMITH was organized by Vornado Realty Trust ("Vornado" or "former parent") as a Maryland REIT on October 27, 2016 for the purpose of receiving, via the spin-off on July 17, 2017 (the "Separation"), substantially all of the assets and liabilities of Vornado's Washington, D.C. segment, which operated as Vornado / Charles E. Smith, (the "Vornado Included Assets"). On July 18, 2017, JBG SMITH acquired the management business and certain assets and liabilities (the "JBG Assets") of The JBG Companies ("JBG") (the "Combination"). The Separation and the Combination are collectively referred to as the "Formation Transaction." Unless the context otherwise requires, all references to "we," "us," and "our," refer to the Vornado Included Assets (our predecessor and accounting acquirer) for periods prior to the Separation and to JBG SMITH for periods after the Separation. Substantially all of our assets are held by, and our operations are conducted through, JBG SMITH Properties LP ("JBG SMITH LP"), our operating partnership.

Our Strategy

Our mission is to own and operate a high-quality portfolio of Metro-served, urban-infill office, multifamily and retail assets concentrated in downtown Washington, D.C., our nation's capital, and other leading urban infill submarkets with proximity to downtown Washington, D.C. and to grow this portfolio through value-added development and acquisitions. We have significant expertise in office, multifamily and retail product types, our core asset classes. We believe we are known for our creative deal-making and capital allocation skills and for our development and value creation expertise across our core product types.

One of our approaches to value creation uses a series of complementary disciplines through a process we call "Placemaking." Placemaking involves strategically mixing high-quality multifamily and commercial buildings with anchor, specialty and neighborhood retail in a high density, thoughtfully planned and designed public space. Through this process, we create synergies, and thus value, across those varied uses and create unique, amenity-rich, walkable neighborhoods that are desirable and enhance significant tenant and investor demand. We believe that our Placemaking approach will increase occupancy and rental rates in our portfolio, particularly with respect to our concentrated and extensive land and building holdings in National Landing. National Landing is the newly defined interconnected and walkable neighborhood that encompasses Crystal City, the eastern portion of Pentagon City and the northern portion of Potomac Yard. It is situated across the Potomac River from Washington, D.C. and we believe it is one of the region's best-located urban mixed-use communities. It is defined by its central and easily accessible location, its adjacency to Reagan National Airport, and its base of existing offices, apartments and hotels.

Since mid-2017, we have been focused on a comprehensive plan to reposition our holdings in National Landing through a broad array of Placemaking strategies. Our Placemaking strategies include the delivery of new multifamily and office developments, locally sourced amenity retail and thoughtful improvements to the streetscape, sidewalks, parks and other outdoor gathering spaces. In keeping with our dedication to Placemaking, each new project is intended to contribute to authentic and distinct neighborhoods by creating a vibrant street environment with a robust offering of amenity retail and improved public spaces.

On November 13, 2018, Amazon.com, Inc. ("Amazon") announced publicly the selection of sites that we own in National Landing as the location of an additional headquarters ("Amazon HQ2"), subject to negotiation and execution of definitive documentation between Amazon and JBG SMITH, and subject to the approval of tax incentives by the Commonwealth of Virginia and Arlington County. Earlier this month, the Commonwealth of Virginia enacted an incentives bill, which provides tax incentives to Amazon as it creates up to 37,850 full-time jobs with average salaries of $150,000 or higher in National Landing. As part of the incentive package, we expect $1.8 billion in infrastructure and education investments led by state and local governments.

Approximately 43% of the square feet of our total holdings is located within a ½ mile of Amazon HQ2, including 6.9 million square feet in our future development pipeline (in addition to the approximately 4.1 million square feet that we expect to develop on behalf of Amazon). We anticipate that we will enter into agreements with Amazon pursuant to which Amazon will engage us as its development manager, property manager, and retail leasing agent for Amazon HQ2. In addition, we granted Amazon the exclusive right for a limited time to lease approximately 500,000 square feet of existing office space at 241 18th Street S., 1800 South Bell Street and 1770 Crystal Drive, and the right to acquire the Pen Place and Met 6, 7 and 8 land in our future development pipeline with estimated potential development density of up to approximately 4.1 million square feet.

Our primary business objectives are to maximize cash flow and generate strong risk-adjusted returns for our shareholders. We intend to pursue these objectives through the following strategies:

Focus on High-Quality Mixed-Use Assets in Metro-Served Submarkets in the Washington, D.C. Metropolitan Area. We intend to continue our longstanding strategy of owning and operating assets within urban-infill, Metro-served submarkets in the Washington, D.C. metropolitan area with high barriers to entry and key urban amenities, including being within walking distance of the Metro. These submarkets, which include the District of Columbia; National Landing, the Rosslyn-Ballston Corridor, Reston and Alexandria in Virginia; and Bethesda, Silver Spring and the Rockville Pike Corridor in Maryland, generally feature strong economic and demographic attributes, as well as superior transportation infrastructure that caters to the preferences of our office, multifamily and retail tenants. We believe these positive attributes will allow our assets located in these submarkets to outperform the Washington, D.C. metropolitan area as a whole.

Realize Contractual Embedded Growth. We believe there are substantial near-term growth opportunities embedded in our existing Operating Portfolio, many of which are contractual in nature, including the burn-off of free rent, contractual rent escalators in our non-GSA office and retail leases based on increases in CPI or a fixed percentage, and the commencement of signed but not yet commenced leases. "GSA" refers to the General Services Administration, which is the independent federal government agency that manages real estate procurement for the federal government and federal agencies.

Drive Incremental Growth Through Lease-up of Our Assets. We believe that we are well-positioned to achieve significant internal growth through lease-up of the vacant space in our Operating Portfolio, including certain recently developed assets, given our leasing capabilities and the tenant demand for high-quality space in our submarkets. As of December 31, 2018, we had 46 operating commercial assets totaling approximately 12.9 million square feet (11.3 million square feet at our share), which were 89.6% leased at our share, resulting in approximately 1.2 million square feet available for lease.

Deliver Our Assets Under Construction. As of December 31, 2018, we had nine high-quality assets under construction in which we expect to make an estimated incremental investment of $519.4 million at our share. Our assets under construction consist of five commercial assets totaling approximately 1.2 million square feet (927,000 square feet at our share) and four multifamily assets totaling 1,476 units (1,298 units at our share), all of which are Metro-served. We believe these projects provide significant potential for value creation. As of December 31, 2018, 53.5% (49.5% at our share) of our commercial assets under construction were pre-leased. Amazon is expected to lease 258,299 SF at 1770 Crystal Drive. With this expected lease with Amazon, the asset would be 97.8% pre-leased, and the pre-leased status of our total under construction portfolio would be 75.8% (77.4% at our share). We define "estimated incremental investment" to mean management's estimate of the remaining cost to be incurred in connection with the development of an asset as of December 31, 2018, including all remaining acquisition costs, hard costs, soft costs, tenant improvements (excluding free rent converted to tenant improvement allowances), leasing costs and other similar costs to develop and stabilize the asset but excluding any financing costs, ground rent expenses and capitalized payroll costs.

Develop Our Significant Future Development Pipeline. We have a significant pipeline of opportunities for value creation through ground-up development, with the goal of producing favorable risk-adjusted returns on invested capital. We expect to be active in developing these opportunities while maintaining prudent leverage levels. Our future development pipeline consists of 41 assets. We estimate our future development pipeline can support over 23.1 million square feet (19.6 million square feet at our share) of estimated potential development density, with 96.8% of this potential development density being Metro-served based on our share of estimated potential development density. The estimated potential development densities and uses reflect our current business plans as of December 31, 2018 and are subject to change based on market conditions. We characterize our future development pipeline as our assets that are development opportunities on which we do not intend to commence construction within 18 months of December 31, 2018 where we (i) own land or control the land through a ground lease or (ii) are under a long-term conditional contract to purchase or enter into a leasehold interest with respect to land.

Our future development pipeline includes six parcels attached to assets in our Operating Portfolio that would require a redevelopment of approximately 349,000 office and/or retail square feet (251,000 square feet at our share) and 324 multifamily units (185 units at our share), which generated $4.9 million of annualized net operating income ("NOI") for the year ended December 31, 2018, in order to access approximately 3.8 million square feet (2.6 million square feet at our share) of total estimated potential development density.

Redevelop and Reposition Our Assets. We evaluate our portfolio on an ongoing basis to identify value-creating redevelopment and renovation opportunities, including the addition of amenities, unit renovations and building and landscaping enhancements. We intend to seek to increase occupancy and rents, improve tenant quality and enhance cash flow and value by completing the redevelopment and repositioning of certain of our assets, including the use of our Placemaking process. This approach is facilitated by our extensive proprietary research platform and deep understanding of submarket dynamics. We believe there will be significant opportunities to apply our Placemaking process across our portfolio.

Rigorous Approach to Capital Allocation. An important component of our focus on maximizing long-term net asset value ("NAV") per share, is prudent capital allocation. We evaluate development, acquisition and disposition decisions based on how they impact long-term NAV per share. Because distinct segments of our market present substantial downside risk while others offer attractive upside, our pursuit of long-term NAV growth takes many forms, some of which sit on opposite ends of the risk-taking spectrum. Where we see elevated asset pricing, potential excess supply, and limited prospects for future growth, we will likely sell assets. Given the attractive pricing of office assets and our long-term objective of shifting our portfolio towards a 50:50 mix of office and multifamily, we are currently targeting primarily office assets in submarkets where we have less concentration and where we anticipate lower growth rates going forward relative to other opportunities within our portfolio. We are also focused on opportunities to turn land assets into income streams or retained capital.

The acquisitions market in the Washington, D.C. area continues to be competitive, and we remain cautious. We expect near-term acquisition activity to be focused on assets with redevelopment potential in emerging growth neighborhoods, as well as assets adjacent to our existing holdings where the combination of sites can add unique value to any new investment. Where there are opportunities to trade out of higher risk assets with extensive capital needs or those outside of our geographic footprint, we will consider Section 1031 exchanges under the Internal Revenue Code of 1986, as amended (the "Code").

Third-Party Services Business

Our third-party asset management and real estate services platform provides fee-based real estate services to third parties, the JBG Legacy Funds and the Washington Housing Initiative ("WHI"), which intends to pursue a transformational approach to producing affordable workforce housing and creating sustainable, mixed-income communities in the Washington D.C. region. Although a significant portion of the assets and interests in assets formerly owned by certain of the JBG Legacy Funds were contributed to us in the Combination, the JBG Legacy Funds retained certain assets that are not consistent with our long-term business strategy, which were generally categorized as (i) condominium and townhome assets, (ii) hotels, (iii) assets that were likely to be sold by the JBG Legacy Funds in the near term as of the time of the Combination, (iv) assets located outside of our core markets or that are not Metro-served, (v) noncontrolling real estate venture interests and (vi) single-tenant leased GSA assets that are encumbered with long-term, hyper-amortizing bond financing that is not consistent with our financing strategy. With respect to the JBG Legacy Funds and for most assets that we hold through real estate ventures, we will continue to provide the same asset management, property management, construction management, leasing and other services that were provided prior to the Combination by the management business that we acquired in the Combination. Other than the WHI, we do not intend to raise any future investment funds, and the JBG Legacy Funds will be managed and liquidated over time. We expect to continue to earn fees from these funds as they are wound down, as well as from any real estate venture arrangements currently in place and any new real estate venture and/or development arrangements entered into in the future, including with Amazon. Certain individual members of our management team own direct equity co-investment and promote interests in the JBG Legacy Funds that were not contributed to us. As the JBG Legacy Funds are wound down over time, these economic interests will decrease and be eventually eliminated.

We believe that the fees we earn in connection with providing these services will enhance our overall returns, provide additional scale and efficiency in our operating, development and acquisition businesses and generate capital which we can use to absorb overhead and other administrative costs of the platform. This scale provides competitive advantages, including market knowledge, buying power and operating efficiencies across all product types. We also believe that our existing relationships arising out of our third-party asset management and real estate services business will continue to provide potential capital and new investment opportunities.

Competition

The commercial real estate markets in which we operate are highly competitive. We compete with numerous acquirers, developers, owners and operators of commercial real estate including other REITs, private real estate funds, domestic and foreign financial institutions, life insurance companies, pension trusts, partnerships and individual investors, many of which own or may seek to acquire or develop assets similar to ours in the same markets in which our assets are located. These competitors may have greater financial resources or access to capital than we do or be willing to acquire assets in transactions which are more highly leveraged or are less attractive from a financial viewpoint than we are willing to pursue. Leasing is a major component of our business and is highly competitive. The principal means of competition in leasing are lease terms (including rent charged and tenant improvement allowances), location, services provided and the nature and condition of the asset to be leased. If our competitors offer space at rental rates below current market rates, below the rental rates we currently charge our tenants, in better locations within our markets, in higher quality assets or offer better services, we may lose potential tenants and we may be pressured to reduce our rental rates below those we currently charge to retain tenants when our tenants' leases expire.

Seasonality

Our revenues and expenses are, to some extent, subject to seasonality during the year, which impacts quarterly net earnings, cash flows and funds from operations that affects the sequential comparison of our results in individual quarters over time. We have historically experienced higher utility costs in the first and third quarters of the year.

Segment Data

We operate in the following business segments: commercial, multifamily and third-party asset management and real estate services. Financial information related to these business segments for each of the three years in the period ended December 31, 2018 is set forth in Note 18 to our consolidated and combined financial statements included herein.

Tax Status

We have elected to be taxed as a REIT under Sections 856-860 of the Code. Under those sections, a REIT which distributes at least 90% of its REIT taxable income as dividends 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. Prior to the Separation, Vornado operated as a REIT and distributed 100% of its REIT taxable income to its shareholders; accordingly, no provision for federal income taxes has been made in the accompanying financial statements for the periods prior to the Separation. We currently adhere and intend to continue to adhere to these requirements and to maintain our REIT status in future periods.

As a REIT, we can reduce our taxable income by distributing all or a portion of such taxable income to shareholders. Future distributions will be declared and paid at the discretion of our Board of Trustees and will depend upon cash generated by operating activities, our financial condition, capital requirements, annual dividend requirements under the REIT provisions of the Code and such other factors as our Board of Trustees deems relevant.

We also participate in the activities conducted by our subsidiary entities that have elected to be treated as taxable REIT subsidiaries ("TRS") under the Code. As such, we are subject to federal, state, and local taxes on the income from these activities. Income taxes attributable to our TRSs are accounted for under the asset and liability method. Under the asset and liability method, deferred income taxes arise from temporary differences between the tax basis of assets and liabilities and their reported amounts in the financial statements, which will result in taxable or deductible amounts in the future.

Significant Tenants

Only the U.S. federal government accounted for 10% or more of our rental revenue, which consists of property rentals and tenant reimbursements, as follows:

(Dollars in thousands)	Year Ended December 31, 2018	2017	2016
Rental revenue from the U.S. federal government	$ 94,822	$ 92,192	$ 103,864
Percentage of commercial segment rental revenue	22.0%	24.0%	29.1%
Percentage of total rental revenue	17.6%	19.4%	23.6%

Sustainable Business Strategy

Our business model prioritizes long-term growth. By investing in urban infill and transit-oriented development and strategically mixing high-quality multifamily and commercial buildings with public areas, retail spaces, and walkable streets, we are working to define neighborhoods that deliver benefits to the environment and our community, as well as long-term value to our shareholders.

We remain committed to transparency in our strategy and performance with a focus on operating efficiency, responding to evolving environmental and social trends, and delivering on the needs of our tenants and communities. This year we demonstrated this by:

- Achieving a 4-star rating in the Global Real Estate Sustainability Benchmark (GRESB) Real Estate Assessment, ranking second in our peer group and in the top 10 of all North American REITs
- Adding oversight of environmental and social matters to the Board of Trustees' Corporate Governance & Nominating Committee’s charter

Our sustainability team works directly with individual departments to integrate our environmental sustainability, social responsibility and corporate governance ("ESG") principles throughout our operations and investment process. The sustainability team includes our Director of Sustainability and a Sustainability Analyst. The team is responsible for annual ESG reporting, maintaining building certifications and coordinating with industry and community partners.

To ensure that our ESG principles are fully integrated into our business practices, Steering Committees, including members of our management team, provide top-down support for the implementation of ESG initiatives. The ESG team provides our Board of Trustees Corporate Governance & Nominating Committee with periodic updates on ESG strategy.

Environmental
We believe that the efficient use of resources will result in sustainable long-term growth. Our portfolio of LEED and ENERGY STAR certified properties demonstrates our commitment to sustainable design and performance. As of December 31, 2018:

- 74% of all operating assets, based on square footage, have earned at least one green certification:
  - 6.6 million square feet of LEED Certified Commercial Space (59%)
  - 1.4 million square feet of LEED Certified Multifamily Space (36%)
  - 7.4 million square feet of ENERGY STAR Certified Commercial Space (65%)
  - 1.9 million square feet of ENERGY STAR Certified Multi-family Space (48%)

We have committed to improve the energy efficiency of our commercial operating portfolio by at least 20% over the next 10 years through the Department of Energy Better Buildings Challenge. Our 2017 data demonstrate improved energy performance by an average of 3.4% each year since 2014, which is consistent with a cumulative improvement of 10%, and is on track to meet or exceed the improvement goal by 2024.

We were named a 2018 Green Lease Leader by the Institute for Market Transformation (IMT) and the U.S. Department of Energy’s (DOE) Better Buildings Alliance. Green Lease Leaders recognizes companies who utilize the leasing process to achieve better collaboration between landlords and tenants with the goal of reducing building energy consumption and operating costs. Our standard lease contains a cost recovery clause for resource efficiency-related capital improvements and requires tenants to provide data for measuring, managing, and reporting sustainability performance.

We take climate change, and the risks associated with climate change seriously, and we are committed to aligning our investment strategy with science. We stand with our communities, tenants, and fellow shareholders in supporting meaningful solutions that address this global challenge. To develop a more informed view of future climate conditions and further our understanding of the direct physical risks to our properties, we are conducting a climate risk assessment, which will include operating assets and land holdings in our future development pipeline. The results of this assessment will be presented to senior management, and we expect it will inform our investment strategy moving forward.

Social Responsibility
We believe the strength of our entire community is central to sustaining the long-term value of our portfolio. We are committed to the economic development of the Washington region through continued investment in our projects and local communities. We recognize, however that new development also fosters challenging growth dynamics, with issues of social equity at the forefront. We strive to work alongside community members, leaders, and local and federal governments to appropriately respond to these challenges. The most recent example of our commitment is the WHI, which we launched in partnership with the Federal City Council. We have initially committed to make up to a $10.0 million investment in WHI projects and added an Executive Vice President of Social Impact Investing to help manage these activities.

The WHI is a transformational market-driven approach to producing affordable workforce housing and creating sustainable, mixed-income communities. The WHI intends to bring together capital from private and philanthropic sources to preserve or build affordable housing in mixed-income communities. The initiatives' goals include:

- Preserving or building between 2,000 and 3,000 units of affordable workforce housing in the Washington D.C. region over the next decade; and
- Delivering triple bottom line results consisting of environmental and social objectives in addition to financial returns.

We recognize that diversity in our workforce brings valuable perspectives, views and ideas to our organization. We pride ourselves on our strong, collaborative culture, and we strive to create an inclusive and healthy work environment for our employees, which allows us to continue to attract innovative thinkers to our organization. Our workforce comprises 38% females and 52% minorities, and our senior leadership has 33% female representation. Our Board of Trustees comprises 17% females. Our Board of Trustees has made a long-term commitment to evolve in a direction that reflects the strength and diversity of our national labor force and establish an equal balance between men and women and one that reflects the diversity of our country.

To learn more about our ESG initiatives please visit JBGSMITH.com/about/sustainability and download our Sustainability Report. Our Internet website and the information contained therein or connected thereto are not intended to be incorporated into this Annual Report on Form 10-K.

Environmental Matters

Under various federal, state and local laws, ordinances and regulations, an owner of real estate is liable for the costs of removal or remediation of certain hazardous or toxic substances on such real estate. These laws often impose such liability without regard to whether the owner knew of, or was responsible for, the presence of such hazardous or toxic substances. The costs of remediation or removal of such substances may be substantial and the presence of such substances, or the failure to promptly remediate such substances, may adversely affect the owner's ability to sell such real estate or to borrow using such real estate as collateral. In connection with the ownership and operation of our assets, we may be potentially liable for such costs. The operations of current and former tenants at our assets have involved, or may have involved, the use of hazardous materials or generated hazardous wastes. The release of such hazardous materials and wastes could result in us incurring liabilities to remediate any resulting contamination. The presence of contamination or the failure to remediate contamination at our properties may (1) expose us to third-party liability (e.g., for cleanup costs, natural resource damages, bodily injury or property damage), (2) subject our properties to liens in favor of the government for damages and costs the government incurs in connection with the contamination, (3) impose restrictions on the manner in which a property may be used or businesses may be operated, or (4) materially adversely affect our ability to sell, lease or develop the real estate or to borrow using the real estate as collateral. In addition, our assets are exposed to the risk of contamination originating from other sources. While a property owner may not be responsible for remediating contamination that has migrated onsite from an identifiable and viable offsite source, the contaminant's presence can have adverse effects on operations and the redevelopment of our assets. To the extent we send contaminated materials to other locations for treatment or disposal, we may be liable for cleanup of those sites if they become contaminated.

Most of our assets have been subject, at some point, to environmental assessments that are intended to evaluate the environmental condition of the subject and surrounding assets. These environmental assessments generally have included a historical review, a public records review, a visual inspection of the site and surrounding assets, visual or historical evidence of underground storage tanks, and the preparation and issuance of a written report. Soil and/or groundwater subsurface testing is conducted at our assets, when necessary, to further investigate any issues raised by the initial assessment that could reasonably be expected to pose a material concern to the property or result in us incurring material environmental liabilities as a result of redevelopment. They may not, however, have included extensive sampling or subsurface investigations. In each case where the environmental assessments have identified conditions requiring remedial actions required by law, we have initiated appropriate actions. The environmental assessments did not reveal any material environmental contamination that we believe would have a material adverse effect on our overall business, financial condition or results of operations, or that have not been anticipated and remediated during site redevelopment as required by law. Nevertheless, 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 cost to us.

Employees

Our headquarters are located at 4445 Willard Avenue, Suite 400, Chevy Chase, MD 20815. As of December 31, 2018, we had 914 employees.

Available Information

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 are available free of charge through our website (www.JBGSMITH.com) as soon as reasonably practicable after they are electronically filed with, or furnished to, the Securities and Exchange Commission ("SEC"). 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 financial measures not in compliance with accounting principles generally accepted in the United States ("GAAP"), 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

You should carefully consider the following risks in evaluating our company and our common shares. If any of the following risks were to occur, our business, prospects, financial condition, results of operations, cash flow and the ability to make distributions to our shareholders could be materially and adversely affected, which we refer herein collectively as a "material adverse effect on us," the per share trading price of our common shares could decline significantly, and you could lose all or a part of your investment. Some statements in this Form 10-K, including statements in the following risk factors, constitute forward-looking statements. Refer to the section entitled "Cautionary Statement Concerning Forward-Looking Statements" for additional information regarding these forward-looking statements.

Risks Related to Our Business and Operations

Our portfolio of assets is geographically concentrated in the Washington, D.C. metropolitan area and submarkets therein, which makes us susceptible to regional and local adverse economic and other conditions such that an economic downturn affecting this area could have a material adverse effect on us.

All our assets are located in the Washington, D.C. metropolitan area. As a result, we are particularly susceptible to adverse economic or other conditions in this market (such as periods of economic slowdown or recession, business layoffs or downsizing, industry slowdowns, actual or anticipated federal government shutdowns, relocations of businesses, increases in real estate and other taxes, and the cost of complying with governmental regulations or increased regulation), as well as to natural disasters (including earthquakes, floods, storms and hurricanes), potentially adverse effects of "global warming" and other disruptions that occur in this market (such as terrorist activity or threats of terrorist activity and other events), any of which may have a greater impact on the value of our assets or on our operating results than if we owned a more geographically diverse portfolio. This market experienced an economic downturn in recent years. A similar or worse economic downturn in the future could have a material adverse effect on us. We cannot assure you that this market will grow or that underlying real estate fundamentals will be favorable to our asset classes or future development.

Moreover, the same risks that apply to the Washington, D.C. metropolitan area as a whole also apply to the individual submarkets where our assets are located. National Landing makes up 57.9% of our operating portfolio and 56.2% of our future development pipeline. Portions of our market, including National Landing, have underperformed other markets in the region with respect to rent growth and occupancy. Any adverse economic or other conditions in the Washington, D.C. metropolitan area, our submarkets, especially National Landing, or any decrease in demand for office, multifamily or retail assets could have a material adverse effect on us.

Our assets and the property development market in the Washington, D.C. metropolitan area are dependent on a metropolitan economy that is heavily reliant on federal government spending, and any actual or anticipated curtailment of such spending could have a material adverse effect on us.

The real estate and property development market in the Washington, D.C. metropolitan area is heavily dependent upon actual and anticipated federal government spending, and the professional services and other industries that support the federal government. Any actual or anticipated curtailment of federal government spending, whether due to an actual or potential change of presidential administration or control of Congress, actual or anticipated federal government sequestrations, furloughs or shutdowns, a slowdown of the U.S. and/or global economy or other factors, could have an adverse impact on real estate values and property development in the Washington, D.C. metropolitan area, on demand and willingness to enter into long-term contracts for office space by the federal government and companies dependent upon the federal government, as well as on occupancy rates and annualized rents of multifamily and retail assets by occupants or patrons whose employment is by or related to the federal government. For example, sequestration, which mainly impacted government contractors and federal government agencies, resulted in a large decrease in federal government spending, and the implementation of BRAC (Base Realignment and Closure), which shifted Department of Defense real estate from leased space to owned bases, contributed to 5.2 million square feet of occupancy losses in the Washington, D.C. metropolitan area from 2012 through 2014, mainly in Northern Virginia. Similar curtailments in federal spending or changes in federal leasing policy could occur in the future, which could have a material adverse effect on us.

Amazon's commitment to the selection of National Landing as Amazon HQ2 is conditional upon negotiating and executing definitive documentation with us. If we are not successful in executing definitive documentation, Amazon may determine not to proceed with the selection of National Landing as the site for Amazon HQ2, which would likely cause the market price of our common shares to decline.

While we and Amazon have entered into an agreement of exclusivity and negotiations regarding Amazon HQ2, this agreement does not obligate Amazon to consummate any transaction with us. We may not be successful in negotiating and executing definitive documentation with Amazon regarding the selection of National Landing and any of our properties as Amazon HQ2. Amazon has significant strength as a counterparty to negotiations of the definitive documentation related to the potential Amazon HQ2 and could make demands during the course of those negotiations that we determine to be unacceptable. If we are not successful in negotiating and executing definitive documentation regarding National Landing and our properties as Amazon HQ2, Amazon may determine not to proceed with the selection of National Landing as the site for Amazon HQ2, and the market price of our common shares would likely decline.

If Amazon invests less than the announced amounts in National Landing or makes such investment over a longer period, our ability to achieve the benefits associated with National Landing being selected as Amazon HQ2 could be adversely affected, which could have a material adverse effect on us and the market price of our common shares. Furthermore, the selection of National Landing for Amazon HQ2 could fail to achieve the anticipated collateral financial effect associated with that selection, which could have a material adverse effect on us and the market price of our common shares.

Even if Amazon and JBG SMITH enter into definitive documentation, and National Landing is conclusively determined as the site for Amazon HQ2, the benefits that might accrue to us may be less than we, financial or industry analysts or investors anticipate. For example, if Amazon invests less than the announced amounts in National Landing or makes such investment over a longer period than anticipated, our ability to achieve the benefits associated with National Landing being selected for Amazon HQ2 could be adversely affected. Furthermore, the selection of National Landing as Amazon HQ2 may not have the anticipated collateral financial effect associated with that selection. If we do not achieve the perceived benefits of such selection as rapidly or to the extent anticipated by us, financial or industry analysts or investors, we and potentially the market price of our common shares could be adversely affected.

We derive a significant portion of our revenues from U.S. federal government tenants.

In the year ended December 31, 2018, approximately 22.0% of the rental revenue from our commercial segment was generated by rentals to federal government tenants, and federal government tenants historically have been a significant source of new leasing for us. The occurrence of events that have a negative impact on the demand for federal government office space, such as a decrease in federal government payrolls or a change in policy that prevents governmental tenants from renting our office space, would have a much larger adverse effect on our revenues than a corresponding occurrence affecting other categories of tenants. If demand for federal government office space were to decline, it would be more difficult for us to lease our buildings and could reduce overall market demand and corresponding rental rates, all of which could have a material adverse effect on us.

We may face additional risks and costs associated with directly managing assets occupied by government tenants.

As of December 31, 2018, we owned 24 assets in which some or all the tenants were federal government agencies. Lease agreements with these federal government agencies contain provisions required by federal law, which require, among other things, that the lessor of the property, agree to comply with certain rules and regulations, including rules and regulations related to anti-kickback procedures, examination of records, audits and records, equal opportunity provisions, prohibition against segregated facilities, certain executive orders, subcontractor cost or pricing data, and certain provisions intending to assist small businesses. We directly manage assets with federal government agency tenants and, therefore, we are subject to additional risks associated with compliance with all applicable federal rules and regulations. In addition, there are certain additional requirements relating to the potential application of equal opportunity provisions and the related requirement to prepare written affirmative action plans applicable to government contractors and subcontractors. Some of the factors used to determine whether these requirements apply to a company that is affiliated with the actual government contractor (the legal entity that is the lessor under a lease with a federal government agency) include whether such company and the government contractor are under common ownership, have common management, and are under common control. We own the entity that is the government contractor and the property manager, increasing the risk that requirements of the Employment Standards Administration's Office of Federal Contract Compliance Programs and requirements to prepare affirmative action plans pursuant to the applicable executive order may be determined to be applicable to us. Compliance with these regulations is costly and any increase in regulation could increase our costs, which could have a material adverse effect on us.

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

There are many factors that can affect the value of our equity securities and any debt securities we may issue in the future, including the state of the capital markets and the economy. Demand for office space may decline nationwide as it did in 2008 and 2009, due to an economic downturn, bankruptcies, downsizing, layoffs and cost cutting. Government action or inaction may adversely affect the state of the capital markets. The cost and availability of credit may be adversely affected by illiquid credit markets and wider credit spreads, which may adversely affect our liquidity and financial condition, including our results of operations, and the liquidity and financial condition of our tenants. Our inability or the inability of our tenants to timely refinance maturing liabilities and access the capital markets to meet liquidity needs may materially affect our financial condition and results of operations and the value of our equity securities and any debt securities we may issue in the future.

We are exposed to risks associated with real estate development and redevelopment, such as unanticipated expenses, delays and other contingencies, any of which could have a material adverse effect on us.

Real estate development and redevelopment activities are a critical element of our business strategy, and we expect to engage in such activities with respect to certain of our properties and with properties that we may acquire in the future. To the extent that we do so, we will be subject to certain risks, including, without limitation:

- construction or redevelopment costs of a project may exceed original estimates, possibly making the project less profitable than originally estimated, or unprofitable;
- time required to complete the construction or redevelopment of a project or to lease-up the completed project may be greater than originally anticipated, thereby adversely affecting our cash flow and liquidity;
- contractor and subcontractor disputes, strikes, labor disputes, weather conditions or supply disruptions;
- failure to achieve expected occupancy and/or rent levels within the projected time frame, if at all;
- delays with respect to obtaining, or the inability to obtain, necessary zoning, occupancy, land use and other governmental permits, and changes in zoning and land use laws;
- occupancy rates and rents of a completed project may not be sufficient to make the project profitable;
- incurrence of design, permitting and other development costs for opportunities that we ultimately abandon;
- the ability of prospective real estate venture partners or buyers of our properties to obtain financing; and
- the availability and pricing of financing to fund our development activities on favorable terms or at all.

Furthermore, if we develop assets in new markets or asset classes where we do not have the same level of market knowledge or experience as with our current markets and asset classes, then we may experience weaker than anticipated performance. These risks could result in substantial unanticipated delays or expenses and, under certain circumstances, could prevent the initiation or the completion of development or redevelopment activities, any of which could have a material adverse effect on us.

We may be unable to identify and complete acquisitions of properties that meet our criteria, which may impede our growth.

Our business strategy includes the acquisition of office, multifamily and retail properties and properties to be held for development, including in connection with like-kind exchanges under the tax code. We evaluate the market for suitable acquisition candidates or investment opportunities that meet our criteria and are compatible with our growth strategies. However, we may be unable to acquire properties identified as potential acquisition opportunities on favorable terms, or at all. We may incur significant costs and divert management attention in connection with evaluating and negotiating potential acquisitions, including ones that we are subsequently unable to complete. If we are unable to complete planned like-kind exchanges using proceeds from asset dispositions, we will be required to distribute to our shareholders those proceeds rather than reinvest them to grow our portfolio. Even if we enter into agreements for the acquisition of properties, these agreements are subject to customary conditions to closing, including the completion of due diligence investigations and other conditions that are not within our control, which may not be satisfied. In addition, we may be unable to finance the acquisition on favorable terms or at all. Furthermore, if we acquire assets in new markets or asset classes where we do not have the same level of market knowledge or experience as with our current markets and asset classes, then we may experience weaker than anticipated performance. Our inability to identify, negotiate, finance or consummate property acquisitions, or acquire properties on favorable terms, or at all, could impede our growth and have a material adverse effect on us.

Our future acquisitions may not yield the returns we expect, and we may otherwise be unable to operate acquired properties to meet our financial expectations, which could have a material adverse effect on us.

Our future acquisitions and our ability to successfully operate the properties we acquire in such acquisitions may expose us to the following significant risks:

- even if we are able to acquire a desired property, competition from other potential acquirers may significantly increase the purchase price;
- we may acquire properties that are not accretive to our results upon acquisition, and we may not be able to successfully manage and lease those properties to meet our expectations;
- we may spend more than budgeted amounts to make necessary improvements or renovations to acquired properties;
- we may be unable to integrate new acquisitions quickly and efficiently, particularly acquisitions of portfolios of properties, into our existing operations, and, as a result, our results of operations and financial condition could be adversely affected;
- market conditions may result in higher than expected vacancy rates and lower than expected rental rates; and
- we may acquire properties subject to liabilities and without any recourse, or with only limited recourse, with respect to unknown liabilities, such as liabilities for clean-up of undisclosed environmental contamination, claims by tenants, vendors or other persons dealing with the former owners of such properties, liabilities incurred in the ordinary course of business and claims for indemnification by general partners, trustees, officers and others indemnified by the former owners of such properties.

If our future acquisitions do not yield the returns we expect, and we are otherwise unable to operate acquired properties to meet our financial expectations, it could have a material adverse effect on us.

We may not be able to control our operating expenses, or our operating expenses may remain constant or increase, even if our revenues do not increase, which could have a material adverse effect on us.

Operating expenses associated with owning a property include real estate taxes, insurance, loan payments, maintenance, repair and renovation costs, the cost of compliance with governmental regulation (including zoning) and the potential for liability under applicable laws. If our operating expenses increase, our results of operations may be adversely affected. Moreover, operating expenses are not necessarily reduced when circumstances such as market factors, competition or reduced occupancy cause a reduction in revenues from the property. As a result, if revenues decline, we may not be able to reduce our operating expenses associated with the property. An increase in operating expenses or the inability to reduce operating expenses commensurate with revenue reductions could have a material adverse effect on us.

Partnership or real estate venture investments could be adversely affected by our lack of sole decision-making authority, our reliance on partners' or co-venturers' financial condition and disputes between us and our partners or co-venturers, which could have a material adverse effect on us.

As of December 31, 2018, approximately 9.9% of our assets measured by total square feet were held through real estate ventures, and we expect to co-invest in the future with other third parties through partnerships, real estate ventures or other entities, acquiring noncontrolling interests in or sharing responsibility for managing the affairs of a property, partnership, real estate venture or other entity. In particular, we expect to use real estate ventures as a significant source of equity capital to fund our development strategy. Consequently, with respect to any such third-party arrangement, we would not be in a position to exercise sole decision-making authority regarding the property, partnership, real estate venture or other entity, or structure of ownership and may, under certain circumstances, be exposed to risks not present were a third party not involved, including the possibility that partners or co-venturers might become bankrupt or fail to fund their share of required capital contributions, and we may be forced to make contributions to maintain the value of the property. Partners or co-venturers may have economic or other business interests or goals that are inconsistent with our business interests or goals and may be in a position to take action or withhold consent contrary to our policies or objectives. In some instances, partners or co-venturers may have competing interests in our markets that could create conflict of interest issues. These investments may also have the potential risk of impasses on decisions, such as a sale, because neither we nor the partner or co-venturer would have full control over the partnership or real estate venture. We and our respective partners or co-venturers may each have the right to trigger a buy-sell right or forced sale arrangement, which could cause us to sell our interest, or acquire our partners' or co-venturers' interest, or to sell the underlying asset, either on unfavorable terms or at a time when we otherwise would not have initiated such a transaction. In addition, a sale or transfer by us to a third party of our interests in the partnership or real estate venture may be subject to consent rights or rights of first refusal in favor of our partners or co-venturers, which would in each case restrict our ability to dispose of our interest in the partnership or real estate venture. Where we are a limited partner or non-managing member in any partnership or limited liability company, if the entity takes or expects to take actions that could jeopardize our status as a REIT or require us to pay tax, we may be forced to dispose of our interest in that entity, including by contributing our interest to a subsidiary of ours that is subject to corporate level income tax. Disputes between us and partners or co-venturers may result in litigation or arbitration that would increase our expenses and prevent our officers and/or trustees from focusing their time and effort on our business. Consequently, actions by or disputes with partners or co-venturers might result in subjecting assets owned by the partnership or real estate venture to additional risk. In addition, we may in certain circumstances be liable for the actions of our third-party partners or co-venturers. Our real estate ventures may be subject to debt, and the refinancing of such debt may require equity capital calls. We will review the qualifications and previous experience of any partners and co-venturers, although we may not obtain financial information from, or undertake independent investigations with respect to, prospective partners or co-venturers. In addition, any cash distributions from real estate ventures will be subject to the operating agreements of the real estate ventures, which may limit distributions, the timing of distributions or specify certain preferential distributions among the respective parties. The occurrence of any of the risks described above could have a material adverse effect on us.

We may be unable to renew leases, lease vacant space or re-let space as leases expire, or do so on favorable terms, which could have a material adverse effect on us.

As of December 31, 2018, leases representing 8.0% of our share of the office and retail square footage in our Operating Portfolio will expire during the year ending December 31, 2019 and 13.8% of our share of the square footage of the assets in our commercial portfolio was unoccupied and not generating rent. We cannot assure you that expiring leases will be renewed or that our assets will be re-let at rental rates equal to or above current average rental rates or that substantial free rent, tenant improvements, early termination rights or below-market renewal options will not be offered to attract new tenants or retain existing tenants.

In addition, our ability to lease our multifamily assets at favorable rates, or at all, may be adversely affected by any increase in supply and/or deterioration in the multifamily market, which is dependent upon the overall level of spending in the economy; and spending is adversely affected by, among other things, job losses and unemployment levels, recession, personal debt levels, housing market conditions, stock market volatility and uncertainty about the future.

If the rental rates on new leases at our assets decrease, our existing tenants do not renew their leases, or we do not re-let a significant portion of our available space and space for which leases expire, it could have a material adverse effect on us.

We depend on major tenants in our commercial portfolio, and the bankruptcy, insolvency or inability to pay rent of any of these tenants could have a material adverse effect on us.

As of December 31, 2018, the 20 largest office and retail tenants in our operating portfolio represented approximately 54.9% of our share of total annualized office and retail rent. In many cases, through tenant improvement allowances and other concessions, we have made substantial upfront investments in leases with our major tenants that we may not recover if they fail to pay rent through the end of the lease term.

The inability of a major tenant to pay rent, or the bankruptcy or insolvency of a major tenant, may adversely affect the income produced by our Operating Portfolio. If a tenant becomes bankrupt or insolvent, federal law may prohibit us from evicting such tenant based solely upon such bankruptcy or insolvency. In addition, a bankrupt or insolvent tenant may be authorized to reject and terminate its lease with us. If a lease is rejected by a tenant in bankruptcy, we may have only a general unsecured claim for damages that is limited in amount and may only be paid to the extent that funds are available and in the same percentage as is paid to all other holders of unsecured claims. Moreover, any claim against this tenant for unpaid, future rent would be subject to a statutory cap that might be substantially less than the remaining rent owed under the lease.

If any of our major tenants were to experience a downturn in its business, or a weakening of its financial condition resulting in its failure to make timely rental payments or causing it to default under its lease, we may experience delays in enforcing our rights as landlord and may incur substantial costs in protecting our investment. Any such event could have a material adverse effect on us.

We derive a significant portion of our revenues from five of our assets.

As of December 31, 2018, five of our assets in the aggregate generated approximately 27% of our share of annualized rent. The occurrence of events that have a negative impact on one or more of these assets, such as a natural disaster that damages one or more of these assets, would have a much larger adverse effect on our revenues than a corresponding occurrence affecting a less significant property. A substantial decline in the revenues generated by one or more of these assets could have a material adverse effect on us.

We derive most of our revenues from commercial assets and are subject to risks that affect the businesses of our commercial tenants, which are generally financial, legal and other professional firms as well as the federal government and defense contractors.

As of December 31, 2018, our 46 operating commercial assets generated approximately 78.6% of our share of annualized rent. As a result, the occurrence of events that have a negative impact on the market for office space, such as increased unemployment in the Washington, D.C. metropolitan area, would have a much larger adverse effect on our revenues than a corresponding occurrence affecting our multifamily segment. Our office tenants are generally financial, legal and other professional firms, as well as the federal government and defense contractors. Consequently, we are subject to factors that affect the financial, legal and professional services industries or the federal government generally, including the state of the economy, stock market volatility, and the level of unemployment. These factors could adversely affect the financial condition of our office tenants and the willingness of firms to lease space in our office buildings, which in turn could have a material adverse effect on us.

Some of our assets depend on anchor or major retail tenants to attract shoppers and could be adversely affected by the loss of, or a store closure by, one or more of these tenants.

Some of our assets are anchored by large, nationally recognized tenants. These tenants may experience a downturn in their business that may significantly weaken their financial condition. As a result, these tenants may fail to comply with their contractual obligations to us, seek concessions to continue operations or declare bankruptcy, any of which could result in the termination of these tenants' leases. In addition, some of our tenants may cease operations at stores in our assets while continuing to pay rent. Moreover, mergers or consolidations among large retail establishments could result in the closure of existing stores or duplicate or geographically overlapping store locations, which could include stores at our assets.

Loss of, or a store closure by, an anchor or significant tenant could decrease customer traffic, thereby decreasing sales for our other tenants at the applicable retail property. If sales of our other tenants decrease, they may be unable to pay their minimum rents or expense recovery charges. These circumstances may significantly reduce our occupancy level or the rent we receive from our retail assets, and we may not have the right to re-lease vacated space or we may be unable to re-lease vacated space at attractive rents or at all. Moreover, if a significant tenant or anchor store defaults, we may experience delays and costs in enforcing our rights as landlord to recover amounts due to us under the terms of our agreements with those parties.

The occurrence of any of the situations described above, particularly if it involves an anchor or major tenant with leases in multiple locations, could have a material adverse effect on us.

Our Placemaking business model depends in significant part on a retail component, which frequently involves retail assets embedded or adjacent to our commercial and/or multifamily assets, making us subject to risks that affect the retail environment generally, such as competition from discount and online retailers, weakness in the economy, consumer spending and the financial condition of large retail companies, any of which could adversely affect market rents for retail space and the willingness or ability of retailers to lease space in our retail assets.

We own and operate retail real estate assets and, consequently, are subject to factors that affect the retail environment generally, as well as the market for retail space. The retail environment and the market for retail space have previously been, and continue to be, adversely affected by increasing competition from online retailers and other online businesses. Additionally, discount retailers and outlet malls, weakness in national, regional and local economies, consumer spending and consumer confidence, adverse financial condition of some large retailing companies, ongoing consolidation in the retail sector and an excess amount of retail space in a number of markets could also adversely affect our retail assets. Increases in online consumer spending may significantly affect our retail tenants' ability to generate sales in their stores. This inability to generate sales may cause retailers to, among other things, close stores, decrease the size of new or existing stores, ask for concessions or go bankrupt, all of which could have a material adverse effect on us.

Additionally, our Placemaking model depends in significant part on a retail component, which frequently involves retail assets embedded in or adjacent to our office and/or multifamily assets and if our retail assets lose tenants, whether to the proliferation of e-commerce business or otherwise, it could have a material adverse effect on us.

If we fail to reinvest in and redevelop our assets to maintain their attractiveness to retailers and shoppers, then retailers or shoppers may perceive that shopping at other venues or online is more convenient, cost-effective or otherwise more attractive, which could negatively affect our ability to rent retail space at our assets.

Any of the foregoing factors could adversely affect the financial condition of our retail tenants, the willingness of retailers to lease space from us, and the success of our Placemaking business model, which could have a material adverse effect on us.

The composition of our portfolio by asset type may change over time, which could expose us to different asset class risks than if our portfolio composition remained static.

We own commercial and multifamily assets, with commercial representing 78.6% of our annualized rent and 74.3% of our portfolio based on square footage. Therefore, our results of operations are more affected by conditions in the commercial market than markets for other asset types. If the composition of our portfolio changes, however, then we would become more exposed to the risks and markets of other asset classes. Under our current business plan, we expect that multifamily assets will become a greater proportion of our portfolio. If we are successful in executing the current business plan, then we will become more exposed to the risks of the multifamily markets, and we may not manage those assets as well as our commercial assets, any of which could have a material adverse effect on us.

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

Telecommuting, flexible work schedules, open workplaces, teleconferencing and the use of artificial intelligence are becoming more common. These practices enable businesses to reduce their space requirements. There is also an increasing trend among some businesses to utilize shared office spaces and co-working spaces. A continuation of the movement toward these practices could over time erode the overall demand for office space and, in turn, place downward pressure on occupancy, rental rates and property valuations.

Increased affordability of residential homes and other competition for tenants of our multifamily properties could affect our ability to retain current residents of our multifamily properties, attract new ones or increase or maintain rents, which could adversely affect our results of operations and our financial condition.

Our multifamily properties compete with numerous housing alternatives in attracting residents, including owner occupied single and multifamily homes. Occupancy levels and market rents may be adversely affected by national and local political, economic and market conditions including, without limitation, new construction and excess inventory of multifamily and owned housing/condominiums, increasing portions of owned housing/condominium stock being converted to rental use, rental housing subsidized by the government, other government programs that favor single family rental housing or owner occupied housing over multifamily rental housing, governmental regulations, slow or negative employment growth and household formation, the availability of low-interest mortgages or the availability of mortgages requiring little or no down payment for single family home buyers, changes in social preferences and the potential for geopolitical instability, all of which are beyond our control. Finally, the federal government's policies, many of which may encourage home ownership, can increase competition, possibly limit our ability to raise rents in our markets and lower the value of our properties. Competitive housing and increased affordability of owner occupied single and multifamily homes caused by lower housing prices, an influx of supply of such housing alternatives, attractive mortgage interest rates and government programs to promote home ownership could adversely affect our ability to retain our current residents, attract new ones or increase or maintain rents, which could adversely affect our results of operations and our financial condition.

Real estate is a competitive business.

We compete with numerous acquirers, developers, owners and operators of commercial real estate including other REITs, private real estate funds, domestic and foreign financial institutions, life insurance companies, pension trusts, partnerships and individual investors, some of which may have greater financial resources and be willing to accept lower returns on their investments than we are. The principal means of competition in leasing are lease terms (including rent charged and tenant improvement allowances), location, services provided and the nature and condition of the asset to be leased. If our competitors offer space at rental rates below current market rates, below the rental rates we currently charge our tenants, in better locations within our markets, in higher quality assets or offer better services, we may lose potential tenants and we may be pressured to reduce our rental rates below those we currently charge to retain tenants when our tenants' leases expire.

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 and population and employment trends.

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 assets to tenants on economically favorable terms. In addition, because most of our income is derived from renting real property, our income, funds available to pay indebtedness and funds available for distribution to shareholders will decrease if 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 might not be able to enforce our rights as landlord without delays and might 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, which could have a material adverse effect on us.

We may find it necessary to make rent or other concessions and/or significant capital expenditures to improve our assets to retain and attract tenants, which could have a material adverse effect on us.

We may find it necessary to make rent or other concessions to tenants, accommodate requests for renovations, build-to-suit remodeling and other improvements or provide additional services to our tenants. As a result, we may have to make significant capital or other expenditures to retain tenants whose leases expire and to attract new tenants in sufficient numbers. If the necessary capital is unavailable, we may be unable to make such expenditures. This could result in non-renewals by tenants upon expiration of their leases and our vacant space remaining untenanted, which could have a material adverse effect on us.

Affordable housing and tenant protection regulations may limit our ability to increase rents and pass through new or increased operating expenses to our tenants.

Certain states and municipalities have adopted laws and regulations imposing restrictions on the timing or amount of rent increases and other tenant protections. As of December 31, 2018, approximately 5% of the multifamily units in our Operating Portfolio were designated as affordable housing. In addition, Washington, D.C. and Montgomery County, Maryland have laws that require, in certain circumstances, an owner of a multifamily rental property to allow tenant organizations the option to purchase the building at a market price if the owner attempts to sell the property. We expect to continue operating and acquiring assets in areas that either are subject to these types of laws or regulations or where such laws or regulations may be enacted in the future. Such laws and regulations limit our ability to charge market rents, increase rents, evict tenants or recover increases in our operating expenses and could make it more difficult for us to dispose of assets in certain circumstances.

Our success depends on our senior management team whose continued service is not guaranteed, and the loss of one or more of these persons could adversely affect our ability to manage our business and to implement our growth strategies or could create a negative perception in the capital markets.

Our success and our ability to implement and manage anticipated future growth depend, in large part, upon the efforts of our senior management team, who have extensive market knowledge and relationships, and exercise substantial influence over our operational, financing, acquisition and disposition activity. Members of our senior management team have national or regional industry reputations that attract business and investment opportunities and assist us in negotiations with lenders, existing and potential tenants and other industry participants. The loss of services of one or more members of our senior management team, or our inability to attract and retain similarly qualified personnel, could adversely affect our business, diminish our investment opportunities and weaken our relationships with lenders, business partners, existing and prospective tenants and industry participants, which could have a material adverse effect on us.

The actual density of our future development pipeline and/or any particular future development parcel may not be consistent with our estimated potential development density.

As of December 31, 2018, we estimate that our 41 future development assets will total approximately 23.1 million square feet (19.6 million square feet at our share) of estimated potential development density. We caution you not to place undue reliance on the potential development density estimates for our future development pipeline and/or any particular future development parcel because they are based solely on our estimates, using data available to us, and our business plans as of December 31, 2018. The actual density of our future development pipeline and/or any particular future development parcel may differ substantially from our estimates based on numerous factors, including our inability to obtain necessary zoning, land use and other required entitlements, legal challenges to our plans by activists and others, as well as building, occupancy and other required governmental permits and authorizations, and changes in the entitlement, permitting and authorization processes that restrict or delay our ability to develop, redevelop or use our future development pipeline at anticipated density levels. Moreover, we may strategically choose not to develop, redevelop or use our future development pipeline to its maximum potential development density or may be unable to do so as a result of factors beyond our control, including our ability to obtain financing on terms and conditions that we find acceptable, or at all, to fund our development activities. We can provide no assurance that the actual density of our future development pipeline and/or any particular future development parcel will be consistent with our estimated potential development density.

We may not be able to realize potential incremental annualized rent from our commercial, multifamily or other lease-up opportunities.

Based on current market demand in our submarkets and the efforts of our dedicated in-house leasing teams, we believe we can increase our occupancy and revenue at certain office, multifamily and retail assets. However, we cannot assure you that we will be able to realize potential incremental annualized rent from our commercial, multifamily or other lease-up opportunities. Our ability to increase our occupancy and revenue at certain commercial, multifamily and other assets may be adversely affected by an increase in supply and/or deterioration in the commercial, multifamily or other markets. In addition, if our competitors offer space at rental rates below current asking rates or below our in-place rates, we may experience difficulties attracting new tenants or retaining existing tenants and may be pressured to reduce our rental rates below those we currently charge or to offer more substantial free rent, tenant improvements, early termination rights or below-market renewal options in order to attract or retain tenants. We caution you not to place undue reliance on our belief that we can increase our occupancy and revenue at certain office, multifamily and retail assets.

Revenues from our third-party asset management and real estate services business may decline more quickly than expected, which could have a material adverse effect on us.

Our third-party asset management and real estate services business provides fee-based real estate services to third parties and the JBG Legacy Funds. Our expectation is that the fund portion of this business will wind down over the next several years, but the wind down could accelerate, and the business could be less profitable than anticipated. Although we expect to receive fees for the services provided to the JBG Legacy Funds as they wind down, the amount of those fees will decrease significantly as the number of assets under management is reduced. In addition to reduced revenue, if we cannot reduce our general and administrative expenses to correspond to the decreasing asset management fees, our profitability will be negatively affected. While we expect significant fees from acting as developer and property manager for Amazon HQ2, these fees may be less than expected. Fees from management of real estate ventures and third parties may also be negatively affected if management or development contracts are terminated or if we are unable to secure new sources of fee-based revenue. Any of the foregoing could have a material adverse effect on us.

We may from time to time be subject to litigation, which could have a material adverse effect on us.

We are a party to various claims and routine litigation arising in the ordinary course of business. Some of these claims or others to which we may be subject from time to time may result in defense costs, settlements, fines or judgments against us, some of which are not, or cannot be, covered by insurance. Payment of any such costs, settlements, fines or judgments that are not insured could have a material adverse effect on us. In addition, certain litigation or the resolution of certain litigation may affect the availability or cost of some of our insurance coverage, which could adversely impact our results of operations and cash flow, expose us to increased risks that would be uninsured, and/or adversely impact our ability to attract officers and trustees.

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

We maintain general liability insurance as well as all-risk property and rental value insurance coverage, with sub-limits for certain perils such as floods and earthquakes on each of our properties. However, there can be no assurance that losses incurred by us will be covered by these insurance policies. We maintain coverage for terrorism acts including terrorism involving nuclear, biological, chemical and radiological terrorism events, as defined by the Terrorism Risk Insurance Program Reauthorization Act, which expires in December 2020. We will continue to monitor the state of the insurance market and the scope and costs of coverage for acts of terrorism. However, we cannot provide assurance that such coverage will be available on commercially reasonable terms in the future.

Our mortgage loans are generally non-recourse and contain customary covenants requiring adequate insurance coverage. Although we believe that we currently 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. If lenders insist on greater coverage than we can obtain, it could adversely affect the ability to finance or refinance the properties.

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 assets, 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. If, under the ADA, we are required to make substantial alterations and capital expenditures in one or more of our assets, including the removal of access barriers, it could have a material adverse effect on us.

Our assets 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.

Terrorist attacks, such as those of September 11, 2001, may adversely affect the value of our assets and our ability to generate revenue.

Our assets are in the Washington, D.C. metropolitan area, which has been and may be in the future the target of actual or threatened terrorism activity. As a result, some tenants in this market may choose to relocate their businesses to other markets or to lower-profile office buildings within this market that may be perceived to be less likely targets of future terrorist activity. This could result in an overall decrease in the demand for office space in this market generally or in our assets in particular, which could increase vacancies in our assets or necessitate that we lease our assets on less favorable terms or both. In addition, future terrorist attacks in the Washington, D.C. metropolitan area could directly or indirectly damage our assets, both physically and financially, or cause losses that materially exceed our insurance coverage. Properties that are occupied by federal government tenants may be more likely to be the target of a future attack. As of December 31, 2018, 24 of our assets had federal government agencies as tenants. As a result of the foregoing, the value of our assets and our ability to generate revenues could decline materially, which could have a material adverse effect on us.

If one of our tenants were designated a "Prohibited Person" by the Office of Foreign Assets Control, we could be materially adversely affected.

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 and negative publicity and could otherwise have a material adverse effect on us.

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. Any of the foregoing could have a material adverse effect on us.

The occurrence of cyber incidents, or a deficiency in our cybersecurity, could negatively impact our business by causing a disruption to our operations, a compromise or corruption of our confidential information, regulatory enforcement and other legal proceedings and/or damage to our business relationships, all of which could negatively impact our financial results.

A cyber incident is any adverse event that threatens the confidentiality, integrity, or availability of our information resources. More specifically, a cyber incident is an intentional attack or an unintentional event that can include unauthorized persons gaining access to systems to disrupt operations, corrupt data, or steal confidential information. As our reliance on technology has increased, so have the risks posed to our systems, both internal and those we have outsourced. Our primary risks that could directly result from the occurrence of a cyber incident are theft of assets; operational interruption; regulatory enforcement, lawsuits and other legal proceedings; damage to our relationship with our tenants; and private data exposure. We have implemented processes, procedures and controls to help mitigate these risks, but despite these measures and our increased awareness of a risk of a cyber incident, a cyber incident could have a material adverse effect on us.

We have a limited operating history as a REIT and may not be able to successfully operate as a REIT.

We have a limited operating history as a REIT. We cannot assure you that the experience of our senior management team will be sufficient to successfully operate our company as a REIT. We have control systems and procedures to maintain our qualification as a REIT, and these efforts could place a significant strain on our management systems, infrastructure and other resources. Failure to maintain our qualification as a REIT would have a material adverse effect on us.

Risks Related to the Formation Transaction

We have a limited history operating as an independent company, and our historical financial information is not necessarily representative of the results that we would have achieved as a separate, publicly traded company and may not be a reliable indicator of our future results.

The historical information included herein covering periods prior to the Formation Transaction refers to our business as operated by Vornado and JBG separately from each other. Our historical financial information included herein covering periods prior to the Formation Transaction is derived from the consolidated financial statements and accounting records of Vornado and does not include the results of the assets contributed by JBG for any period prior to completion of the Formation Transaction. Accordingly, the historical financial information included herein does not necessarily reflect the financial condition, results of operations or cash flows that we would have achieved as a separate, publicly traded company during the periods presented or those that we will achieve in the future. Factors that could cause our results to differ from those reflected in our historical financial information and which may adversely impact our ability to receive similar results in the future may include, but are not limited to, the following:

- Prior to the Formation Transaction in July 2017, our business was operated by Vornado or JBG, as applicable, as part of their broader organizations, rather than as an independent company. Vornado and JBG performed various management functions for our business, such as accounting, information technology and finance. Our financial statements for all periods prior to the Formation Transaction reflect allocations of expenses from Vornado for such functions and those allocations may be less than the expenses we would have incurred had we operated as a separate, publicly traded company. We entered into certain transition and other separation-related agreements with Vornado, which specified a term of up to 24 months following the Formation Transaction for the services provided to us under the Transition Services Agreement. As of December 31, 2018, transition services we receive from Vornado are insignificant. We are continuing to make investments in our systems, infrastructure and personnel and the cost of the functions necessary to operate as a separate, publicly traded company may be higher than the allocated cost of the services provided by Vornado;
- Prior to the Formation Transaction, our working capital requirements and capital for our general business purposes, including acquisitions and capital expenditures, have historically been satisfied as part of the company-wide cash management policies of Vornado or of JBG, as applicable. We expect to seek additional financing from banks, through public offerings or private placements of debt or equity securities, strategic relationships or other arrangements, which may not be on terms as favorable to those obtained by Vornado or JBG, and the cost of capital for our business may be higher than Vornado's or JBG's cost of capital prior to the Formation Transaction; and
- As a separate public company, we are subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act and the Dodd-Frank Act and are required to prepare our financial statements according to the rules and regulations required by the SEC. We cannot assure you that the past experience of our senior management team will be sufficient to successfully operate as a publicly traded company.

Other significant changes may occur in our cost structure, management, financing and business operations as a result of operating as an independent company. For additional information about the past financial performance of our business and the basis of presentation of the historical combined financial statements, refer to "Selected Financial Data," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the historical financial statements and accompanying notes included herein.

We could be required to indemnify Vornado for certain material tax obligations that could arise as addressed in the Tax Matters Agreement.

The Tax Matters Agreement that we entered into with Vornado provides special rules that allocate tax liabilities if the distribution of JBG SMITH shares by Vornado, together with certain related transactions, is not tax-free. Under the Tax Matters Agreement, we may be required to indemnify Vornado against any taxes and related amounts and costs resulting from (i) an acquisition of all or a portion of our equity securities or our assets, whether by merger or otherwise, (ii) other actions or failures to act by us, or (iii) any of our representations or undertakings being incorrect or violated. In addition, under the Tax Matters Agreement, we are liable for any taxes attributable to us and our subsidiaries, unless such taxes are imposed on us or any of the REITs contributed by Vornado (i) with respect to a period before the distribution as a result of any action taken by Vornado after the distribution, or (ii) with respect to any period as a result of Vornado's failure to qualify as a REIT for the taxable year of Vornado that includes the distribution.

Unless Vornado and JBG SMITH are both REITs immediately after the distribution of JBG SMITH from Vornado and at all times during the two years thereafter, JBG SMITH could be required to recognize certain corporate-level gains for tax purposes.

Section 355(h) of the Code provides that tax-free treatment will not be available unless, as relevant here, Vornado and JBG SMITH are both REITs immediately after the distribution.

In addition, the Treasury Department and the IRS have released temporary Treasury regulations pursuant to which, subject to certain exceptions, a REIT must recognize corporate-level gain if it acquires property from a non-REIT "C" corporation in certain so-called "conversion" transactions and engages in a Section 355 transaction within ten years of such conversion. For this purpose, a conversion transaction refers to the qualification of a non-REIT "C" corporation as a REIT or the transfer of property owned by a non-REIT "C" corporation to a REIT. JBG SMITH or its subsidiaries have acquired property pursuant to conversion transactions within ten years of the distribution. One of the exceptions to the recognition of corporate-level gain applies to a distribution described in Section 355 of the Code in which the distributing corporation and the controlled corporation are both REITs immediately after such distribution and at all times during the two years thereafter.

We believe that each of Vornado and JBG SMITH qualifies as a REIT and intends to operate in a manner so that each qualified immediately after the distribution and will qualify at all times during the two years after the distribution. However, if either Vornado or JBG SMITH failed to qualify as a REIT immediately after the distribution of JBG SMITH from Vornado or fails to qualify at any time during the two years after the distribution, then, for our taxable year that includes the distribution, the IRS may assert that JBG SMITH would have to recognize corporate-level gain on assets acquired in conversion transactions. The Treasury Department recently issued a notice identifying the temporary Treasury regulations as a significant tax regulation that imposes an undue financial burden on U.S. taxpayers and/or adds undue complexity to the federal tax laws, pursuant to Executive Order 13789 (issued April 21, 2017). In its two reports to the President pursuant to Executive Order 13789, the Treasury Department has indicated that it intends to propose reforms to mitigate the burdens of the temporary Treasury regulations. It is unclear the exact form any such proposed reforms would take and what the impact of such reforms would be on JBG SMITH.

We may not be able to engage in potentially desirable strategic or capital-raising transactions for the 24-month period following the Formation Transaction. In addition, if we were able to engage in such transactions, we could be liable for adverse tax consequences resulting therefrom.

To preserve the tax-free treatment of the Formation Transaction, for the two-year period following the Formation Transaction, we are prohibited, except in specific circumstances, from: (i) entering into any transaction pursuant to which all or a portion of our shares would be acquired, whether by merger or otherwise, (ii) issuing equity securities beyond certain thresholds and except in certain circumscribed manners, (iii) repurchasing common shares, (iv) ceasing to actively conduct certain of our businesses, or (v) taking or failing to take any other action that prevents the distribution of JBG SMITH shares by Vornado and certain related transactions from being tax-free.

These restrictions may limit our ability to pursue strategic transactions or engage in new business or other transactions that may maximize the value of our business.

Potential indemnification liabilities to Vornado pursuant to the Separation and Distribution Agreement (the "Separation Agreement") could have a material adverse effect on us.

The Separation Agreement with Vornado governs our ongoing relationship with Vornado. Among other things, the Separation Agreement provides for indemnification obligations designed to make us financially responsible for substantially all liabilities that may exist relating to our business activities, whether incurred prior to or after the Formation Transaction, as well as those obligations of Vornado that we assumed pursuant to the Separation Agreement. If we are required to indemnify Vornado under the circumstances set forth in this agreement, we may be subject to substantial liabilities.

There may be undisclosed liabilities of the Vornado and JBG assets contributed to us in the Formation Transaction that might expose us to potentially large, unanticipated costs.

Prior to entering into the Master Transaction Agreement ("MTA"), each of Vornado and JBG performed diligence with respect to the business and assets of the other. However, these diligence reviews were necessarily limited in nature and scope and may not have adequately uncovered all of the contingent or undisclosed liabilities that we assumed in connection with the Formation Transaction, many of which may not be covered by insurance. The MTA does not provide for indemnification for these types of liabilities by either party post-closing, and, therefore, we may not have any recourse with respect to such unexpected liabilities. Any such liabilities could cause us to experience losses, which may be significant, which could have a material adverse effect on us.

Certain of our trustees and executive officers may have actual or potential conflicts of interest because of their previous or continuing equity interest in, or positions at, Vornado or JBG, as applicable, including members of our senior management, who have an ownership interest in the JBG Legacy Funds and own carried interests in certain JBG Legacy Funds and in certain of our real estate ventures that entitles them to receive additional compensation if the fund or real estate venture achieves certain return thresholds.

Some of our trustees and executive officers are persons who are or have been employees of Vornado or were employees of JBG. Because of their current or former positions with Vornado or JBG, certain of our trustees and executive officers own Vornado common shares or other Vornado equity awards or equity interests in certain JBG Legacy Funds and related entities. In addition, one of our trustees continues to serve as chief executive officer and chairman of the Board of Trustees of Vornado. Ownership of Vornado common shares or interests in the JBG Legacy Funds, or service as a trustee or managing partner, as applicable, at either company, could create, or appear to create, potential conflicts of interest.

Certain of the JBG Legacy Funds own assets that were not contributed to us in the combination (the "JBG Excluded Assets"), which JBG Legacy Funds are owned in part by members of our senior management. In addition, although the asset management and property management fees associated with the JBG Excluded Assets were assigned to us upon completion of the Formation Transaction, the general partner and managing member interests in the JBG Legacy Funds held by former JBG executives (who became members of our management team) were not transferred to us and remain under the control of these individuals. As a result, our management's time and efforts may be diverted from the management of our assets to management of the JBG Legacy Funds, which could adversely affect the execution of our business plan and our results of operations and cash flow.

In addition, members of our senior management have an ownership interest in the JBG Legacy Funds and own carried interests in each fund and in certain of our real estate ventures that entitle them to receive additional compensation if the fund or real estate venture achieves certain return thresholds. As a result, members of our senior management could be incentivized to spend time and effort maximizing the cash flow from the assets being retained by the JBG Legacy Funds and certain real estate ventures, particularly through sales of assets, which may accelerate payments of the carried interest but would reduce the asset management and other fees that would otherwise be payable to us with respect to the JBG Excluded Assets. These actions could adversely impact our results of operations and cash flow.

Other potential conflicts of interest with the JBG Legacy Funds include transactions with these funds and competition for tenants. We have, and in the future we may, enter into transactions with the JBG Legacy Funds, such as purchasing assets from them. Any such transaction would create a conflict of interest as a result of our management team's interests on both sides of the transaction, because we manage the JBG Legacy Funds and because members of our management own interests in the general partner or other managing entities of the funds. We may compete for tenants with the JBG Legacy Funds and because we typically manage the assets of the JBG Legacy Funds, we may have a conflict of interest when competing for a tenant if the tenant is interested in assets owned by us and the JBG Legacy Funds. Any of the above described conflicts of interest could have a material adverse effect on us.

Vornado is not required to present investments to us that satisfy our investment guidelines before pursuing such opportunities on Vornado's behalf.

Our agreements with Vornado do not require Vornado to present to us investment opportunities that satisfy our investment guidelines before Vornado pursues such opportunities. While Vornado advised us at the time of the Formation Transaction that it did not intend to make acquisitions within the Washington, D.C. metropolitan area after the Formation Transaction, should it choose to do so, Vornado is free to direct investment opportunities away from us, and we may be unable to compete with Vornado in pursuing such opportunities. In addition, our declaration of trust provides that a trustee who is also a trustee, officer, employee or agent of Vornado or any of Vornado's affiliates has no duty to communicate or present any business opportunity to us.

In connection with the Formation Transaction, Vornado agreed to indemnify us for certain pre-distribution liabilities and liabilities related to Vornado assets. However, there can be no assurance that these indemnities will be sufficient to protect us against the full amount of such liabilities, or that Vornado's ability to satisfy its indemnification obligation will not be impaired in the future.

Pursuant to the Separation Agreement, Vornado agreed to indemnify us for certain liabilities. However, third parties could seek to hold us responsible for any of the liabilities that Vornado agreed to retain, and there can be no assurance that Vornado will be able to fully satisfy its indemnification obligations. Moreover, even if we ultimately succeed in recovering from Vornado any amounts for which we are held liable, such indemnification may be insufficient to fully offset the financial impact of such liabilities and/or we may be temporarily required to bear these losses while seeking recovery from Vornado.

Failure to maintain effective internal control over financial reporting in accordance with Section 404 of the Sarbanes-Oxley Act could have a material adverse effect on our business and share price.

As a public company, we are subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act and the Dodd-Frank Act and are required to prepare our financial statements according to the rules and regulations required by the SEC. In addition, the Exchange Act requires that we file annual, quarterly and current reports. Our failure to prepare and disclose this information in a timely manner or to otherwise comply with applicable law could subject us to penalties under federal securities laws, expose us to lawsuits and restrict our ability to access financing.

In addition, the Sarbanes-Oxley Act requires that we, among other things, establish and maintain effective internal controls and procedures for financial reporting and disclosure purposes. Internal control over financial reporting is complex and may be revised over time to adapt to changes in our business, or changes in applicable accounting rules. We cannot assure you that our internal control over financial reporting will be effective in the future or that a material weakness will not be discovered with respect to a prior period for which we had previously believed that internal controls were effective. If we are not able to maintain or document effective internal control over financial reporting, our independent registered public accounting firm will not be able to certify as to the effectiveness of our internal control over financial reporting.

Matters impacting our internal controls may cause us to be unable to report our financial information on a timely basis, or may cause our company to restate previously issued financial information, and thereby subject us to adverse regulatory consequences, including sanctions or investigations by the SEC, or violations of applicable stock exchange listing rules. There could also be a negative reaction in the financial markets due to a loss of investor confidence in our company and the reliability of our financial statements. Confidence in the reliability of our financial statements is also likely to suffer if we or our independent registered public accounting firm report a material weakness in our internal control over financial reporting. Any of the foregoing could have a material adverse effect on us.

Risks Related to Our Indebtedness and Financing

We have a substantial amount of indebtedness, which may limit our financial and operating activities and expose us to the risk of default under our debt obligations.

As of December 31, 2018, we had approximately $2.1 billion aggregate principal amount of consolidated debt outstanding and our unconsolidated real estate ventures had approximately $1.1 billion aggregate principal amount of debt outstanding ($299.4 million at our share), resulting in a total of over $2.4 billion aggregate principal amount of debt outstanding at our share. A portion of our outstanding debt is guaranteed by our operating partnership, and we may incur significant additional debt to finance future acquisition and development activities.

Payments of principal and interest on borrowings may leave us with insufficient cash resources to operate our assets or to pay the dividends currently contemplated. Our level of debt and the limitations imposed on us by our debt agreements could have significant adverse consequences, including the following:

- our cash flow may be insufficient to meet our required principal and interest payments;
- we may be unable to borrow additional funds as needed or on favorable terms, which could, among other things, adversely affect our ability to meet operational needs;
- we may be unable to refinance our indebtedness at maturity or the refinancing terms may be less favorable than the terms of our original indebtedness;
- we may be forced to dispose of one or more of our assets, possibly on unfavorable terms or in violation of certain covenants to which we may be subject;
- we may violate restrictive covenants in our loan documents, which would entitle the lenders to accelerate our debt obligations; and
- our default under any loan with cross-default provisions could result in a default on other indebtedness.

If any one of these events were to occur, it could have a material adverse effect on us.

Our debt agreements include restrictive covenants, requirements to maintain financial ratios and default provisions, which could limit our flexibility and our ability to make distributions and require us to repay the indebtedness prior to its maturity.

The mortgages on our assets contain customary negative covenants that, among other things, limit our ability, without the prior consent of the lender, to further mortgage the property and to reduce or change insurance coverage. We have a $1.4 billion credit facility under which we have significant borrowing capacity. Additionally, our debt agreements contain customary covenants that, among other things, restrict our ability to incur additional indebtedness and may restrict our ability to engage in material asset sales, mergers, consolidations and acquisitions, and restrict our ability to make capital expenditures. These debt agreements, in some cases, also subject us to guarantor and liquidity covenants, and our credit facility requires, and other future debt may require, us to maintain various financial ratios. Some of our debt agreements contain cash flow sweep requirements and mandatory escrows, and our property mortgages generally require mandatory prepayments upon disposition of underlying collateral. Our ability to borrow is subject to compliance with these and other covenants, and 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 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.

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

Because the Code requires us, as a REIT, to distribute at least 90% of our taxable income, excluding net capital gains, to our shareholders, we depend primarily on external financing to fund the growth of our business. 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. There can be no assurance that new financing will be available or available on acceptable terms.

Our future development plans are capital intensive. To complete these plans, we anticipate financing construction and development through asset sales, real estate ventures with third parties, recapitalizations of assets, and public or private equity offerings, or a combination thereof. Similarly, these plans require an even more significant amount of debt financing. If we are unable to obtain the required debt or equity capital, then we will not be able to execute our business plan, which could have a material adverse effect on us.

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 and combined financial statements included herein.

High mortgage rates and/or unavailability of mortgage debt may make it difficult for us to finance or refinance properties, which could reduce the number of properties we can acquire or retain, our net income and the amount of cash distributions we can make.

If mortgage debt is not available at reasonable rates, or if lenders currently under contractual obligations to lend to us fail to perform on such obligations, we may not be able to finance the purchase of properties. If we place mortgages on properties, we may be unable to refinance the properties when the loans become due, or refinance on favorable terms or at all, including as a result of increases in interest rates or a decline in the value of our portfolio or portions thereof. If principal payments due at maturity cannot be refinanced, extended or paid with proceeds from other capital transactions, such as new equity issuances, our operating cash flow may not be sufficient in all years to repay all maturing debt. This, in turn, could reduce cash available for distribution to our shareholders and may hinder our ability to raise more capital by issuing more shares or by borrowing more money. In addition, payments of principal and interest made to service our debts may leave us with insufficient cash to make distributions necessary to meet the distribution requirements imposed on REITs under the Code. As a result, we may be forced to postpone capital expenditures necessary for the maintenance of our properties, we may have to dispose of one or more properties on terms that would otherwise be unacceptable to us or we may be forced to allow the mortgage holder to foreclose on a property, any of the foregoing could have a material adverse effect on us.

Mortgage debt obligations expose us to the possibility of foreclosure, which could result in the loss of our investment in a property or group of properties subject to mortgage debt.

Incurring mortgage and other secured debt obligations increases our risk of property losses because defaults on indebtedness secured by properties may result in foreclosure actions initiated by lenders and ultimately our loss of the property collateralizing loans for which we are in default. Any foreclosure on a mortgaged property or group of properties could adversely affect the overall value of our portfolio of properties. For tax purposes, a foreclosure on any of our properties that is subject to a nonrecourse mortgage loan would be treated as a sale of the property for a purchase price equal to the outstanding balance of the debt secured by the mortgage. If the outstanding balance of the debt secured by the mortgage exceeds our tax basis in the property, we would recognize taxable income on foreclosure, but would not receive any cash proceeds, which could hinder our ability to meet the REIT distribution requirements imposed by the Code.

Variable rate debt is subject to interest rate risk that could increase our interest expense, increase the cost to refinance and increase the cost of issuing new debt.

As of December 31, 2018, $1.6 billion of our outstanding consolidated debt was subject to instruments that bear interest at variable rates, and we may also borrow additional money at variable interest rates in the future. We have made arrangements that hedge against the risk of rising interest rates with respect to $1.1 billion of our outstanding consolidated debt; but with respect to the remainder, increases in interest rates would increase our interest expense under these instruments, increase the cost of refinancing these instruments or issuing new debt, and adversely affect our cash flow and our ability to service our indebtedness and make distributions to our shareholders, which could, in turn, adversely affect the market price of our common shares. Based on our aggregate variable rate debt outstanding as of December 31, 2018, an increase of 100 basis points in interest rates would result in a hypothetical increase of approximately $5.2 million in interest expense on an annual basis. The amount of this change includes the benefit of swaps and caps we currently have in place.

Failure to effectively hedge against interest rate changes may adversely affect our financial condition, results of operations, cash flow, per share market price of our common shares and ability to make distributions to our shareholders and the future of the reference rate used in our existing hedging arrangements is uncertain, which could hinder our ability to maintain effective hedges.

The REIT provisions of the Code impose certain restrictions on our ability to utilize hedges, swaps and other types of derivatives to hedge our liabilities. Subject to these restrictions, we may enter into hedging transactions to protect ourselves from the effects of interest rate fluctuations on floating rate debt. As of December 31, 2018, our hedging transactions include entering into interest rate cap and swap agreements, which covered $182.5 million and $1.1 billion of our outstanding consolidated debt. These agreements involve risks, such as the risk that such arrangements would not be effective in reducing our exposure to interest rate changes or that a court could rule that such an agreement is not legally enforceable. In addition, interest rate hedging can be expensive, particularly during periods of rising and volatile interest rates, which could reduce the overall returns on our investments. Failure to hedge effectively against interest rate changes could have a material adverse effect on us. In addition, while such agreements would be intended to lessen the impact of rising interest rates on us, they could also expose us to the risk that the other parties to the agreements would not perform, and that the hedging arrangements may not be effective in reducing our exposure to interest rate changes. Moreover, there can be no assurance that our hedging arrangements will qualify as highly effective cash flow hedges under Financial Accounting Standards Board, or FASB, Accounting Standards Codification, or ASC, Topic 815, Derivatives and Hedging, or that our hedging activities will have the desired beneficial impact on our results of operations. Furthermore, should we desire to terminate a hedging agreement, there could be significant costs and cash requirements involved to fulfill our obligation under the hedging agreement. Any of the foregoing could have a material adverse effect on us.

Our existing hedging arrangements currently use as a reference rate the London Interbank Overnight Rate (“LIBOR”), as calculated for U.S. dollar ("USD-LIBOR"), but there can be no assurance that our hedging arrangements will continue to use LIBOR as a reference rate or that LIBOR will continue to be viable and appropriate as a reference rate. In July 2017, due to a decline in the quantity of loans used to calculate LIBOR, the United Kingdom regulator that regulates LIBOR announced that it intends to stop compelling banks to submit rates for the calculation of LIBOR after 2021, making it clear that the continuation of LIBOR after 2021 cannot be assured. In April 2018, the New York Federal Reserve commenced publishing an alternative reference rate, the Secured Overnight Financing Rate ("SOFR"), proposed by a group of major market participants convened by the U.S. Federal Reserve with participation by SEC Staff and other regulators, the Alternative Reference Rates Committee ("ARRC"). SOFR is based on transactions in the more robust U.S. Treasury repurchase market and has been proposed as the alternative to LIBOR for use in derivatives and other financial contracts that currently rely on LIBOR as a reference rate. ARRC has proposed a paced market transition plan to SOFR from LIBOR and organizations are currently working on industry wide and company specific transition plans as it relates to derivatives and cash markets exposed to LIBOR. It is impossible to predict whether and to what extent banks will continue to provide LIBOR submissions to the administrator of LIBOR, whether LIBOR rates will cease to be published or supported before or after 2021 or whether any additional reforms to LIBOR may be enacted in the United Kingdom or elsewhere. At this time, no consensus exists as to what rate or rates may become accepted alternatives to LIBOR, including for purposes of hedging arrangements such as those we currently have in place. Furthermore, the transition from LIBOR to one or more replacement rates could cause uncertainty in what reference rates apply to existing hedging and other arrangements. Additionally, there is some possibility that LIBOR continues to be published, but that the quantity of loans used to calculate LIBOR diminishes significantly enough to reduce the appropriateness of the rate as a reference rate. We can provide no assurance regarding the future of LIBOR, whether our current hedging arrangements will continue to use USD-LIBOR as a reference rate or whether any reliance on such rate will be appropriate. Confusion as to the relevant benchmark reference rate for our hedging instruments could hinder our ability to establish effective hedges.

We may acquire properties or portfolios of properties through tax deferred contribution transactions, which could result in shareholder dilution and limit our ability to sell or refinance such assets.

In the future, we may acquire properties or portfolios of properties through tax deferred contribution transactions in exchange for partnership interests in our operating partnership, which may result in shareholder dilution through the issuance of common limited partnership units ("OP Units") that may be exchanged for common shares. This acquisition structure may have the effect of, among other things, reducing the amount of tax depreciation we could deduct (as compared to a transaction where we do not inherit the contributor's tax basis but acquire tax basis equal to the value of the consideration exchanged for the property) until the OP units issued in such transactions are redeemed for cash or converted into common shares. While no such protection arrangements existed at December 31, 2018, in the future we may agree to protect the contributors' ability to defer recognition of taxable gain through restrictions on our ability to dispose of, or refinance the debt on, the acquired properties for specified periods of time. Similarly, we may be required to incur or maintain debt we would otherwise not incur or maintain so that we can allocate the debt to the contributors to maintain their tax bases. These restrictions could limit our ability to sell an asset at a time, or on terms, that would be favorable absent such restrictions.

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 GAAP, 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, which could have a material adverse effect on us.

Risks Related to the Real Estate Industry

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 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 assets;
- the development and/or redevelopment of our assets;
- changes in market rental rates;
- the timing and costs associated with property improvements and rentals;
- whether we can 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 consider a property attractive;
- 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 attack against, the United States or individual acts of violence in public spaces;
- 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 assets 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 shareholders. 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.

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. Moreover, our ability to buy, sell, or finance real estate assets may be adversely affected during periods of uncertainty or unfavorable conditions in the credit markets as we, or potential buyers of our assets, may experience difficulty in obtaining financing.

Our property taxes could increase due to property tax rate changes or reassessment, which could have a material adverse effect on us.

Even if we qualify as a REIT for U.S. federal income tax purposes, we will be required to pay certain state and local taxes on our properties. The real property taxes on our properties may increase as property tax rates change or as our properties are assessed or reassessed by taxing authorities. Therefore, the amount of property taxes we pay in the future may increase substantially from what we have paid in the past and such increases may not be covered by tenants pursuant to our lease agreements. An increase in the property taxes we pay could have a material adverse effect on us.

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 assets 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 such release. The presence of contamination or the failure to remediate contamination may (1) expose us to third-party liability (e.g., for cleanup costs, natural resource damages, bodily injury or property damage), (2) subject our properties to liens in favor of the government for damages and costs the government incurs in connection with the contamination, (3) result in restrictions on the manner in which a property may be used or businesses may be operated, or (4) impair our ability to sell or lease real estate or to borrow using the real estate as collateral. To the extent we send contaminated materials to other locations for treatment or disposal, we may be liable for cleanup of those sites if they become contaminated.

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 noncompliance 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 at or from our assets.

Most of our assets have been subjected to varying degrees of environmental assessment at various times. 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 cleanup 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.

If we default on or fail to renew at expiration the ground leases for land on which some of our assets are located or other long-term leases, our results of operations could be adversely affected.

We own leasehold interests in certain land on which some of our assets are located. If we default under the terms of any of these ground leases, we may be liable for damages and could lose our leasehold interest in the property or our option to purchase the underlying fee interest in such assets. In addition, unless we purchase the underlying fee interests in the land on which a particular property is located, we will lose our right to operate the property or we will continue to operate it at much lower profitability, which would significantly adversely affect our results of operations. In addition, if we are perceived to have breached the terms of a ground lease, the fee owner may initiate proceedings to terminate the lease. As of December 31, 2018, the remaining weighted average term of our ground leases, including unilateral as-of-right extension rights available to us, was approximately 62.8 years. Our share of annualized rent from assets subject to ground leases as of December 31, 2018 was approximately $80.9 million, or 15.2% of total annualized rent.

Climate change may adversely affect our business.

Climate change, including rising sea levels, flooding, extreme weather, and changes in precipitation and temperature, may result in physical damage to, a decrease in demand for and/or a decrease in rent from and value of our properties located in the areas affected by these conditions. We own a number of assets in low-lying areas close to sea level, making those assets susceptible to a rise in sea level. If sea levels were to rise, we may incur material costs to protect our low-lying assets or sustain damage, a decrease in value or total loss to those assets. Furthermore, our insurance premiums may increase as a result of the threat of climate change or the effects of climate change may not be covered by our insurance policies. We do not currently have any assets located within a Federal Emergency Management Agency (FEMA) special flood plain in our portfolio.

In addition, changes in federal and state legislation and regulations on climate change could result in increased utility expenses and/or increased capital expenditures to improve the energy efficiency of our existing properties or other related aspects of our properties in order to comply with such regulations or otherwise adapt to climate change. The four major jurisdictions where we operate are the District of Columbia, Arlington County, VA, Fairfax County, VA, and Montgomery County, MD, each of which has made formal public commitments to carbon reduction aligned with the goal to keep global warming under 2 degrees Celsius consistent with the Paris Agreement, the United Nations framework convention on climate change. To enforce this commitment, in December 2018, the Washington DC City Council passed the DC Clean Energy Omnibus bill. The bill requires that all electricity purchased in the District be renewable by 2032 and sets a building energy performance standard (BEPS) requiring certain buildings to meet certain minimum energy efficiency standards. Under BEPS, all existing buildings over 50,000 square feet will be required to reach minimum levels of energy efficiency or deliver savings by 2026, with progressively smaller buildings phasing into compliance over the following years. This regulation may require unplanned capital improvements, and increased engagement to manage occupant energy use, which is a large driver of building performance. Properties that cannot meet performance standards within our investment thresholds risk fines for non-compliance, as well as a decrease in demand and a decline in value.

Risks Related to Our Organization and Structure

Tax consequences to holders of JBG SMITH LP limited partnership units upon a sale of certain of our assets may cause the interests of our senior management to differ from your own.

Some holders of JBG SMITH LP limited partnership units, including members of our senior management, may suffer different and more adverse tax consequences than holders of our common shares upon the sale of certain of the assets owned by our operating partnership, and therefore these holders may have different objectives regarding the appropriate pricing, timing and other material terms of any sale or refinancing of certain assets, or whether to sell such assets at all.

Our declaration of trust and bylaws, the partnership agreement of our operating partnership and Maryland law contain provisions that may delay, defer or prevent a change of control transaction that might involve a premium price for our common shares or that our shareholders otherwise believe to be in their best interest.

Our declaration of trust contains ownership limits with respect to our shares.

Generally, to maintain our qualification as a REIT, no more than 50% in value of our outstanding shares of beneficial interest may be owned, directly or indirectly, by five or fewer individuals at any time during the last half of our taxable year. The Code defines "individuals" for purposes of the requirement described in the preceding sentence to include some types of entities. Our declaration of trust authorizes our Board of Trustees to take such actions as it determines are necessary or advisable to preserve our qualification as a REIT. Our declaration of trust prohibits, among other things, the actual, beneficial or constructive ownership by any person of more than 7.5% in value or number of shares, whichever is more restrictive, of the outstanding shares of any class or series. For these purposes, our declaration of trust includes a "group" as that term is used for purposes of Section 13(d)(3) of the Exchange Act in the definition of "person." Our Board of Trustees may exempt a person, prospectively or retroactively, from these ownership limits if certain conditions are satisfied.

This ownership limit and the other restrictions on ownership and transfer of our shares contained in our declaration of trust may:

- discourage a tender offer or other transactions or a change in management or of control that might involve a premium price for our common shares or that our shareholders might otherwise believe to be in their best interest; or
- result in the transfer of shares acquired in excess of the restrictions to a trust for the benefit of a charitable beneficiary and, as a result, the forfeiture by the acquirer of the benefits of owning the additional shares.

Provisions of Maryland law could inhibit changes in control, which may discourage third parties from conducting a tender offer or seeking other change of control transactions that might involve a premium price for our common shares or that our shareholders might otherwise believe to be in their best interest.

Provisions of the Maryland General Corporation Law, or "MGCL", may have the effect of inhibiting a third party from making a proposal to acquire us or of impeding a change of control under circumstances that otherwise could provide the holders of common shares with the opportunity to realize a premium over the then-prevailing market price of such shares, including:

- "business combination" provisions that, subject to limitations, prohibit business combinations between us and an "interested shareholder" (defined generally as any person who beneficially owns 10% or more of the voting power of our shares or an affiliate thereof or an affiliate or associate of ours who was the beneficial owner, directly or indirectly, of 10% or more of the voting power of our then-outstanding voting shares at any time within the two-year period immediately prior to the date in question) for five years after the most recent date on which the shareholder becomes an interested shareholder, and thereafter impose fair price and/or supermajority shareholder voting requirements on these combinations; and
- "control share" provisions that provide that a shareholder’s "control shares" of our company (defined as shares that, when aggregated with other shares controlled by the shareholder, entitle the shareholder to exercise one of three increasing ranges of voting power in electing trustees) acquired in a "control share acquisition" (defined as the direct or indirect acquisition of ownership or control of issued and outstanding "control shares") have no voting rights with respect to their control shares, except to the extent approved by our shareholders by the affirmative vote of at least two-thirds of all the votes entitled to be cast on the matter, excluding all interested shares.

As permitted by the MGCL, we have elected in our bylaws to opt out of the business combination and control share provisions of the MGCL. However, we cannot assure you that our Board of Trustees will not opt to be subject to such provisions of the MGCL in the future, including opting to be subject to such provisions retroactively.

The limited partnership agreement of our operating partnership requires the approval of the limited partners with respect to certain extraordinary transactions involving JBG SMITH, which may reduce the likelihood of such transactions being consummated, even if they are in the best interests of, and have been approved by, our shareholders.

The limited partnership agreement of JBG SMITH LP as amended and restated in connection with the Formation Transaction, provides that we may not engage in a merger, consolidation or other combination with or into another person, a sale of all or substantially all of our assets, or a reclassification, recapitalization or a change in outstanding shares (except for changes in par value, or from par value to no par value, or as a result of a subdivision or combination of our common shares), which we refer to collectively as an extraordinary transaction, unless specified criteria are met. In particular, with respect to any extraordinary transaction, if partners will receive consideration for their limited partnership units and if we seek the approval of our shareholders for the transaction (or if we would have been required to obtain shareholder approval of any such extraordinary transaction but for the fact that a tender offer shall have been accepted with respect to a sufficient number of our common shares to permit consummation of such extraordinary transaction without shareholder approval), then the limited partnership agreement prohibits us from engaging in the extraordinary transaction unless we also obtain "partnership approval." To obtain "partnership approval," we must obtain the consent of our limited partners (including us and any limited partners majority owned, directly or indirectly, by us) representing a percentage interest in JBG SMITH LP that is equal to or greater than the percentage of our outstanding common shares required (or that would have been required in the absence of a tender offer) to approve the extraordinary transaction, provided that we and any limited partners majority owned, directly or indirectly, by us will be deemed to have provided consent for our partnership units solely in proportion to the percentage of our common shares approving the extraordinary transaction (or, if there is no shareholder vote with respect to such extraordinary transaction because a tender offer shall have been accepted with respect to a sufficient number of our common shares to permit consummation of the extraordinary transaction without shareholder approval, the percentage of our common shares with respect to which such tender offer shall have been accepted).

The limited partners of JBG SMITH LP may have interests in an extraordinary transaction that differ from those of common shareholders, and there can be no assurance that, if we are required to seek "partnership approval" for such a transaction, we will be able to obtain it. As a result, if a sufficient number of limited partners oppose such an extraordinary transaction, the limited partnership agreement may prohibit us from consummating it, even if it is in the best interests of, and has been approved by, our shareholders.

Until the 2020 annual meeting of shareholders, we will have a classified Board of Trustees, and that may reduce the likelihood of certain takeover transactions.

Our declaration of trust divides our Board of Trustees into three classes. The initial term of the first class expired at our first annual meeting of shareholders held following the Formation Transaction, and the initial terms of the second and third classes will expire at the second and third annual meetings of shareholders. At the 2018 annual shareholders meeting, shareholders elected successors to trustees of the first class for a two-year term and, at the 2019 annual shareholders meeting, shareholders will elect successors to trustees of the second class for a one-year term. Commencing with the 2020 annual meeting of shareholders, each trustee shall be elected annually for a term of one year and shall hold office until the next succeeding annual meeting and until a successor is duly elected and qualifies. There is no cumulative voting in the election of trustees. Until the 2020 annual meeting of the shareholders, our Board is classified, which may reduce the possibility of a tender offer or an attempt to change control, even though a tender offer or change in control might be in the best interest of our shareholders.

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

Our declaration of trust authorizes the Board of Trustees, without shareholder approval, to:

- cause us to issue additional authorized but unissued common or preferred shares;
- classify or reclassify, in one or more classes or series, any unissued common or preferred shares;
- set the preferences, rights and other terms of any classified or reclassified shares that we issue; and
- amend our declaration of trust to increase the number of shares of beneficial interest that we may issue.

The Board of Trustees could establish a class or series of common or preferred shares whose terms could delay, deter or prevent a change in control or other transaction that might involve a premium price or otherwise be in the best interest of our shareholders, although the Board of Trustees does not now intend to establish a class or series of common or preferred shares of this kind. Our declaration of trust and bylaws contain other provisions that may delay, deter or prevent a change in control or other transaction that might involve a premium price or otherwise be in the best interest of our shareholders.

Substantially all our assets are owned by subsidiaries. We depend on dividends and distributions from these subsidiaries. The creditors of these subsidiaries are entitled to amounts payable to them by the subsidiaries before the subsidiaries may pay any dividends or other distributions to us.

Substantially all of our assets are held through JBG SMITH LP which holds substantially all of its assets through wholly owned subsidiaries. JBG SMITH LP's cash flow is dependent on cash distributions to it by its subsidiaries, and in turn, substantially all of our cash flow is dependent on cash distributions to us by JBG SMITH LP. The creditors of each of our 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. In addition, the operating agreements governing some of our subsidiaries which are parties to real estate joint ventures may have restrictions on distributions which could limit the ability of those subsidiaries to make distributions to JBG SMITH LP. Thus, JBG SMITH LP's ability to make distributions to holders of its units, including us, depends on its subsidiaries' ability first to satisfy their obligations to their creditors, and then to make distributions to JBG SMITH LP. Likewise, our ability to pay dividends to our shareholders depends on JBG SMITH LP's ability first to satisfy its obligations, if any, to its creditors and make distributions payable to holders of preferred units (if any), and then to make distributions to us.

In addition, our participation in any distribution of the assets of any of our subsidiaries upon the liquidation, reorganization or insolvency of the subsidiary, occurs only after the claims of the creditors, including trade creditors, and preferred security holders, if any, of the applicable direct or indirect subsidiaries are satisfied.

Our rights and the rights of our shareholders to take action against our Trustees and officers are limited.

As permitted by Maryland law, under our declaration of trust, trustees and officers shall not be liable to us and our shareholders for money damages, except for liability resulting from:

- actual receipt of an improper benefit or profit in money, property or services; or
- a final judgment based upon a finding of active and deliberate dishonesty by the trustee or officer that was material to the cause of action adjudicated.

In addition, our declaration of trust requires us to indemnify our trustees and officers for actions taken by them in those and certain other capacities to the maximum extent permitted by Maryland law. The Maryland REIT law permits a REIT to indemnify and advance expenses to its trustees, officers, employees and agents to the same extent as permitted by the MGCL for directors and officers of a Maryland corporation. Generally, Maryland law permits a Maryland corporation to indemnify its present and former directors and officers except in instances where the person seeking indemnification acted in bad faith or with active and deliberate dishonesty, actually received an improper personal benefit in money, property or services or, in the case of a criminal proceeding, had reasonable cause to believe that his or her actions were unlawful. Under Maryland law, a Maryland corporation also may not indemnify a director or officer in a suit by or in the right of the corporation in which the director or officer was adjudged liable to the corporation or for a judgment of liability on the basis that a personal benefit was improperly received. A court may order indemnification if it determines that the director or officer is fairly and reasonably entitled to indemnification, even though the director or officer did not meet the prescribed standard of conduct; however, indemnification for an adverse judgment in a suit by us or in our right, or for a judgment of liability on the basis that personal benefit was improperly received, is limited to expenses. As a result, we and our shareholders may have more limited rights against our trustees and officers than might otherwise exist. Accordingly, if actions taken in good faith by any of our trustees or officers impede the performance of our company, your ability to recover damages from such trustee or officer will be limited.

Risks Related to Our Status as a REIT

We 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 we are organized and intend to operate to qualify as a REIT for federal income tax purposes, we may fail to remain so qualified. Qualification and taxation as a REIT are governed by highly technical and complex provisions of the 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, we fail to maintain our qualification as a REIT and do not qualify under statutory relief provisions, we could not deduct distributions to shareholders in computing our taxable income and would have to pay federal income tax on our taxable income at regular corporate rates. If we had to pay federal income tax, the amount of money available to distribute to shareholders and pay our indebtedness would be reduced for the year or years involved, and we would not be required to make distributions to shareholders in that taxable year and in future years until we were able to qualify as a REIT. In addition, we would also be disqualified from treatment as a REIT for the four taxable years following the year during which qualification was lost, unless we were entitled to relief under the relevant statutory provisions.

REIT distribution requirements could adversely affect our liquidity and our ability to execute our business plan.

For us to qualify to be taxed as a REIT, and assuming that certain other requirements are also satisfied, we generally must distribute at least 90% of our REIT taxable income, determined without regard to the dividends paid deduction and excluding any net capital gains, to our shareholders each year, so that U.S. federal corporate income tax does not apply to earnings that we distribute. To the extent that we satisfy this distribution requirement and qualify for taxation as a REIT, but distribute less than 100% of our REIT taxable income, determined without regard to the dividends paid deduction and including any net capital gains, we will be subject to U.S. federal corporate income tax on our undistributed net taxable income. In addition, we will be subject to a 4% nondeductible excise tax if the actual amount that we distribute to our shareholders in a calendar year is less than a minimum amount specified under U.S. federal income tax laws. We intend to distribute 100% of our REIT taxable income to our shareholders out of assets legally available therefor.

From time to time, we may generate taxable income greater than our cash flow as a result of differences in timing between the recognition of taxable income and the actual receipt of cash or the effect of nondeductible capital expenditures, the creation of reserves, or required debt or amortization payments. Further, under amendments to the Code made by federal tax reform legislation , which was signed into law on December 22, 2017 and which we refer to as the 2017 Tax Act, income must be accrued for U.S. federal income tax purposes no later than when such income is taken into account as revenue in our financial statements, subject to certain exceptions, which could also create mismatches between REIT taxable income and the receipt of cash attributable to such income. If we do not have other funds available in these situations, we could be required to borrow funds on unfavorable terms, sell assets at disadvantageous prices, distribute amounts that would otherwise be invested in future acquisitions, capital expenditures or repayment of debt, or make taxable distributions of our shares or debt securities to make distributions sufficient to enable us to pay out enough of our taxable income to satisfy the REIT distribution requirement and avoid corporate income tax and the 4% excise tax in a particular year. These alternatives could increase our costs or reduce our equity. Further, amounts distributed will not be available to fund investment activities. Thus, compliance with the REIT requirements may hinder our ability to grow, which could adversely affect the value of our shares. Any restrictions on our ability to incur additional indebtedness or make certain distributions could preclude us from meeting the 90% distribution requirement. Decreases in funds from operations due to unfinanced expenditures for acquisitions of assets or increases in the number of shares outstanding without commensurate increases in funds from operations would each adversely affect our ability to maintain our current level of distributions to our shareholders. Consequently, there can be no assurance that we will be able to make distributions at the anticipated distribution rate or any other rate.

Dividends payable by REITs do not qualify for the reduced tax rates available for some dividends, which could depress the market price of our common shares if perceived as a less attractive investment.

The maximum tax rate applicable to income from "qualified dividends" payable by non-REIT corporations to U.S. shareholders that are individuals, trusts or estates is 20%, and a 3.8% Medicare tax may also apply. Dividends payable by REITs, however, generally are not eligible for this reduced rate. Commencing with taxable years beginning on or after January 1, 2018 and continuing through 2025, the 2017 Tax Act temporarily reduces the effective tax rate on ordinary REIT dividends (i.e., dividends other than capital gain dividends and dividends attributable to certain qualified dividend income received by us) for U.S. holders of our common shares that are individuals, trusts or estates by permitting such holders to claim a deduction in determining their taxable income equal to 20% of any such dividends they receive (but limited to the excess of a holder’s taxable income over net capital gain). Taking into account the 2017 Tax Act’s reduction in the maximum individual federal income tax rate from 39.6% to 37%, this results in a maximum effective rate of federal income tax (exclusive of the 3.8% Medicare tax) on ordinary REIT dividends of 29.6% through 2025, as compared to the 20% maximum federal income tax rate applicable to qualified dividend income received from a non-REIT corporation (although the maximum effective rate applicable to such dividends, after taking into account the 21% federal income tax applicable to non-REIT corporations, is 36.8%). Although these rules do not adversely affect the taxation of REITs or dividends payable by REITs, investors who are individuals, trusts or estates may perceive investments in REITs to be relatively less attractive than investments in the shares of non-REIT corporations that pay dividends, which could adversely affect the value of the shares of REITs, including the per share trading price of our common shares.

The tax imposed on REITs engaging in "prohibited transactions" may limit our ability to engage in transactions that would be treated as sales for U.S. federal income tax purposes.

A REIT’s net income from prohibited transactions is subject to a 100% penalty tax. In general, prohibited transactions are sales or other dispositions of property, other than foreclosure property, held primarily for sale to customers in the ordinary course of business. Although we and our subsidiary REITs believe that we have held, and intend to continue to hold, our properties for investment and do not intend to hold any properties that could be characterized as held for sale to customers in the ordinary course of our business unless a sale or disposition qualifies under a statutory safe harbor applicable to REITs, such characterization is a factual determination and no guarantee can be given that the IRS would agree with our characterization of our properties or that we will always be able to make use of the available safe harbor. In the case of some of our properties held through partnerships with third parties, our ability to dispose of such properties in a manner that satisfies the statutory safe harbor depends in part on the action of third parties over which we have no control or only limited influence.

If our operating partnership failed to qualify as a partnership for U.S. federal income tax purposes, we would cease to qualify as a REIT and suffer other adverse consequences.

We believe that our operating partnership will be treated as a partnership for U.S. federal income tax purposes. As a partnership, our operating partnership will not be subject to U.S. federal income tax on its income. Instead, each of its partners, including us, will be allocated, and may be required to pay tax with respect to, its share of our operating partnership's income. We cannot assure you, however, that the IRS will not challenge the status of our operating partnership or that a court would not sustain such a challenge. If the IRS were successful in treating our operating partnership as an entity taxable as a corporation for U.S. federal income tax purposes, we would fail to meet the gross income tests and certain of the asset tests applicable to REITs and, accordingly, we would cease to qualify as a REIT. Also, the failure of our operating partnership or any subsidiary partnership to qualify as a partnership could cause the entity to become subject to U.S. federal, state or local corporate income tax, which would reduce significantly the amount of cash available for debt service and for distribution to us.

Complying with REIT requirements may limit our ability to hedge effectively and may cause us to incur tax liabilities.

The REIT provisions of the Code may limit our ability to hedge our assets and operations. Under these provisions, income that we generate from transactions intended to hedge our interest rate and certain types of foreign currency risk generally will be excluded from gross income for purposes of the 75% and 95% gross income tests applicable to REITs if the instrument hedges interest rate or foreign currency risk on liabilities used to carry or acquire real estate assets or certain other types of foreign currency risk, and such instrument is properly identified. Income from certain hedges entered into in connection with the termination of a hedging transaction described in the preceding sentence, where the property or indebtedness that was the subject of the prior hedging transaction was extinguished or disposed of, will also be excluded from gross income for purposes of the 75% and 95% gross income tests. Income from hedging transactions that do not meet these requirements will generally constitute non-qualifying income for purposes of both the 75% and 95% gross income tests. As a result of these rules, we may have to limit our use of hedging techniques that might otherwise be advantageous or implement those hedges through a TRS. This could increase the cost of our hedging activities, because our TRS would be subject to tax on gains, or could expose us to greater risks associated with changes in interest rates than we would otherwise want to bear. In addition, losses in our TRS will generally not provide any tax benefit, except to the extent they can be carried forward and used to offset future taxable income in the TRS.

Our subsidiary REITs may be subject to a corporate tax on recognized gain if some properties are sold within five years of their acquisition.

To the extent that our operating partnership contributes appreciated properties to a subsidiary REIT that were acquired in the Formation Transaction from tax partnerships in which investors that are C corporations under the Code hold interests, the subsidiary REIT will be subject to a corporate level tax on the portion of the net built-in gain attributable to the C corporation investors' interests that would have otherwise been taxable to such investors if such gain is recognized by the subsidiary REIT as the result of a sale of any such property within a five-year period following the contribution of the properties to the subsidiary REIT. This corporate level tax will be borne proportionately by all of the holders of OP Units, including us. In the alternative, we may cause our operating partnership to elect to cause the recognition of such net built-in gain at the time of the contribution of the properties to the subsidiary REIT (a so-called deemed sale election). In this case, the taxable recognized gain would be allocated to the C corporation investors by the operating partnership (expected to be with respect to the operating partnership's 2017 tax year), which would increase the operating partnership's basis in the stock of the subsidiary REIT (as to the C corporation investors only) by the amount of net built-in gain allocated to such investors. We will decide, as general partner of the operating partnership, whether or not to cause the operating partnership to make such a deemed sale election.

Our ownership of TRSs will be limited, and we will be required to pay a 100% penalty tax on certain income or deductions if our transactions with our TRSs are not conducted on arm's length terms.

We own an interest in certain TRSs and may establish additional TRSs in the future. A TRS is a corporation other than a REIT in which a REIT directly or indirectly holds stock, and that has made a joint election with such REIT to be treated as a TRS. If a TRS owns more than 35% percent of the total voting power or value of the outstanding securities of another corporation, such other corporation will also be treated as a TRS. Other than some activities relating to lodging and health care facilities, a TRS may generally engage in any business, including the provision of customary or non-customary services to tenants of its parent REIT. A TRS is subject to U.S. federal, state and local income tax as a regular C corporation, and its after-tax net income is available for distribution to the parent REIT but is not required to be distributed. As a result of the enactment of the 2017 Tax Act, effective for taxable years beginning on or after January 1, 2018 our domestic TRSs are subject to U.S. federal income tax on their taxable income at a maximum rate of 21% (as well as applicable state and local income tax), but net operating loss, or NOL, carryforwards of TRS losses arising in taxable years beginning after December 31, 2018 may be deducted only to the extent of 80% of TRS taxable income in the carryforward year (computed without regard to the NOL deduction). In contrast to prior law, which permitted unused NOL carryforwards to be carried back two years and forward 20 years, the 2017 Tax Act provides that losses arising in taxable years ending after December 31, 2018 can no longer be carried back but can be carried forward indefinitely. In addition, a 100% excise tax will be imposed on certain transactions between a TRS and its parent REIT that are not conducted on an arm's length basis.

A REIT's ownership of securities of a TRS is not subject to the 5% or 10% asset tests applicable to REITs. Not more than 20% of our total assets may be represented by securities (including securities of one or more TRSs), other than those securities includable in the 75% asset test. We anticipate that the aggregate value of the stock and securities of our TRSs and other nonqualifying assets will be less than 20% of the value of our total assets, and we will monitor the value of these investments to ensure compliance with applicable ownership limitations. In addition, we intend to structure our transactions with our TRSs to ensure that they are entered on arm's length terms to avoid incurring the 100% excise tax described above. There can be no assurance, however, that we will be able to comply with the TRS asset limitation or to avoid application of the 100% excise tax discussed above.

Our ability to provide certain services to our tenants may be limited by the REIT provisions of the Code, or we may have to provide such services through a TRS.

As a REIT, we generally cannot provide services to our tenants other than those that are customarily provided by landlords, and we cannot derive income from a third party that provides such services. If we forego providing such services to our tenants, we may be at a disadvantage to competitors who are not subject to the same restrictions. However, we can provide such non-customary services to tenants and share in the revenue from such services if we do so through a TRS, though income earned through the TRS will be subject to corporate income taxes.

We face possible adverse changes in tax laws, which may result in an increase in our tax liability and adverse consequences to our shareholders.

At any time, the U.S. federal income tax laws governing REITs or the administrative interpretations of those laws may be amended. We cannot predict when or if any new U.S. federal income tax law, regulation, or administrative interpretation, or any amendment to any existing U.S. federal income tax law, regulation or administrative interpretation will be adopted, promulgated or become effective and any such law, regulation, or interpretation may take effect retroactively. Any such change in, or any new, U.S. federal income tax law, regulation or administrative interpretation, could have a material adverse effect on us.

In particular, the 2017 Tax Act, which generally took effect for taxable years beginning on or after January 1, 2018 (subject to certain exceptions), made many significant changes to the U.S. federal income tax laws that will profoundly impact the taxation of individuals, corporations (both regular C corporations as well as corporations that have elected to be taxed as REITs), and the taxation of taxpayers with overseas assets and operations. A number of changes that affect noncorporate taxpayers will expire at the end of 2025 unless Congress acts to extend them. These changes will impact us and our shareholders in various ways, some of which are adverse or potentially adverse compared to prior law. To date, the IRS has issued only some guidance with respect to certain of the new provisions, and there are numerous interpretive issues that will require guidance. Technical corrections legislation is still needed to clarify certain aspects of the new law and give proper effect to Congressional intent. There can be no assurance, however, that technical clarifications or changes needed to prevent unintended or unforeseen tax consequences will be enacted by Congress in the near future.

Additionally, the rules of Section 355 of the Code and the Treasury regulations promulgated thereunder, which apply to determine the taxability of the Formation Transaction, have been the subject of change and may continue to be the subject of change, possibly with retroactive application, which could have a negative effect on us and our shareholders. If such changes occur, we may be required to pay additional taxes on our assets or income. These increased tax costs could have a material adverse effect on us.

Other legislative proposals could be enacted in the future that could affect REITs and their shareholders. Prospective investors are urged to consult their tax advisors regarding the effect of the 2017 Tax Act and any other potential tax law changes on an investment in our common shares.

Risks Related to Our Common Shares

We cannot guarantee the timing, amount, or payment of dividends on our common shares.

Although we expect to pay regular cash dividends, the timing, declaration, amount and payment of future dividends to shareholders will fall within the discretion of our Board of Trustees. Our Board of Trustees' decisions regarding the payment of dividends will depend on many factors, such as our financial condition, earnings, capital requirements, debt service obligations, limitations under our financing arrangements, industry practice, legal requirements, regulatory constraints, and other factors that it deems relevant. Our ability to pay dividends will depend on our ongoing ability to generate cash from operations and access the capital markets. We cannot guarantee that we will pay a dividend in the future.

Future offerings of debt or equity securities, which would be senior to our common shares upon liquidation, and/or preferred equity securities, which may be senior to our common shares for purposes of dividend distributions or upon liquidation, may adversely affect the per share trading price of our common shares.

In the future, we may attempt to increase our capital resources by offering debt or equity securities (or causing our operating partnership to issue debt securities), including medium-term notes, senior or subordinated notes and classes or series of preferred shares. Upon liquidation, holders of our debt securities and preferred shares and lenders with respect to other borrowings will be entitled to receive our available assets prior to distribution to the holders of our common shares. Additionally, any convertible or exchangeable securities that we issue in the future may have rights, preferences and privileges more favorable than those of our common shares and may result in dilution to owners of our common shares. Holders of our common shares are not entitled to preemptive rights or other protections against dilution. Our preferred shares, if issued, could have a preference on liquidating distributions or a preference on dividend payments that could limit our ability pay dividends to the holders of our common shares. Because our decision to issue securities in any future offering will depend on market conditions and other factors beyond our control, we cannot predict or estimate the amount, timing or nature of our future offerings.

Your percentage of ownership in our company may be diluted in the future.

Your percentage of ownership in us may be diluted because of equity issuances for acquisitions, capital market transactions or otherwise. We also have granted and anticipate continuing to grant compensatory equity awards to our trustees, officers, employees, advisors and consultants who provide services to us. Such awards have a dilutive effect on our earnings per share, which could adversely affect the market price of our common shares.

In addition, our declaration of trust authorizes us to issue, without the approval of our shareholders, one or more classes or series of preferred shares having such designation, voting powers, preferences, rights and other terms, including preferences over our common shares with respect to dividends and distributions, as our Board of Trustees generally may determine. The terms of one or more classes or series of preferred shares could dilute the voting power or reduce the value of our common shares. For example, we could grant the holders of preferred shares the right to elect some number of our trustees in all events or on the occurrence of specified events, or the right to veto specified transactions. Similarly, the repurchase or redemption rights or liquidation preferences we could assign to holders of preferred shares could affect the residual value of our common shares.

From time to time 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 common shares.

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 common shares.

CAUTIONARY STATEMENT CONCERNING FORWARD-LOOKING STATEMENTS

Certain statements contained herein constitute forward-looking statements within the meaning of the federal securities laws. 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.

In particular, information included under "Business," "Risk Factors," and "Management's Discussion and Analysis of Financial Condition and Results of Operations" contains forward-looking statements. 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 a discussion of factors that could materially affect the outcome of our forward-looking statements, see "Risk Factors" in this Annual Report on Form 10-K.

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.

ITEM 1B. UNRESOLVED STAFF COMMENTS

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

ITEM 2. PROPERTIES

Note on presentation of "at share" information. We present certain financial information and metrics "at JBG SMITH Share," which refers to our ownership percentage of consolidated and unconsolidated assets in real estate ventures. Financial information "at JBG SMITH Share" is calculated on an entity-by-entity basis. "At JBG SMITH Share" information, which we also refer to as being "at share," "our pro rata share" or "our share," is not, and is not intended to be, a presentation in accordance with GAAP. Because as of December 31, 2018, approximately 9.9% of our assets, as measured by total square feet, were held through real estate ventures, we believe this form of presentation, which includes our economic interests in the unconsolidated real estate ventures, provides investors important information regarding a significant component of our portfolio, its composition, performance and capitalization. We classify our portfolio as "operating," "near-term development" or "future development." "Near-term development" refers to assets that have substantially completed the entitlement process and on which we intend to commence construction within 18 months following December 31, 2018, subject to market conditions. We had no near-term development assets as of December 31, 2018. "Future development" refers to assets that are development opportunities on which we do not intend to commence construction within 18 months of December 31, 2018 where we (i) own land or control the land through a ground lease or (ii) are under a long-term conditional contract to purchase or enter into a leasehold interest with respect to land.

The tables below provide information about each of our commercial, multifamily, near-term development and future development portfolios as of December 31, 2018. Many of our future development parcels are adjacent to or an integrated component of operating commercial or multifamily assets in our portfolio. A significant number of our assets included in the tables below are held through real estate ventures with third parties or are subject to ground leases. In addition to other information, the tables below indicate our percentage ownership, whether the assets are consolidated or unconsolidated and whether the asset is subject to a ground lease.

Commercial Assets

Commercial Assets	% Ownership	C/U (1)	Same Store (2): YTD 2017-2018	Total Square Feet	% Leased	Office % Occupied	Retail % Occupied
D.C.							
Universal Buildings	100.0%	C	Y	659,965	98.2%	98.0%	99.6%
2101 L Street	100.0%	C	Y	378,660	98.4%	99.0%	92.6%
1730 M Street (3)	100.0%	C	Y	204,736	88.9%	87.0%	100.0%
1600 K Street	100.0%	C	N	82,011	98.6%	98.3%	100.0%
1700 M Street (4)	100.0%	C	N	34,000	—	—	—
L’Enfant Plaza Office-East (3)	49.0%	U	N	397,057	90.8%	90.8%	—
L’Enfant Plaza Office-North	49.0%	U	N	299,476	95.1%	84.2%	85.9%
L’Enfant Plaza Retail (4)	49.0%	U	N	119,361	82.6%	100.0%	79.8%
The Foundry	9.9%	U	N	223,359	83.2%	76.4%	100.0%
1101 17th Street	55.0%	U	Y	210,730	82.7%	82.7%	82.7%
VA							
Courthouse Plaza 1 and 2 (3)	100.0%	C	Y	633,256	85.1%	83.6%	100.0%
2121 Crystal Drive	100.0%	C	Y	505,754	95.3%	95.3%	—
2345 Crystal Drive	100.0%	C	Y	502,526	77.7%	77.5%	100.0%
2231 Crystal Drive	100.0%	C	Y	467,040	87.3%	83.9%	100.0%
1550 Crystal Drive (5)	100.0%	C	Y	451,037	96.0%	81.4%	—
RTC-West (5)	100.0%	C	N	435,998	88.8%	88.8%	—

Commercial Assets	% Ownership	C/U [1]	Same Store [2]: YTD 2017-2018	Total Square Feet	% Leased	Office % Occupied	Retail % Occupied
RTC-West Retail	100.0%	C	N	40,025	91.9%	—	91.9%
2011 Crystal Drive	100.0%	C	Y	440,046	90.9%	82.7%	49.7%
2451 Crystal Drive	100.0%	C	Y	398,329	72.9%	72.1%	100.0%
Commerce Executive [5] [6]	100.0%	C	Y	388,562	89.4%	84.3%	95.2%
1235 S. Clark Street	100.0%	C	Y	384,032	85.3%	83.2%	100.0%
241 18th Street S.	100.0%	C	Y	357,685	79.0%	72.4%	91.5%
251 18th Street S.	100.0%	C	Y	342,155	99.4%	100.0%	96.2%
1215 S. Clark Street	100.0%	C	Y	336,159	100.0%	100.0%	100.0%
201 12th Street S.	100.0%	C	Y	329,903	90.5%	87.8%	100.0%
800 North Glebe Road	100.0%	C	N	303,644	100.0%	100.0%	100.0%
2200 Crystal Drive	100.0%	C	Y	282,920	70.6%	44.8%	—
1901 South Bell Street	100.0%	C	Y	277,003	100.0%	100.0%	100.0%
1225 S. Clark Street	100.0%	C	Y	276,952	92.4%	47.1%	100.0%
Crystal City Marriott (345 Rooms)	100.0%	C	Y	266,000	—	—	—
2100 Crystal Drive	100.0%	C	Y	249,281	98.8%	98.8%	—
200 12th Street S.	100.0%	C	Y	202,736	86.7%	86.7%	—
2001 Jefferson Davis Highway	100.0%	C	Y	159,838	67.3%	64.0%	—
1800 South Bell Street [5]	100.0%	C	N	69,621	100.0%	100.0%	100.0%
Crystal City Shops at 2100	100.0%	C	Y	59,574	91.2%	—	91.2%
Crystal Drive Retail	100.0%	C	Y	56,965	97.3%	—	97.3%
Vienna Retail*	100.0%	C	Y	8,584	100.0%	—	100.0%
Stonebridge at Potomac Town Center*	10.0%	U	N	503,683	94.4%	—	93.9%
Pickett Industrial Park	10.0%	U	N	246,145	100.0%	100.0%	—
Rosslyn Gateway-North	18.0%	U	N	143,676	80.8%	79.3%	96.0%
Rosslyn Gateway-South	18.0%	U	N	102,061	84.9%	87.5%	40.4%
MD							
7200 Wisconsin Avenue	100.0%	C	N	267,602	72.6%	70.7%	80.8%
One Democracy Plaza* [3]	100.0%	C	Y	213,131	96.8%	94.8%	100.0%
4749 Bethesda Avenue Retail	100.0%	C	N	7,999	47.9%	—	47.9%
11333 Woodglen Drive	18.0%	U	N	62,650	97.6%	97.2%	100.0%
Total / Weighted Average				**12,381,927**	**89.6%**	**85.3%**	**93.4%**
Recently Delivered							
VA							
CEB Tower at Central Place [3]	100.0%	C	N	552,540	93.0%	92.6%	100.0%
Operating - Total / Weighted Average				**12,934,467**	**89.8%**	**85.7%**	**93.5%**

Commercial Assets	% Ownership	C/U [1]	Same Store [2]: YTD 2017-2018	Total Square Feet	% Leased	Office % Occupied	Retail % Occupied
Under Construction							
D.C.							
1900 N Street [3] [7]	55.0%	U		271,433	65.2%		
L'Enfant Plaza Office-Southeast	49.0%	U		215,185	74.3%		
VA							
1770 Crystal Drive [8]	100.0%	C		271,572	2.7%		
Central District Retail	100.0%	C		108,825	45.0%		
MD							
4747 Bethesda Avenue [9]	100.0%	C		291,414	77.7%		
Under Construction - Total / Weighted Average				**1,158,429**	**53.5%**		
Total / Weighted Average				**14,092,896**	**86.7%**		
Totals at JBG SMITH Share							
In service assets				10,741,949	89.4%	85.1%	94.4%
Recently delivered assets				552,540	93.0%	92.6%	100.0%
Operating assets				11,294,489	89.6%	85.5%	94.6%
Under construction assets				926,530	49.5%	—	—

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Note: At 100% share, unless otherwise noted. Excludes our 10% subordinated interests in three commercial buildings held through a real estate venture in which we have no economic interest.

* Not Metro-served.

(1) "C" denotes a consolidated interest. "U" denotes an unconsolidated interest.

(2) "Y" denotes an asset as same store and "N" denotes an asset as non-same store. Same store refers to assets that were in service for the entirety of both periods being compared, except for assets for which significant redevelopment, renovation or repositioning occurred during either of the periods being compared. No JBG Assets are considered same store.

(3) Asset is subject to a ground lease.

(4) In December 2018, we leased (as landlord) the unimproved land at 1700 M Street for a 99-year term, with no extension options. 1700 M Street is a 34,000 square foot development site located in Washington, D.C.

(5) The following assets contain space that is held for development or not otherwise available for lease. This out-of-service square footage is excluded from area, leased, and occupancy metrics in the above table.

Commercial Asset	In-Service	Not Available for Lease
1550 Crystal Drive	451,037	43,655
RTC - West	435,998	17,988
Commerce Executive	388,562	14,085
1800 South Bell Street	69,621	150,321

(6) In February 2019, we sold Commerce Executive for $115.0 million.

(7) Ownership percentage reflects expected dilution of JBG SMITH as contributions are funded during the construction of the asset. As of December 31, 2018, JBG SMITH's ownership interest was 68.5%.

(8) Amazon is expected to lease 258,299 SF at 1770 Crystal Drive. With this expected lease with Amazon, the asset would be 97.8% pre-leased, and the pre-leased status of our total under construction portfolio would be 75.8% (77.4% at our share).

(9) Includes JBG SMITH's lease for approximately 84,400 square feet.

Multifamily Assets

Multifamily Assets	% Ownership	C/U (1)	Same Store (2): YTD 2017-2018	Number of Units	Total Square Feet	% Leased	Multifamily % Occupied	Retail % Occupied
D.C.								

Fort Totten Square	100.0%	C	N	345	384,316	98.6%	95.9%	100.0%

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Multifamily Assets	% Ownership	C/U (1)	Same Store (2): YTD 2017-2018	Number of Units	Total Square Feet	% Leased	Multifamily % Occupied	Retail % Occupied
WestEnd25	100.0%	C	Y	283	273,264	96.5%	95.8%	—
North End Retail	100.0%	C	N	—	27,355	100.0%	N/A	100.0%
The Gale Eckington	5.0%	U	N	603	466,716	91.9%	90.2%	100.0%
Atlantic Plumbing	64.0%	U	N	310	245,527	96.0%	93.9%	100.0%
VA								
RiverHouse Apartments	100.0%	C	Y	1,670	1,322,016	95.6%	94.1%	100.0%
The Bartlett	100.0%	C	N	699	619,372	95.7%	93.6%	100.0%
220 20th Street	100.0%	C	Y	265	271,476	97.4%	95.8%	100.0%
2221 South Clark Street	100.0%	C	Y	216	164,743	100.0%	100.0%	—
Fairway Apartments*	10.0%	U	N	346	370,850	95.0%	95.1%	—
MD								
Falkland Chase-South & West	100.0%	C	N	268	222,949	98.0%	96.6%	—
Falkland Chase-North	100.0%	C	N	170	112,259	97.1%	95.3%	—
Galvan	1.8%	U	N	356	390,641	95.9%	94.9%	96.8%
The Alaire (4)	18.0%	U	N	279	266,497	94.7%	92.8%	100.0%
The Terano (3) (4)	1.8%	U	N	214	195,864	92.4%	91.1%	76.2%
Total / Weighted Average				**6,024**	**5,333,845**	**95.8%**	**94.2%**	**98.3%**
Recently Delivered								
D.C.								
1221 Van Street	100.0%	C	N	291	225,462	83.1%	80.4%	79.8%
Operating - Total / Weighted Average				**6,315**	**5,559,307**	**95.3%**	**93.6%**	**97.2%**
Under Construction								
D.C.								
West Half	100.0%	C		465	388,174			
965 Florida Avenue (5)	96.1%	C		433	336,092			
Atlantic Plumbing C	100.0%	C		256	225,531			
MD								
7900 Wisconsin Avenue	50.0%	U		322	359,025			
Under Construction - Total				**1,476**	**1,308,822**			
Total				**7,791**	**6,868,129**			
Totals at JBG SMITH Share								
In service assets				4,240	3,673,835	96.5%	94.9%	100.0%
Recently delivered assets				291	225,462	83.1%	80.4%	79.8%
Operating assets				4,531	3,899,297	95.7%	93.9%	98.1%
Under construction assets				1,298	1,116,337	—	—	—

Note: At 100% share.
* Not Metro-served.

(1) "C" denotes a consolidated interest. "U" denotes an unconsolidated interest.

(2) "Y" denotes an asset as same store and "N" denotes an asset as non-same store. Same store refers to assets that were in service for the entirety of both periods being compared, except for assets for which significant redevelopment, renovation or repositioning occurred during either of the periods being compared. No JBG Assets are considered same store.

(3) The following asset contains space that is held for development or not otherwise available for lease. This out-of-service square footage is excluded from area, leased, and occupancy metrics in the above table.

Multifamily Asset	In-Service	Not Available for Lease
The Terano	195,864	3,904

(4) Asset is subject to a ground lease.

(5) Ownership percentage reflects expected dilution of JBG SMITH's real estate venture partner as contributions are funded during the construction of the asset. As of December 31, 2018, JBG SMITH's ownership interest was 88.1%.

Near-Term Developments

As of December 31, 2018, we had no near-term development assets.

Future Developments

Region	Number of Assets	Estimated Potential Development Density (SF) Total	Office	Multifamily	Retail	Estimated Commercial SF / Multifamily Units to be Replaced [1]	Estimated Total Investment (In thousands)
Owned							
D.C.							
D.C.	8	1,678,400	312,100	1,357,300	9,000	—	$ 106,283
VA							
National Landing [2]	15	11,038,400	7,551,200	3,341,700	145,500	229,459 SF	353,305
Reston	5	3,483,200	1,299,800	1,971,400	212,000	15 units	79,154
Other VA	4	220,600	88,200	121,300	11,100	21,544 SF	9,081
	24	14,742,200	8,939,200	5,434,400	368,600	251,003 SF / 15 units	441,540
MD							
Silver Spring	1	1,276,300	—	1,156,300	120,000	170 units	46,660
Greater Rockville	4	126,500	19,200	88,600	18,700	—	4,294
	5	1,402,800	19,200	1,244,900	138,700	170 units	50,954
Total / weighted average	37	17,823,400	9,270,500	8,036,600	516,300	251,003 SF / 185 units	598,777
Optioned [3]							
D.C.							
D.C.	3	1,793,600	78,800	1,498,900	215,900	—	114,888
VA							
Other VA	1	11,300	—	10,400	900	—	1,071
Total / weighted average	4	1,804,900	78,800	1,509,300	216,800	—	115,959
Total / Weighted Average	41	19,628,300	9,349,300	9,545,900	733,100	251,003 SF / 185 units	$ 714,736

Note: At JBG SMITH share.

(1) Represents management's estimate of the total office and/or retail rentable square feet and multifamily units that would need to be redeveloped to access some of the estimated potential development density.

(2) Includes 4.1 million square feet of estimated potential development density that JBG SMITH intends to sell to Amazon for $294.0 million.

(3) As of December 31, 2018, the weighted average remaining term for the optioned future development assets is 5.5 years.

Major Tenants

The following table sets forth information for our 10 largest tenants by annualized rent for the year ended December 31, 2018:

		At JBG SMITH Share			
Tenant	**Number of Leases**	**Square Feet**	**% of Total Square Feet**	**Annualized Rent (In thousands)**	**% of Total Annualized Rent**
GSA	66	2,487,060	25.6%	$ 98,745	23.2%
Gartner, Inc.	1	348,847	3.6%	21,629	5.1%
Family Health International	3	295,977	3.0%	14,677	3.5%
Lockheed Martin Corporation	3	274,361	2.8%	13,330	3.1%
WeWork (1)	2	205,565	2.1%	10,890	2.6%
Arlington County	3	237,001	2.4%	9,987	2.4%
Accenture LLP	2	130,716	1.3%	7,371	1.7%
Greenberg Traurig LLP	1	116,067	1.2%	7,136	1.7%
Public Broadcasting Service	1	140,885	1.5%	5,811	1.4%
Evolent Health LLC	1	90,905	0.9%	4,814	1.1%
Total	83	4,327,384	44.4%	$ 194,390	45.8%

Note: Includes all in-place leases as of December 31, 2018 for office and retail space within JBG SMITH's operating portfolio.

(1) Excludes the WeLive lease at 2221 South Clark Street.

Lease Expirations

The following table sets forth as of December 31, 2018 the scheduled expirations of tenant leases in our operating portfolio for each year from 2019 through 2027 and thereafter, assuming no exercise of renewal options or early termination rights:

	At JBG SMITH Share						
Year of Lease Expiration	**Number of Leases**	**Square Feet**	**% of Total Square Feet**	**Annualized Rent (in thousands)**	**% of Total Annualized Rent**	**Annualized Rent Per Square Foot**	**Estimated Annualized Rent Per Square Foot at Expiration (1)**
Month-to-Month	58	268,723	2.8%	$ 10,859	2.6%	$ 40.41	$ 40.41
2019	136	779,695	8.0%	33,120	7.8%	42.48	42.79
2020	141	1,136,248	11.7%	48,307	11.4%	42.51	43.64
2021	117	914,267	9.4%	42,240	9.9%	46.20	48.78
2022	97	1,334,682	13.7%	58,200	13.7%	43.61	45.20
2023	89	561,432	5.8%	23,483	5.5%	41.83	45.91
2024	81	933,791	9.6%	43,036	10.1%	46.09	50.73
2025	47	386,267	4.0%	14,634	3.4%	37.89	42.58
2026	56	320,468	3.3%	13,649	3.2%	42.59	49.99
2027	44	427,730	4.4%	18,278	4.3%	42.73	51.25
Thereafter	107	2,651,778	27.3%	118,979	28.1%	44.87	57.53
Total / Weighted Average	**973**	**9,715,081**	**100.0%**	**$ 424,785**	**100.0%**	**$ 43.72**	**$ 49.29**

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Note: Includes all in-place leases as of December 31, 2018 for office and retail space within JBG SMITH's operating portfolio.

(1) Represents monthly base rent before free rent, plus tenant reimbursements, as of lease expiration multiplied by 12 and divided by square feet. Triple net leases are converted to a gross basis by adding tenant reimbursements to monthly base rent. Tenant reimbursements at lease expiration are estimated by escalating tenant reimbursements as of December 31, 2018, or management’s estimate thereof, by 2.75% annually through the lease expiration year.

ITEM 3. LEGAL PROCEEDINGS

We are, from time to time, involved in legal actions arising in the ordinary course of business. In our opinion, 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

Market Information and Dividends

Our common shares began regular way trading on the New York Stock Exchange, or NYSE, on July 18, 2017, under the symbol "JBGS." On February 20, 2019, there were 902 holders of record of our common shares. This does not reflect individuals or other entities who hold their shares in "street name."

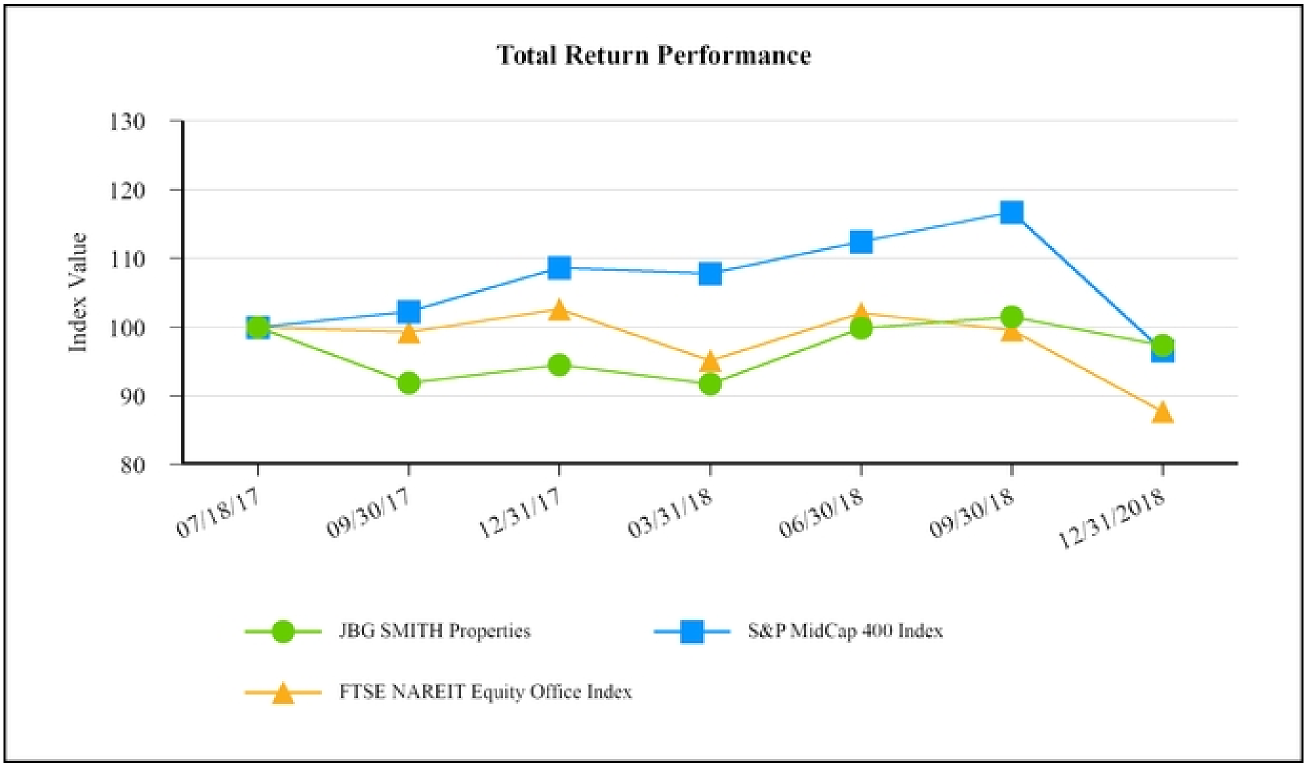
Dividends declared in 2018 totaled $1.00 per common share (regular quarterly dividends of $0.225 per common share each quarter plus a special dividend of $0.10 per common share). Dividends declared in 2017 totaled $0.45 per common share (regular quarterly dividends of $0.225 per common share each quarter following the Formation Transaction). While future declarations of dividends will be made at the discretion of our Board of Trustees and will depend upon cash generated by our operating activities, our financial condition, capital requirements, annual distribution requirements under the REIT provisions of the Code and such other factors as our Board of Trustees deems relevant, management expects regular quarterly dividends in 2019 will be comparable in amount with those declared in 2018. To qualify for the beneficial tax treatment accorded to REITs under the Code, we are currently required to make distributions to holders of our shares in an amount equal to at least 90% of our REIT taxable income as defined in Section 857 of the Code.

The annual dividend amounts are different from dividends as calculated for federal income tax purposes. Distributions to the extent of our current and accumulated earnings and profits for federal income tax purposes generally will be taxable to a shareholder as ordinary dividend income. Distributions in excess of current and accumulated earnings and profits will be treated as a nontaxable reduction of the shareholder's basis in such shareholder's shares, to the extent thereof, and thereafter as taxable capital gain. Distributions that are treated as a reduction of the shareholder's basis in its shares will have the effect of increasing the amount of gain, or reducing the amount of loss, recognized upon the sale of the shareholder's shares. No assurances can be given regarding what portion, if any, of distributions in 2019 or subsequent years will constitute a return of capital for federal income tax purposes. During a year in which a REIT earns a net long-term capital gain, the REIT can elect under Section 857(b)(3) of the Code to designate a portion of dividends paid to shareholders as capital gain dividends. If this election is made, the capital gain dividends are generally taxable to the shareholder as long-term capital gains.

Performance Graph

This performance graph shall not be deemed "soliciting material" or to be "filed" with the SEC for purposes of Section 18 of the Exchange Act, or otherwise subject to the liabilities under that Section, and shall not be deemed to be incorporated by reference into any of our filings of under the Securities Act or the Exchange Act.

The graph below compares the cumulative total return of our common shares, the S&P MidCap 400 Index and the FTSE NAREIT Equity Office Index, from July 18, 2017 (the completion date of the Formation Transaction) through December 31, 2018. The comparison assumes $100 was invested on July 18, 2017 in our common shares and in each of the foregoing indexes and assumes reinvestment of dividends, as applicable. We have included the FTSE NAREIT Equity Office Index because we believe that it is representative of the industry in which we compete and is relevant to an assessment of our performance. 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.



	Period Ending						
	7/18/2017	**9/30/2017**	**12/31/2017**	**3/31/2018**	**6/30/2018**	**9/30/2018**	**12/31/2018**
JBG SMITH Properties	100.00	91.86	94.51	91.74	99.85	101.46	97.36
S&P MidCap 400 Index	100.00	102.22	108.61	107.78	112.40	116.75	96.58
FTSE NAREIT Equity Office Index	100.00	99.26	102.57	95.14	102.02	99.52	87.70

Sales of Unregistered Shares

During the year ended December 31, 2018, we did not sell any unregistered securities.

Repurchases of Equity Securities

During the year ended December 31, 2018, we did not repurchase any of our equity securities.

Equity Compensation Plan Information

Information regarding equity compensation plans is presented in Part III, Item 12 of this Annual Report on Form 10-K and incorporated herein by reference.

ITEM 6. SELECTED FINANCIAL DATA

The following table includes selected consolidated and combined financial data set forth as of and for each of the five years in the period ended December 31, 2018. The consolidated balance sheets as of December 31, 2018 and 2017 reflect the consolidation of properties that are wholly owned and properties in which we own less than 100% interest, including JBG SMITH LP, but in which we have a controlling interest. The consolidated statement of operations for the year ended December 31, 2018 includes our consolidated accounts. The consolidated and combined statement of operations for the year ended December 31, 2017 includes our consolidated accounts and the combined accounts of the Vornado Included Assets. Accordingly, the results presented for the year ended December 31, 2017 reflect the operations, comprehensive income (loss), and changes in cash flows and equity on a carved-out and combined basis for the period from January 1, 2017 through the date of the Separation and on a consolidated basis subsequent to the Separation. Consequently, our results for the periods before and after the Formation Transaction are not directly comparable. The financial data for the periods prior to the Separation are derived from audited combined financial statements. This selected financial data should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations", and our audited consolidated and combined financial statements and related notes included in Part II, Items 7 and 8 of this Annual Report on Form 10-K.

	Year Ended December 31,				
	2018	2017	2016	2015	2014
	(In thousands, except per share data)				
Statement of Operations Data:					
Total revenue	$ 644,182	$ 543,013	$ 478,519	$ 470,607	$ 472,923
Depreciation and amortization	211,436	161,659	133,343	144,984	112,046
Property operating	148,081	118,836	100,304	101,511	101,597
Real estate taxes	71,054	66,434	57,784	58,874	56,165
General and administrative:					
Corporate and other	33,728	39,350	48,753	44,424	46,188
Third-party real estate services	89,826	51,919	19,066	18,217	18,308
Share-based compensation related to Formation Transaction and special equity awards	36,030	29,251	—	—	—
Transaction and other costs	27,706	127,739	6,476	—	—
Total expenses	617,861	595,188	365,726	368,010	334,304
Other income (expense):					
Income (loss) from unconsolidated real estate ventures, net	39,409	(4,143)	(947)	(4,283)	(1,278)
Interest and other income, net	15,168	1,788	2,992	2,557	1,338
Interest expense	(74,447)	(58,141)	(51,781)	(50,823)	(57,137)
Gain on sale of real estate	52,183	—	—	—	—
Loss on extinguishment of debt	(5,153)	(701)	—	—	—
Gain (reduction of gain) on bargain purchase	(7,606)	24,376	—	—	—
Total other income (expense)	19,554	(36,821)	(49,736)	(52,549)	(57,077)
Income (loss) before income tax benefit (expense)	45,875	(88,996)	63,057	50,048	81,542
Income tax benefit (expense)	738	9,912	(1,083)	(420)	(242)
Net income (loss)	46,613	(79,084)	61,974	49,628	81,300
Net (income) loss attributable to redeemable noncontrolling interests	(6,710)	7,328	—	—	—
Net loss attributable to noncontrolling interest	21	3	—	—	—
Net income (loss) attributable to common shareholders	$ 39,924	$ (71,753)	$ 61,974	$ 49,628	$ 81,300
Earnings (loss) per common share:					
Basic	$ 0.31	$ (0.70)	$ 0.62	$ 0.49	$ 0.81
Diluted	$ 0.31	$ (0.70)	0.62	0.49	0.81
Weighted average number of common shares outstanding - basic and diluted	119,176	105,359	100,571	100,571	100,571
Dividends declared per common share	$ 1.00	$ 0.45	$ —	$ —	$ —
Balance Sheet Data:					
Real estate, net	$ 4,740,859	$ 5,006,174	$ 3,224,622	$ 3,129,973	$ 3,011,407
Total assets	5,997,285	6,071,807	3,660,640	3,575,878	3,357,744
Mortgages payable, net	1,838,381	2,025,692	1,165,014	1,302,956	1,277,889
Revolving credit facility	—	115,751	—	—	—
Unsecured term loan, net	297,129	46,537	—	—	—
Redeemable noncontrolling interests	558,140	609,129	—	—	—
Total equity	2,987,352	2,974,814	2,121,984	2,059,491	1,988,915
Cash Flow Statement Data:					
Provided by operating activities	$ 188,193	$ 74,183	$ 159,541	$ 178,230	$ 187,386
Provided by (used in) investing activities	66,327	(7,676)	(258,807)	(236,617)	(239,336)
Provided by (used in) financing activities	(193,545)	239,787	51,083	122,671	33,353

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

The following discussion should be read in conjunction with the consolidated and combined financial statements and notes thereto appearing in Item 8 - Financial Statements and Supplementary Data of this Annual Report on Form 10-K.

Organization and Basis of Presentation

JBG SMITH was organized by Vornado as a Maryland REIT on October 27, 2016 for the purpose of receiving, via the spin-off on July 17, 2017, substantially all of the assets and liabilities of Vornado's Washington, D.C. segment, which operated as Vornado / Charles E. Smith. On July 18, 2017, JBG SMITH acquired the management business and certain assets and liabilities of JBG. Substantially all of our assets are held by, and our operations are conducted through, JBG SMITH LP.

Prior to the Separation from Vornado, JBG SMITH was a wholly owned subsidiary of Vornado and had no material assets or operations. On July 17, 2017, Vornado distributed 100% of the then outstanding common shares of JBG SMITH on a pro rata basis to the holders of its common shares. Prior to such distribution by Vornado, Vornado Realty L.P. ("VRLP"), Vornado's operating partnership, distributed OP Units in JBG SMITH LP on a pro rata basis to the holders of VRLP's common limited partnership units, consisting of Vornado and the other common limited partners of VRLP. Following such distribution by VRLP and prior to such distribution by Vornado, Vornado contributed to JBG SMITH all of the OP Units it received in exchange for common shares of JBG SMITH. Each Vornado common shareholder received one JBG SMITH common share for every two Vornado common shares held as of the close of business on July 7, 2017 (the "Record Date"). Vornado and each of the other limited partners of VRLP received one JBG SMITH LP OP Unit for every two common limited partnership units in VRLP held as of the close of business on the Record Date.

Our operations are presented as if the transfer of the Vornado Included Assets had been consummated prior to all historical periods presented in the accompanying consolidated and combined financial statements at the carrying amounts of such assets and liabilities reflected in Vornado's books and records. The assets and liabilities of the JBG Assets and subsequent results of operations and cash flows are reflected in our consolidated and combined financial statements beginning on the date of the Combination.

The following is a discussion of the historical results of operations and liquidity and capital resources of JBG SMITH as of December 31, 2018 and 2017, and for each of the three years in the period ended December 31, 2018, which includes results prior to the consummation of the Formation Transaction. The historical results presented prior to the consummation of the Formation Transaction include the Vornado Included Assets, all of which were under common control of Vornado until July 17, 2017. Unless otherwise specified, the discussion of the historical results prior to July 18, 2017 does not include the results of the JBG Assets. Consequently, our results for the periods before and after the Formation Transaction are not directly comparable.

References to the financial statements refer to our consolidated and combined financial statements as of December 31, 2018 and 2017, and for each of the three years in the period ended December 31, 2018. References to the balance sheets refer to our consolidated balance sheets as of December 31, 2018 and 2017. References to the statements of operations refer to our consolidated and combined statements of operations for each of the three years in the period ended December 31, 2018. References to the statements of cash flows refer to our consolidated and combined statements of cash flows for each of the three years in the period ended December 31, 2018.

The accompanying financial statements are prepared in accordance with GAAP. GAAP requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the financial statements and the reported amounts of revenue and expenses during the reporting periods. Actual results could differ from these estimates. The historical financial results for the Vornado Included Assets reflect charges for certain corporate costs allocated by the former parent which were based on either actual costs incurred or a proportion of costs estimated to be applicable to the Vornado Included Assets based on an analysis of key metrics, including total revenues. Such costs do not necessarily reflect what the actual costs would have been if JBG SMITH had been operating as a separate standalone public company. These charges are discussed further in Note 20 to the financial statements included herein.

We have elected to be taxed as a REIT under sections 856-860 of the Code. Under those sections, a REIT which distributes at least 90% of its REIT taxable income as dividends 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. Prior to the Separation, Vornado operated as a REIT and distributed 100% of its REIT taxable income to its shareholders; accordingly, no provision for federal income taxes has been made in the accompanying financial statements for the periods prior to the Separation. We have adhered and intend to continue to adhere to these requirements and maintain our REIT status in future periods.

As a REIT, we can reduce our taxable income by distributing all or a portion of such taxable income to shareholders. Future distributions will be declared and paid at the discretion of the Board of Trustees and will depend upon cash generated by operating activities, our financial condition, capital requirements, annual dividend requirements under the REIT provisions of the Code, and such other factors as our Board of Trustees deems relevant.

We also participate in the activities conducted by our subsidiary entities that have elected to be treated as TRSs under the Code. As such, we are subject to federal, state, and local taxes on the income from these activities. Income taxes attributable to our TRSs are accounted for under the asset and liability method. Under the asset and liability method, deferred income taxes arise from temporary differences between the tax basis of assets and liabilities and their reported amounts in the financial statements, which will result in taxable or deductible amounts in the future.

We aggregate our operating segments into three reportable segments (commercial, multifamily, and third-party asset management and real estate services) based on the economic characteristics and nature of our assets and services.

We compete with a large number of property owners and developers. Our success depends upon, among other factors, trends affecting national and local economies, the financial condition and operating results of current and prospective tenants, the availability and cost of capital, interest rates, construction and renovation costs, taxes, governmental regulations and legislation, population trends, zoning laws, and our ability to lease, sublease or sell our assets at profitable levels. Our success is also subject to our ability to refinance existing debt on acceptable terms as it comes due.

Overview

We own and operate a portfolio of high-quality commercial and multifamily assets, many of which are amenitized with ancillary retail. Our portfolio reflects our longstanding strategy of owning and operating assets within Metro-served submarkets in the Washington, D.C. metropolitan area that have high barriers to entry and key urban amenities, including being within walking distance of a Metro station. On November 13, 2018, Amazon announced publicly the selection of sites that we own in National Landing as the location of Amazon HQ2, subject to negotiation and execution of definitive documentation between Amazon and JBG SMITH, and subject to the approval of tax incentives by the Commonwealth of Virginia and Arlington County. We anticipate that we will enter into agreements with Amazon pursuant to which Amazon will engage us as its development manager, property manager, and retail leasing agent for Amazon HQ2. In addition, we granted Amazon the exclusive right for a limited time to lease approximately 500,000 square feet of existing office space at 241 18th Street S., 1800 South Bell Street and 1770 Crystal Drive, and the right to acquire the Pen Place and Met 6, 7 and 8 land in our future development pipeline with estimated potential development density of up to approximately 4.1 million square feet.

During 2018, we sold or recapitalized approximately $875.0 million of assets that were identified for sale because of their relatively low expected return potential and their high tax basis, enabling better capital retention. The assets sold generated approximately $30.0 million of NOI in 2018. Also, consistent with our approach to capital recycling, in the competitive Washington, D.C. office leasing market, we are focused on retaining tenants and avoiding the costly concessions associated with backfilling vacancy. We believe this approach produces a higher comparable return while better positioning assets for potential sale or recapitalization, and simultaneously de-risking them at a time of greater supply and cyclical downturn risk. The lease renewals we executed in 2017 and 2018 will further reduce our NOI in 2019, primarily due to free rent associated with these early renewals. As the free rent in these leases burns off, and our under construction assets deliver, we expect our NOI to grow and surpass 2018 levels by the second half of 2020.

As of December 31, 2018, our Operating Portfolio consists of 62 operating assets comprising 46 commercial assets totaling approximately 12.9 million square feet (11.3 million square feet at our share) and 16 multifamily assets totaling 6,315 units (4,531 units at our share). Additionally, we have (i) nine assets under construction comprising five commercial assets totaling approximately 1.2 million square feet (927,000 square feet at our share) and four multifamily assets totaling 1,476 units (1,298 units at our share); and (ii) 41 future development assets totaling approximately 23.1 million square feet (19.6 million square feet at our share) of estimated potential development density.

Key highlights of operating results for the year ended December 31, 2018 included:

- net income attributable to common shareholders of $39.9 million, or $0.31 per diluted common share, for the year ended December 31, 2018 as compared to a net loss of $71.8 million, or $0.70 per diluted common share, for the year ended December 31, 2017. Net income attributable to common shareholders for the year ended December 31, 2018 included gains on the sale of real estate of $52.2 million and transaction and other costs of $27.7 million. Net loss attributable to common shareholders for the year ended December 31, 2017 included transaction and other costs of $127.7 million and a gain on bargain purchase of $24.4 million;
- operating commercial portfolio leased and occupied percentages at our share of 89.6% and 85.5% as of December 31, 2018 compared to 88.0% and 87.2% as of December 31, 2017;
- operating multifamily portfolio leased and occupied percentages at our share of 95.7% and 93.9% as of December 31, 2018 compared to 95.7% and 93.8% as of December 31, 2017;

- the leasing of approximately 2.0 million square feet, or 1.8 million square feet at our share, at an initial rent [1] of $46.64 per square foot and a GAAP-basis weighted average rent per square foot [2] of $48.39 for the year ended December 31, 2018; and
- a decrease in same store [3] net operating income of 1.1% to $250.3 million for the year ended December 31, 2018 as compared to $253.0 million for the year ended December 31, 2017.

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(1) Represents the cash basis weighted average starting rent per square foot, which excludes free rent and fixed escalations.

(2) Represents the weighted average rent per square foot that is recognized over the term of the respective leases, including the effect of free rent and fixed escalations.

(3) Includes the results of the properties that are owned, operated and in service for the entirety of both periods being compared except for properties for which significant redevelopment, renovation or repositioning occurred during either of the periods being compared. Excludes the JBG Assets acquired in the Combination.

Additionally, investing and financing activity during the year ended December 31, 2018 included:

- the sale of four commercial assets located in Washington D.C. and Reston, Virginia, a future development asset located in Reston, Virginia, and the out-of-service portion of a multifamily asset located in Silver Spring, Maryland, for an aggregate gross sales price of $427.4 million, resulting in gains on sale of real estate of $52.2 million. See Note 4 to the financial statements for additional information;
- the leasing of the unimproved land at 1700 M Street for a 99-year term, with no extension options;
- the acquisition of a 4.25-acre land parcel, Potomac Yard Land Bay H located in Alexandria, Virginia, for $23.0 million;
- the closing of a real estate venture with Canadian Pension Plan Investment Board ("CPPIB") to develop and own 1900 N Street, an under construction commercial asset in Washington, D.C. We contributed 1900 N Street, valued at $95.9 million, to the real estate venture, and CPPIB has committed to contribute approximately $101.3 million to the venture for a 45.0% interest, which will reduce our ownership interest from 100.0% at the real estate venture's formation to 55.0% as contributions are funded;
- the investment of $10.1 million for a 16.67% interest in a real estate venture with CIM Group and Pacific Life Insurance Company, which purchased the 1,152-key Wardman Park hotel, located adjacent to the Woodley Park Metro Station in northwest Washington, D.C.;
- the acquisition by our partner in the real estate venture that owned the Investment Building, a 401,000 square foot office building located in Washington, D.C., of our 5.0% interest in the venture for $24.6 million, resulting in a gain of $15.5 million;
- the sale of The Warner, a 583,000 square foot office building located in Washington, D.C., by our unconsolidated real estate venture with CPPIB for $376.5 million. In connection with the sale, the unconsolidated real estate venture recognized a gain on sale of $32.5 million, of which our proportionate share was $20.6 million;
- a $50.0 million draw under our unsecured term loan maturing in January 2023, in accordance with the delayed draw provisions of the credit facility, bringing the outstanding borrowings under the term loan facility to $100.0 million. Concurrent with the draw, we entered into an interest rate swap agreement effectively to convert the variable interest rate to a fixed interest rate;
- a $200.0 million draw under our unsecured term loan maturing in July 2024, in accordance with the delayed draw provisions of the credit facility. We also repaid all outstanding revolving credit facility balances;
- aggregate borrowings under mortgages payable totaling $118.1 million, of which $47.5 million relates to the principal balance on a new mortgage loan collateralized by 1730 M Street and the remainder related to construction draws under mortgages payable;
- the repayment of mortgages payable with an aggregate principal balance of $298.1 million and recognized losses on the extinguishment of debt in conjunction with these repayments of $5.2 million;
- declared cash dividends totaling $1.00 (regular dividends of $0.90 per common share and a special dividend of $0.10 per common share). Regular quarterly dividends declared in December 2018 of $0.225 per common share and a special dividend of $0.10 per common share were paid in January 2019; and
- the investment of $385.9 million in development costs, construction in progress and real estate additions.

Activity subsequent to December 31, 2018 included:

- the sale of Commerce Executive, an office building located in Reston, Virginia, for the gross sales price of $115.0 million;
- the issuance of an additional 442,395 long-term incentive partnership units ("LTIP Units") and 477,640 performance-based LTIP Units ("Performance-Based LTIP Units") to management and employees with an estimated aggregate fair value of $24.5 million; and
- the redemption of 1.7 million OP units, which we elected to redeem for an equivalent number of our common shares.

Critical Accounting Policies and Estimates

The preparation of financial statements in conformity with GAAP, requires management to make estimates and assumptions that in certain circumstances may significantly impact our financial results. These estimates are prepared using management’s best judgment, after considering past and current events and economic conditions. In addition, certain information relied upon by management in preparing such estimates includes internally generated financial and operating information, external market information, when available, and when necessary, information obtained from consultations with third-party experts. Actual results could differ from these estimates. We consider an accounting estimate to be critical if changes in the estimate could have a material impact on our consolidated and combined results of operations or financial condition.

Our significant accounting policies are more fully described in Note 2 to the financial statements included in Part II, Item 8 of this Annual Report on Form 10-K; however, the most critical accounting policies, which involve the use of estimates and assumptions as to future uncertainties and, therefore, may result in actual amounts that differ from estimates, are as follows:

Business Combinations

We account for business combinations, including the acquisition of real estate, using the acquisition method pursuant to which we recognize and measure the identifiable assets acquired, liabilities assumed, and any noncontrolling interests in the acquiree at their acquisition date fair values. Accordingly, we estimate the fair values of acquired tangible assets (consisting of real estate, cash and cash equivalents, tenant and other receivables, investments in unconsolidated real estate ventures and other assets, as applicable), identified intangible assets and liabilities (consisting of the value of in-place leases, above- and below-market leases, options to enter into ground leases and management contracts, as applicable), assumed debt and other liabilities, and noncontrolling interests, as applicable, based on our evaluation of information and estimates available at that date. Based on these estimates, we allocate the purchase price to the identified assets acquired and liabilities assumed. Any excess of the purchase price over the estimated fair value of the net assets acquired is recorded as goodwill. Any excess of the fair value of assets acquired over the purchase price is recorded as a gain on bargain purchase. If, up to one year from the acquisition date, information regarding the fair value of the net assets acquired and liabilities assumed is received and estimates are refined, appropriate adjustments are made on a prospective basis to the purchase price allocation, which may include adjustments to identified assets, assumed liabilities, and goodwill or the gain on bargain purchase, as applicable. The results of operations of acquisitions are prospectively included in our financial statements beginning with the date of the acquisition. Transaction costs related to business combinations are expensed as incurred and included in "Transaction and other costs" in our statements of operations.

The fair values of buildings are determined using the "as-if vacant" approach whereby we use discounted income or cash flow models with inputs and assumptions that we believe are consistent with current market conditions for similar assets. The most significant assumptions in determining the allocation of the purchase price to buildings are the exit capitalization rate, discount rate, estimated market rents and hypothetical expected lease-up periods. We assess fair value of land based on market comparisons and development projects using an income approach of cost plus a margin.

The fair values of identified intangible assets are determined based on the following:

- The value allocable to the above- or below-market component of an acquired in-place lease is determined based upon the present value (using a discount rate which reflects the risks associated with the acquired leases) of the difference between (i) the contractual amounts to be received pursuant to the lease over its remaining term and (ii) management’s estimate of the amounts that would be received using market rates over the remaining term of the lease. Amounts allocated to above- market leases are recorded as "Identified intangible assets" in "Other assets, net" in the balance sheets, and amounts allocated to below-market leases are recorded as "Lease intangible liabilities" in "Other liabilities, net" in the balance sheets. These intangibles are amortized to "Property rentals" in our statements of operations over the remaining terms of the respective leases.
- Factors considered in determining the value allocable to in-place leases during hypothetical lease-up periods related to space that is leased at the time of acquisition include (i) lost rent and operating cost recoveries during the hypothetical lease-up period and (ii) theoretical leasing commissions required to execute similar leases. These intangible assets are recorded as "Identified intangible assets" in "Other assets, net" in the balance sheets and are amortized to "Depreciation and amortization expenses" in our statements of operations over the remaining term of the existing lease.
- The fair value of the in-place property management, leasing, asset management, and development and construction management contracts is based on revenue and expense projections over the estimated life of each contract discounted using a market discount rate. These management contract intangibles are amortized to "Depreciation and amortization expenses" in our statements of operations over the weighted average life of the management contracts.

The fair value of investments in unconsolidated real estate ventures and related noncontrolling interests is based on the estimated fair values of the identified assets acquired and liabilities assumed of each venture, including future expected cash flows from promote interests.

The fair value of the mortgages payable assumed is determined using current market interest rates for comparable debt financings. The fair values of the interest rate swaps and caps are based on the estimated amounts we would receive or pay to terminate the contract at the acquisition date and are determined using interest rate pricing models and observable inputs. The carrying value of cash, restricted cash, working capital balances, leasehold improvements and equipment, and other assets acquired and liabilities assumed approximates fair value.

Real Estate

Real estate is carried at cost, net of accumulated depreciation and amortization. Maintenance and repairs are expensed as incurred and are included in "Property operating expenses" in our statements of operations. As real estate is undergoing redevelopment activities, all property operating expenses directly associated with and attributable to the redevelopment, including interest expense, are capitalized to the extent that we believe such costs are recoverable through the value of the property. The capitalization period ends when redevelopment activities are substantially complete. General and administrative costs are expensed as incurred. Depreciation requires an estimate of the useful life of each property and improvement as well as an allocation of the costs associated with a property to its various components. Depreciation is recognized on a straight-line basis over estimated useful lives, which range from three to 40 years. Tenant improvements are amortized on a straight-line basis over the lives of the related leases, which approximate the useful lives of the tenant improvements. When assets are sold or retired, their costs and related accumulated depreciation are removed from the accounts with the resulting gains or losses reflected in net income or loss for the period in “Depreciation and amortization expense.”

Construction in progress, including land, is carried at cost, and no depreciation is recorded. Real estate undergoing significant renovations and improvements is considered to be under development. All direct and indirect costs related to development activities are capitalized into "Construction in progress, including land" on our balance sheets, except for certain demolition costs, which are expensed as incurred. Direct development costs incurred include: pre-development expenditures directly related to a specific project, development and construction costs, interest, insurance and real estate taxes. Indirect development costs include: employee salaries and benefits, travel and other related costs that are directly associated with the development. Our method of calculating capitalized interest expense is based upon applying our weighted average borrowing rate to the actual accumulated expenditures if the property does not have property specific debt. If the property is encumbered by specific debt, we will capitalize both the interest incurred applicable to that debt and additional interest expense using our weighted average borrowing rate for any accumulated expenditures in excess of the principal balance of the debt encumbering the property. The capitalization of such expenses ceases when the real estate is ready for its intended use, but no later than one-year from substantial completion of major construction activity. If we determine that a construction project is no longer viable, all capitalized pre-development project costs are immediately expensed.

Our assets and related intangible assets are individually reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the assets may not be recoverable. An impairment exists when the carrying amount of an asset exceeds the sum of the undiscounted cash flows expected to result from the use and eventual disposition of the asset. Estimates of future cash flows are based on our current plans, intended holding periods and available market information at the time the analyses are prepared. An impairment loss is recognized if the carrying amount of the asset is not recoverable and is measured based on the excess of the property’s carrying amount over its estimated fair value. If our estimates of future cash flows, anticipated holding periods, or fair values change, based on market conditions or otherwise, our evaluation of impairment charges may be different and such differences could be material to our financial statements. Estimates of future cash flows are subjective and are based, in part, on assumptions regarding future occupancy, rental rates and capital requirements that could differ materially from actual results.

Investments in and Advances to Real Estate Ventures

We analyze our real estate ventures to determine whether the entities should be consolidated. If it is determined that these investments do not require consolidation because the entities are not VIEs in accordance with the Consolidation Topic of the FASB ASC, we are not considered the primary beneficiary of the entities determined to be VIEs, we do not have voting control, and/or the limited partners (or non-managing members) have substantive participatory rights, then the selection of the accounting method used to account for our investments in unconsolidated real estate ventures is generally determined by our voting interests and the degree of influence we have over the entity. Management uses its judgment when determining if we are the primary beneficiary of, or have a controlling financial interest in, an entity in which we have a variable interest. Factors considered in determining whether we have the power to direct the activities that most significantly impact the entity’s economic performance include risk and reward sharing, experience and financial condition of the other partners, voting rights, involvement in day-to-day capital and operating decisions and the extent of our involvement in the entity.

We use the equity method of accounting for investments in unconsolidated real estate ventures when we own 20% or more of the voting interests and have significant influence but do not have a controlling financial interest, or if we own less than 20% of the voting interests but have determined that we have significant influence. Under the equity method, we record our investments in and advances to these entities in our balance sheets, and our proportionate share of earnings or losses earned by the real estate venture is recognized in "Income (loss) from unconsolidated real estate ventures, net" in the accompanying statements of operations. We earn revenues from the management services we provide to unconsolidated entities. These fees are determined in accordance with the terms specific to each arrangement and may include property and asset management fees or transactional fees for leasing, acquisition, development and construction, financing, and legal services provided. We account for this revenue gross of our ownership interest in each respective real estate venture and recognize such revenue in "Third-party real estate services, including reimbursements" in our statements of operations. Our proportionate share of related expenses is recognized in "Income (loss) from unconsolidated real estate ventures, net" in our statements of operations. We may also earn incremental promote distributions if certain financial return benchmarks are achieved upon ultimate disposition of the underlying properties. Management fees are recognized when earned, and promote fees are recognized when certain earnings events have occurred, and the amount is determinable and collectible. Any promote fees are reflected in "Income (loss) from unconsolidated real estate ventures, net" in our statements of operations.

On a periodic basis, we evaluate our investments in unconsolidated entities for impairment. We assess whether there are any indicators, including underlying property operating performance and general market conditions, that the value of our investments in unconsolidated real estate ventures may be impaired. An investment in a real estate venture is considered impaired if we determine that its fair value is less than the net carrying value of the investment in that real estate venture on an other-than-temporary basis. Cash flow projections for the investments consider property level factors such as expected future operating income, trends and prospects, as well as the effects of demand, competition and other factors. We consider various qualitative factors to determine if a decrease in the value of our investment is other-than-temporary. These factors include age of the venture, our intent and ability to retain our investment in the entity, financial condition and long-term prospects of the entity and relationships with our partners and banks. If we believe that the decline in the fair value of the investment is temporary, no impairment charge is recorded. If our analysis indicates that there is an other-than temporary impairment related to the investment in a particular real estate venture, the carrying value of the venture will be adjusted to an amount that reflects the estimated fair value of the investment.

Revenue Recognition

Property rentals income includes base rents that each tenant pays in accordance with the terms of its respective lease and is reported on a straight-line basis over the non-cancellable term of the lease, which includes the effects of periodic step-ups in rent and rent abatements under the leases. We commence rental revenue recognition when the tenant takes possession of the leased space or controls the physical use of the leased space and the leased space is substantially ready for its intended use. 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 property rentals revenue on a straight-line basis over the term of the lease. Differences between rental income recognized and amounts due under the respective lease agreements are recorded as an increase or decrease to "Deferred rent receivable, net" on our balance sheets. Property rentals also includes the amortization/accretion of acquired above- and below-market leases.

Tenant reimbursements provide for the recovery of all or a portion of the operating expenses and real estate taxes of the respective assets. Tenant reimbursements are accrued in the same periods as the related expenses are incurred.

Third-party real estate services revenue, including reimbursements, is determined in accordance with the terms specific to each arrangement and may include property and asset management fees or transactional fees for leasing, acquisition, development and construction, financing, and legal services provided. These fees are determined in accordance with the terms specific to each arrangement and are recognized as the related services are performed. Development and construction fees earned from providing services to our unconsolidated real estate ventures are recorded on a percentage of completion basis.

Share-Based Compensation

The fair value of OP Units, formation awards, LTIP Units, LTIP Units with time-based vesting requirements, Performance-Based LTIP Units, and Employee Share Purchase Plan common shares granted to our trustees, management and employees is determined, depending on the type of award, using the Monte Carlo or Black-Scholes methods, which is intended to estimate the fair value of the awards at the grant date using dividend yields, expected volatilities that are primarily based on available implied data and peer group companies' historical data and post-vesting restriction periods. The risk-free interest rate is based on the U.S. Treasury yield curve in effect at the time of grant. The shortcut method is used for determining the expected life used in the valuation method.

Compensation expense is based on the fair value of our common shares at the date of the grant and is recognized ratably over the vesting period using a graded vesting attribution model. We account for forfeitures as they occur.

Recent Accounting Pronouncements

See Note 2 to the financial statements for a description of the potential impact of the adoption of any new accounting pronouncements.

Results of Operations

Comparison of the Year Ended December 31, 2018 to 2017

The following summarizes certain line items from our statements of operations that we believe are important in understanding our operations and/or those items which significantly changed in the year ended December 31, 2018 as compared to the same period in 2017:

	Year Ended December 31,		
	2018	2017	% Change
	(In thousands)		
Property rentals revenue	$ 499,835	$ 436,625	14.5 %
Tenant reimbursements revenue	39,290	37,985	3.4 %
Third-party real estate services revenue, including reimbursements	98,699	63,236	56.1 %
Depreciation and amortization expense	211,436	161,659	30.8 %
Property operating expense	148,081	118,836	24.6 %
Real estate taxes expense	71,054	66,434	7.0 %
General and administrative expense:			
Corporate and other	33,728	39,350	(14.3)%
Third-party real estate services	89,826	51,919	73.0 %
Share-based compensation related to Formation Transaction and special equity awards	36,030	29,251	23.2 %
Transaction and other costs	27,706	127,739	(78.3)%
Income (loss) from unconsolidated real estate ventures, net	39,409	(4,143)	*
Interest and other income, net	15,168	1,788	748.3 %
Interest expense	74,447	58,141	28.0 %
Gain on sale of real estate	52,183	—	*
Loss on extinguishment of debt	5,153	701	635.1 %
Gain (reduction of gain) on bargain purchase	(7,606)	24,376	*

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* Not meaningful.

Property rentals revenue increased by approximately $63.2 million, or 14.5%, to $499.8 million in 2018 from $436.6 million in 2017. The increase was primarily due to $66.2 million of revenue associated with the assets acquired in the Combination, including $32.4 million of revenue associated with placing CEB Tower at Central Place and 1221 Van Street into service, partially offset by a decrease of $3.0 million in revenue associated with the Vornado Included Assets, primarily due to the sale of the Bowen building.

Tenant reimbursements revenue increased by approximately $1.3 million, or 3.4%, to $39.3 million in 2018 from $38.0 million in 2017. The increase was primarily due to an increase of $2.9 million associated with the assets acquired in the Combination, partially offset by a decrease of $1.6 million associated with the Vornado Included Assets primarily due to lower tax assessments and the sale of the Bowen building, offset by an increase in construction services provided to tenants.

Third-party real estate services revenue, including reimbursements, increased by approximately $35.5 million, or 56.1%, to $98.7 million in 2018 from $63.2 million in 2017. The increase was primarily due to the real estate services business acquired in the Combination, partially offset by lower payroll reimbursements related to third-party arrangements that were terminated during 2017 and early 2018.

Depreciation and amortization expense increased by approximately $49.8 million, or 30.8%, to $211.4 million in 2018 from $161.7 million in 2017. The increase was primarily due to depreciation and amortization expense associated with the assets acquired in the Combination, including $13.4 million of depreciation and amortization expense associated with placing CEB Tower at Central Place and 1221 Van Street into service and $11.6 million related to the write-off of assets associated with the redevelopment of 1770 Crystal Drive.

Property operating expense increased by approximately $29.2 million, or 24.6%, to $148.1 million in 2018 from $118.8 million in 2017. The increase was primarily due to property operating expense of $20.4 million associated with the assets acquired in the Combination, including $7.3 million of operating expense associated with placing CEB Tower at Central Place and 1221 Van Street into service and an increase of $8.8 million associated with the Vornado Included Assets primarily due to higher ground rent, corporate allocation and marketing expenses, partially offset by the sale of the Bowen Building and Executive Tower and lower bad debt expense.

Real estate tax expense increased by approximately $4.6 million, or 7.0%, to $71.1 million in 2018 from $66.4 million in 2017. The increase was primarily due to real estate tax expense of $8.6 million associated with the assets acquired in the Combination, including $2.6 million associated with placing CEB Tower at Central Place and 1221 Van Street into service, partially offset by a $4.0 million decrease associated with the Vornado Included Assets due to lower tax assessments and the sale of the Bowen Building and Executive Tower.

General and administrative expense: corporate and other decreased by approximately $5.6 million, or 14.3%, to $33.7 million in 2018 from $39.4 million in 2017. The decrease was due to lower corporate overhead costs in the 2018 period compared to the amount allocated and recorded in the 2017 period, including expenses incurred in the operation and management of our properties subsequent to the Formation Transaction that were previously included in general and administrative expenses. This decrease was partially offset by an increase in general and administrative expenses associated with the operations acquired in the Combination.

General and administrative expense: third-party real estate services increased by approximately $37.9 million, or 73.0%, to $89.8 million in 2018 from $51.9 million in 2017 primarily due to the real estate services business acquired in the Combination.

General and administrative expense: share-based compensation related to Formation Transaction and special equity awards of $36.0 million in 2018 and $29.3 million in 2017 consists of expenses related to share-based compensation issued in connection with the Formation Transaction and special equity awards issued related to our successful pursuit of Amazon HQ2.

Transaction and other costs of $27.7 million in 2018 comprised fees and expenses incurred in connection with the Formation Transaction (including transition services provided by our former parent, integration costs and severance costs) of $15.9 million, costs related to other completed, potential and pursued transactions of $9.0 million and costs related to the successful pursuit of Amazon HQ2 at our properties in National Landing of $2.8 million. Transaction and other costs of $127.7 million in 2017 consist primarily of fees and expenses incurred in connection with the Formation Transaction, including severance and transaction bonus expense of $40.8 million, investment banking fees of $33.6 million, legal fees of $13.9 million and accounting fees of $10.8 million.

Income from unconsolidated real estate ventures, net increased by approximately $43.6 million to $39.4 million in 2018 from a $4.1 million loss in 2017. The increase was primarily due to the sale of The Warner by our unconsolidated real estate venture for a gain to us of $20.6 million and the sale of our 5.0% interest in a real estate venture that owned the Investment Building, resulting in a gain of $15.5 million.

Interest and other income increased by approximately $13.4 million, or 748.3%, to $15.2 million in 2018 from $1.8 million in 2017. The increase was primarily due to the reduction of an assumed lease liability, higher interest income and higher income from other investments.

Interest expense increased by approximately $16.3 million, or 28.0%, to $74.4 million in 2018 from $58.1 million in 2017. The increase was primarily due to interest expense associated with the assets acquired in the Combination, additional term loan borrowings and higher interest rates, partially offset by the repayment of mortgages.

Gain on the sale of real estate of $52.2 million is primarily related to the sale of Summit I and II, the Bowen Building, Executive Tower, 1233 20th Street and the out-of-service portion of Falkland Chase - North during 2018. See Note 4 to the financial statements for additional information.

Loss on extinguishment of debt of $5.2 million in 2018 and $701,000 in 2017 is related to our repayment of various mortgages payable during the period.

The gain on bargain purchase of $24.4 million in 2017 represents the fair value of the identifiable net assets acquired in excess of the purchase consideration in the Combination. The reduction of the gain on bargain purchase of $7.6 million in 2018 is the result of finalizing the fair values used in the purchase price allocation related to the Combination.

Comparison of the Year Ended December 31, 2017 to 2016

The following summarizes certain line items from our statements of operations that we believe are important in understanding our operations and/or those items which significantly changed in the year ended December 31, 2017 as compared to the same period in 2016:

	Year Ended December 31,		
	2017	**2016**	**% Change**
	(In thousands)		
Property rentals revenue	$ 436,625	$ 401,595	8.7 %
Tenant reimbursements revenue	37,985	37,661	0.9 %
Third-party real estate services revenue, including reimbursements	63,236	33,882	86.6 %
Depreciation and amortization expense	161,659	133,343	21.2 %
Property operating expense	118,836	100,304	18.5 %
Real estate taxes expense	66,434	57,784	15.0 %
General and administrative expense:			
Corporate and other	39,350	48,753	(19.3)%
Third-party real estate services	51,919	19,066	172.3 %
Share-based compensation related to Formation Transaction and special equity awards	29,251	—	*
Transaction and other costs	127,739	6,476	1,872.5 %
Loss from unconsolidated real estate ventures, net	4,143	947	337.5 %
Interest expense	58,141	51,781	12.3 %
Loss on extinguishment of debt	701	—	*
Gain on bargain purchase	24,376	—	*
Net loss attributable to redeemable noncontrolling interests	7,328	—	*

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* Not meaningful.

Property rentals revenue increased by approximately $35.0 million, or 8.7%, to $436.6 million in 2017 from $401.6 million in 2016. The increase was primarily due to revenues of $31.4 million associated with the JBG Assets acquired in the Combination and an increase of $3.6 million in revenues associated with the Vornado Included Assets that were the existing assets in the prior period. The $3.6 million increase in revenues associated with existing assets is primarily due to an increase in occupancy and associated rentals at The Bartlett multifamily asset as the property was placed into service in the second quarter of 2016 and rent commencements at 1215 S. Clark St, partially offset by a decrease in revenues at 1700 M Street and 1770 Crystal Drive, which were taken out of service.

Tenant reimbursements revenue increased by approximately $324,000, or 0.9%, to $38.0 million in 2017 from $37.7 million in 2016. Revenue associated with existing assets decreased by $2.8 million, primarily due to lower construction services provided to tenants and lower operating expenses, partially offset by an increase of $3.1 million associated with the assets acquired in the Combination.

Third-party real estate services revenue, including reimbursements, increased by approximately $29.4 million, or 86.6%, to $63.2 million in 2017 from $33.9 million in 2016. The increase was primarily due to the real estate services business acquired in the Combination, partially offset by lower management fees and leasing commissions from existing arrangements with third-parties.

Depreciation and amortization expense increased by approximately $28.3 million, or 21.2%, to $161.7 million in 2017 from $133.3 million in 2016. The increase was primarily due to depreciation and amortization expense associated with the assets acquired in the Combination.

Property operating expense increased by approximately $18.5 million, or 18.5%, to $118.8 million in 2017 from $100.3 million in 2016. The increase was primarily due to property operating expenses of $10.4 million associated with the assets acquired in the Combination, an increase of $7.8 million related to expenses incurred in the operation and management of our properties subsequent to the Formation Transaction that were previously included in general and administrative expenses, and an increase of approximately $400,000 associated with existing assets due primarily to higher bad debt expense, partially offset by lower tenant services expense and lower utilities.

Real estate tax expense increased by approximately $8.7 million, or 15.0%, to $66.4 million in 2017 from $57.8 million in 2016. The increase was primarily due to real estate tax expense of $4.8 million associated with the assets acquired in the Combination, an increase in the tax assessments and lower capitalized real estate taxes.

General and administrative expense: corporate and other decreased by approximately $9.4 million, or 19.3%, to $39.4 million in 2017 from $48.8 million in 2016. The decrease was due to lower corporate allocated overhead costs associated with our former parent and a decrease of $7.8 million related to expenses incurred in the operation and management of our properties subsequent to the Formation Transaction that were previously included in general and administrative expenses, partially offset by an increase in general operating expenses associated with the operations acquired in the Combination.

General and administrative expense: third-party real estate services increased by approximately $32.9 million, or 172.3%, to $51.9 million in 2017 from $19.1 million in 2016 primarily due to the real estate services business acquired in the Combination.

General and administrative expense: share-based compensation related to Formation Transaction and special equity awards of $29.3 million in 2017 consists of expense related to share-based compensation issued in connection with the Formation Transaction.

Transaction and other costs of $127.7 million in 2017 consists primarily of fees and expenses incurred in connection with the Formation Transaction, including severance and transaction bonus expense of $40.8 million, investment banking fees of $33.6 million, legal fees of $13.9 million and accounting fees of $10.8 million.

Loss from unconsolidated real estate ventures, net increased by approximately $3.2 million to $4.1 million in 2017 from $947,000 in 2016. The increase in the loss was primarily due to losses from interests in real estate ventures acquired in the Combination, partially offset by an increase in equity income of approximately $2.5 million primarily from the refinancing of the Warner Building mortgage loan in May 2016 at a lower interest rate and for a lower outstanding principal amount.

Interest expense increased by approximately $6.4 million, or 12.3%, to $58.1 million in 2017 from $51.8 million in 2016. The increase was primarily due to $3.3 million of interest expense associated with the assets acquired in the Combination and lower capitalized interest related to The Bartlett multifamily asset which was placed into service during the second quarter of 2016.

Loss on extinguishment of debt of $701,000 in 2017 is related to the prepayment of mortgages payable.

The gain on bargain purchase of approximately $24.4 million in 2017 represents the estimated fair value of the identifiable net assets acquired in excess of the purchase consideration in the Combination. The purchase consideration was based on the fair value of the common shares and OP Units issued in the Combination. See Note 3 to the financial statements for additional information.

Net loss attributable to redeemable noncontrolling interests of approximately $7.3 million in 2017 relates to the allocation of net loss to the noncontrolling interests in JBG SMITH LP and 965 Florida Avenue.

NOI and Same Store NOI

We utilize NOI, which is a non-GAAP financial measure, to assess a segment's performance. The most directly comparable GAAP measure is net income (loss) attributable to common shareholders. We use NOI internally as a performance measure and believe NOI provides useful information to investors regarding our financial condition and results of operations because it reflects only property related revenue (which includes base rent, tenant reimbursements and other operating revenue) less operating expense, before deferred rent and related party management fees. Management uses NOI as a supplemental performance measure for our assets and believes it provides useful information to investors because it reflects only those revenue and expense items that are incurred at the asset level, excluding non-cash items. In addition, NOI is considered by many in the real estate industry to be a useful starting point for determining the value of a real estate asset or group of assets. However, because NOI excludes depreciation and amortization and captures neither the changes in the value of our assets that result from use or market conditions, nor the level of capital expenditures and capitalized leasing commissions necessary to maintain the operating performance of our assets, all of which have real economic effect and could materially impact the financial performance of our assets, the utility of NOI as a measure of the operating performance of our assets is limited. NOI presented by us may not be comparable to NOI reported by other REITs that define these measures differently. We believe that to facilitate a clear understanding of our operating results, NOI should be examined in conjunction with net income (loss) attributable to common shareholders as presented in our financial statements. NOI should not be considered as an alternative to net income (loss) attributable to common shareholders as an indication of our performance or to cash flows as a measure of liquidity or our ability to make distributions.

We also provide certain information on a "same store" basis. Information provided on a same store basis includes the results of properties that are owned, operated and in service for the entirety of both periods being compared except for properties for which significant redevelopment, renovation or repositioning occurred during either of the periods being compared. While there is judgment surrounding changes in designations, a property is removed from the same store pool when the property is considered to be under construction because it is undergoing significant redevelopment or renovation pursuant to a formal plan or is being repositioned in the market and such renovation or repositioning is expected to have a significant impact on property operating income. A development property or property under construction is moved to the same store pool once a substantial portion of the growth expected from the development or redevelopment is reflected in both the current and comparable prior year period. Acquisitions are moved into the same store pool once we have owned the property for the entirety of the comparable periods and the property is not under significant development or redevelopment.

For the year ended December 31, 2018, all of the JBG Assets and two Vornado Included Assets (The Bartlett and 1800 South Bell Street) were not included in the same store comparison as they were not in service during portions of the periods being compared. Additionally, the Bowen Building, Executive Tower, the Investment Building and 1233 20th Street were excluded because these assets were sold during the period.

Same store NOI decreased by $2.7 million, or 1.1%, for the year ended December 31, 2018 as compared to the year ended December 31, 2017. The decrease in same store NOI for the year ended December 31, 2018, was largely attributable to rental abatements, increased ground rent expense at Courthouse Plaza 1 and 2, and anticipated tenant move-outs.

The following table reflects the reconciliation of net income (loss) attributable to common shareholders to NOI and same store NOI for the periods presented:

	Year Ended December 31,	
	2018	2017
	(In thousands)	
Net income (loss) attributable to common shareholders	$ 39,924	$ (71,753)
Add:		
Depreciation and amortization expense	211,436	161,659
General and administrative expense:		
Corporate and other	33,728	39,350
Third-party real estate services	89,826	51,919
Share-based compensation related to Formation Transaction and special equity awards	36,030	29,251
Transaction and other costs	27,706	127,739
Interest expense	74,447	58,141
Loss on extinguishment of debt	5,153	701
Reduction of gain (gain) on bargain purchase	7,606	(24,376)
Income tax benefit	(738)	(9,912)
Net (income) loss attributable to redeemable noncontrolling interests	6,710	(7,328)
Less:		
Third-party real estate services, including reimbursements	98,699	63,236
Other income	6,358	5,167
Income (loss) from unconsolidated real estate ventures, net	39,409	(4,143)
Interest and other income, net	15,168	1,788
Gain on sale of real estate	52,183	—
Net loss attributable to noncontrolling interests	21	3
Consolidated NOI	319,990	289,340
NOI attributable to consolidated JBG Assets [(1)]	—	24,936
Proportionate NOI attributable to unconsolidated JBG Assets [(1)]	—	8,688
Proportionate NOI attributable to unconsolidated real estate ventures	36,824	21,530
Non-cash rent adjustments [(2)]	(10,349)	(6,715)
Other adjustments [(3)]	19,638	11,587
Total adjustments	46,113	60,026
NOI	366,103	349,366
Non-same store NOI [(4)]	115,801	96,342
Same store NOI [(5)]	**$ 250,302**	**$ 253,024**
Growth in same store NOI	(1.1)%	
Number of properties in same store pool	32	

(1) Includes financial information for the JBG Assets as if the Combination had been completed as of the beginning of the period presented.

(2) Adjustment to exclude straight-line rent, above/below market lease amortization and lease incentive amortization.

(3) Adjustment to include other income and payments associated with assumed lease liabilities related to operating properties, and exclude incidental income generated by development assets and commercial lease termination revenue. Includes property management fees of approximately $16.6 million and $7.8 million for the years ended December 31, 2018 and 2017.

(4) Includes the results for properties that were not owned, operated and in service for the entirety of both periods being compared and properties for which significant redevelopment, renovation or repositioning occurred during either of the periods being compared.

(5) Includes the results of the properties that are owned, operated and in service for the entirety of both periods being compared except for properties for which significant redevelopment, renovation or repositioning occurred during either of the periods being compared.

Reportable Segments

We review operating and financial data for each property on an individual basis; therefore, each of our individual properties is a separate operating segment. Our reportable segments are aligned with our method of internal reporting and the way our Chief

Executive Officer, who is also our Chief Operating Decision Maker ("CODM"), makes key operating decisions, evaluates financial results, allocates resources and manages our business. Accordingly, we aggregate our operating segments into three reportable segments (commercial, multifamily and third-party asset management and real estate services) based on the economic characteristics and nature of our assets and services. To conform to the current period presentation, we have reclassified the prior period segment financial data for certain properties that had been classified as part of other to the commercial and multifamily segments and the elimination of intersegment activity has been included as part of other. The commercial segment was previously referred to as the office segment.

The CODM measures and evaluates the performance of our operating segments, with the exception of the third-party asset management and real estate services business, based on the NOI of properties within each segment. NOI includes property rental revenues and tenant reimbursements and deducts property operating expenses and real estate taxes.

With respect to the third-party asset management and real estate services business, the CODM reviews revenues streams generated by this segment ("Third-party real estate services, including reimbursements"), as well as the expenses attributable to the segment ("General and administrative: third-party real estate services"), which are disclosed separately in the statements of operations and discussed in the preceding pages under "Results of Operations." The following presents a reconciliation of revenue from our third-party asset management and real estate services business, excluding reimbursements and service revenue, to "Third-party real estate services revenue, including reimbursements":

	Year Ended December 31,		
	2018	2017	2016
		(In thousands)	
Property management fees	$ 24,831	$ 16,022	$ 10,643
Asset management fees	14,910	10,083	—
Leasing fees	6,658	3,639	4,635
Development fees	7,592	3,653	396
Construction management fees	2,892	2,220	1,182
Other service revenue	2,801	712	223
Third-party real estate services revenue, excluding reimbursements and service revenue	59,684	36,329	17,079
Reimbursements and service revenue	39,015	26,907	16,803
Third-party real estate services revenue, including reimbursements	$ 98,699	$ 63,236	$ 33,882

Increases in property management fees, asset management fees and reimbursements and service revenue are primarily due to the real estate services business acquired in the Combination.

Consistent with internal reporting presented to our CODM and our definition of NOI, the third-party asset management and real estate services operating results are excluded from the NOI data below.

Rental revenue is calculated as property rentals plus tenant reimbursements. Rental expense is calculated as property operating expenses plus real estate taxes. NOI is calculated as rental revenue less rental expense. See Note 18 to the financial statements for the reconciliation of net income (loss) attributable to common shareholders to consolidated NOI for each of the three years in the period ended December 31, 2018.

	Year Ended December 31,		
	2018	2017	2016
	(In thousands)		
Rental revenue:			
Commercial	$ 430,042	$ 383,897	$ 356,494
Multifamily	109,357	91,569	66,855
Other [(1)]	(274)	(856)	15,907
Total rental revenue	539,125	474,610	439,256
Rental expense:			
Commercial	171,612	148,247	137,263
Multifamily	45,782	35,653	24,231
Other [(1)]	1,741	1,370	(3,406)
Total rental expense	219,135	185,270	158,088
Consolidated NOI:			
Commercial	258,430	235,650	219,231
Multifamily	63,575	55,916	42,624
Other [(1)]	(2,015)	(2,226)	19,313
Consolidated NOI	$ 319,990	$ 289,340	$ 281,168

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(1) Includes future development assets, corporate entities and the elimination of intersegment activity.

Comparison of the Year Ended December 31, 2018 to 2017

Commercial: Rental revenue increased by $46.1 million, or 12.0%, to $430.0 million in 2018 from $383.9 million in 2017. Consolidated NOI increased by $22.8 million, or 9.7%, to $258.4 million in 2018 from $235.7 million in 2017. The increase in rental revenue and consolidated NOI is primarily due to revenue associated with assets acquired in the Combination, including placing CEB Tower at Central Place into service, partially offset by the sale of the Bowen Building, Summit I and II and Executive Tower, a decrease in occupancy at 2345 Crystal Drive and an increase in rent abatements.

Multifamily: Rental revenue increased by $17.8 million, or 19.4%, to $109.4 million in 2018 from $91.6 million in 2017. Consolidated NOI increased by $7.7 million, or 13.7%, to $63.6 million in 2018 from $55.9 million in 2017. The increase in rental revenue and consolidated NOI is primarily due to the assets acquired in the Combination, including placing 1221 Van Street into service, and an increase in occupancy and associated rentals at The Bartlett.

Comparison of the Year Ended December 31, 2017 to 2016

Commercial: Rental revenue increased by $27.4 million, or 7.7%, to $383.9 million in 2017 from $356.5 million in 2016. Consolidated NOI increased by $16.4 million, or 7.5%, to $235.7 million in 2017 from $219.2 million in 2016. The increase in rental revenue and consolidated NOI is primarily due to the Combination and higher rents due to rent commencements at 1215 S. Clark St.

Multifamily: Rental revenue increased by $24.7 million, or 37.0%, to $91.6 million in 2017 from $66.9 million in 2016. Consolidated NOI increased by $13.3 million, or 31.2%, to $55.9 million in 2017 from $42.6 million in 2016. The increase in rental revenue and consolidated NOI is primarily due to the Combination and an increase in occupancy and associated rentals at The Bartlett which was placed into service in the second quarter of 2016.

Liquidity and Capital Resources

Property rental income is our primary source of operating cash flow and is dependent on a number of factors including occupancy levels and rental rates, as well as our tenants' ability to pay rent. In addition, our third-party asset management and real estate services business provides fee-based real estate services to third parties and the JBG Legacy Funds. Our assets provide a relatively consistent level of cash flow that enables us to pay operating expenses, debt service, recurring capital expenditures, dividends to shareholders and distributions to holders of OP Units. Other sources of liquidity to fund cash requirements include proceeds from financings, the issuance and sale of equity securities and asset sales. We anticipate that cash flows from continuing operations and proceeds from financings, recapitalizations and asset sales, together with existing cash balances, will be adequate to fund our business operations, debt amortization, capital expenditures, dividends to shareholders and distributions to holders of OP Units over the next 12 months.

Financing Activities

The following is a summary of mortgages payable:

	Weighted Average Effective Interest Rate (1)	December 31, 2018	December 31, 2017
		(In thousands)	
Variable rate (2)	4.30%	$ 308,918	$ 498,253
Fixed rate (3)	4.09%	1,535,734	1,537,706
Mortgages payable		1,844,652	2,035,959
Unamortized deferred financing costs and premium/ discount, net		(6,271)	(10,267)
Mortgages payable, net		$ 1,838,381	$ 2,025,692

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(1) Weighted average effective interest rate as of December 31, 2018.

(2) Includes variable rate mortgages payable with interest rate cap agreements.

(3) Includes variable rate mortgages payable with interest rates fixed by interest rate swap agreements.

As of December 31, 2018, the net carrying value of real estate collateralizing our mortgages payable, excluding assets held for sale, totaled $2.3 billion. Our mortgage loans contain covenants that limit our ability to incur additional indebtedness on these properties and in certain circumstances, require lender approval of tenant leases and/or yield maintenance upon repayment prior to maturity. Certain of our mortgage loans are recourse to us. As of December 31, 2018, we were not in default under any mortgage loan.

During the year ended December 31, 2018, aggregate borrowings totaled $118.1 million, of which $47.5 million relates to the principal balance on a new mortgage loan collateralized by 1730 M Street and the remainder related to construction draws under mortgages payable. We repaid mortgages payable with an aggregate principal balance of $298.1 million and recognized losses on the extinguishment of debt in conjunction with these repayments of $5.2 million for the year ended December 31, 2018.

In the Combination, we assumed mortgages payable with an aggregate principal balance of $768.5 million. In addition, we entered into mortgages payable with an aggregate principal balance of $79.3 million during the year ended December 31, 2017 with an ability to draw an additional $143.7 million for construction. During the year ended December 31, 2017, we repaid mortgages payable with an aggregate principal balance of $250.0 million, which includes mortgages payable totaling $64.8 million assumed in the Combination. We recognized losses on the extinguishment of debt in conjunction with these repayments of $701,000 for the year ended December 31, 2017.

As of December 31, 2018 and 2017, we had various interest rate swap and cap agreements with an aggregate notional value of $1.3 billion and $1.4 billion on certain of our mortgages payable, which mature on various dates concurrent with the maturity of the related mortgages payable. During the year ended December 31, 2018, we entered into various interest rate swap and cap agreements on certain of our mortgages payable with an aggregate notional value of $381.3 million. See Note 17 to the financial statements for additional information.

In July 2017, we entered into a $1.4 billion credit facility, consisting of a $1.0 billion revolving credit facility maturing in July 2021, with two six-month extension options, a delayed draw $200.0 million unsecured term loan ("Tranche A-1 Term Loan") maturing in January 2023, and a delayed draw $200.0 million unsecured term loan ("Tranche A-2 Term Loan") maturing in July 2024. The interest rate for the credit facility varies based on a ratio of our total outstanding indebtedness to a valuation of certain real property and assets and ranges (a) in the case of the revolving credit facility, from LIBOR plus 1.10% to LIBOR plus 1.50%, (b) in the case of the Tranche A-1 Term Loan, from LIBOR plus 1.20% to LIBOR plus 1.70% and (c) in the case of the Tranche A-2 Term Loan, from LIBOR plus 1.55% to LIBOR plus 2.35%. There are various LIBOR options in the credit facility, and we elected the one-month LIBOR option as of December 31, 2018. As of December 31, 2018, we were not in default under our credit facility.

In July 2017, in connection with the Combination, we drew $115.8 million on the revolving credit facility and $50.0 million under the Tranche A-1 Term Loan. In connection with the execution of the credit facility, we incurred $11.2 million in debt issuance costs during the year ended December 31, 2017. In October 2017, we entered into an interest rate swap with a notional value of $50.0 million effectively to convert the variable interest rate applicable to our Tranche A-1 Term Loan to a fixed interest rate.

In January 2018, we drew $50.0 million under the Tranche A-1 Term Loan in accordance with the delayed draw provisions of the credit facility, bringing the outstanding borrowings under the term loan facility to $100.0 million. Concurrent with the draw, we entered into an interest rate swap agreement effectively to convert the variable interest rate to a fixed interest rate. As of December 31, 2018 and 2017, we had interest rate swaps with an aggregate notional value of $100.0 million and $50.0 million effectively to convert the variable interest rate applicable to our Tranche A-1 Term Loan to a fixed interest rate, providing weighted average base interest rates under the facility agreement of 2.12% and 1.97% per annum. The interest rate swaps mature in January 2023, concurrent with the maturity of our Tranche A-1 Term Loan.

In July 2018, we drew $200.0 million under the Tranche A-2 Term Loan, in accordance with the delayed draw provisions of the credit facility.

The following is a summary of amounts outstanding under the credit facility:

		December 31,	
	Interest Rate (1)	**2018**	**2017**
		(In thousands)	
Revolving credit facility (2) (3) (4) (5)	3.60%	$ —	$ 115,751
Tranche A-1 Term Loan	3.32%	$ 100,000	$ 50,000
Tranche A-2 Term Loan	4.05%	200,000	—
Unsecured term loans		300,000	50,000
Unamortized deferred financing costs, net		(2,871)	(3,463)
Unsecured term loans, net		$ 297,129	$ 46,537

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(1) Interest rate as of December 31, 2018.

(2) As of December 31, 2018 and 2017, letters of credit with an aggregate face amount of $5.7 million were provided under our revolving credit facility.

(3) As of December 31, 2018 and 2017, net deferred financing costs related to our revolving credit facility totaling $4.8 million and $6.7 million were included in "Other assets, net."

(4) In May 2018, in connection with the sale of the Bowen Building, we repaid $115.0 million of the then outstanding balance on our revolving credit facility. See Note 4 to the financial statements for additional information.

(5) The interest rate for the revolving credit facility excludes a 0.15% facility fee.

In July 2018, we entered into an equity distribution agreement with various financial institutions relating to our "at the market" ("ATM") offering program, through which we may issue up to $200.0 million of our common shares from time to time. We may use net proceeds from the issuance of common shares under the ATM program for general corporate purposes, which may include paying down our indebtedness and funding our under construction assets and future development opportunities. No issuances occurred under the agreement in 2018.

In July 2018, we commenced a dividend reinvestment program, whereby shareholders may use their dividends and optional cash payments to purchase common shares. The common shares sold under this program may either be common shares issued by us or common shares purchased in the open market. We did not issue any common shares under this program in 2018.

Liquidity Requirements

Our principal liquidity needs for the next twelve months and beyond are to fund:

- normal recurring expenses;
- debt service and principal repayment obligations, including balloon payments on maturing debt;
- capital expenditures, including major renovations, tenant improvements and leasing costs;
- development expenditures;
- dividends to shareholders and distributions to holders of OP Units and
- possible acquisitions of properties, either directly or indirectly through the acquisition of equity interests therein.

We expect to satisfy these needs using one or more of the following:

- cash flows from operations;
- distributions from real estate ventures;
- cash and cash equivalent balances;
- issuance and sale of equity securities and
- proceeds from financings, recapitalizations and asset sales.

We anticipate that cash flows from continuing operations and proceeds from financings, recapitalizations and asset sales, together with existing cash balances, will be adequate to fund our business operations, debt amortization, capital expenditures, dividends to shareholders and distributions to holders of OP Units over the next 12 months.

Contractual Obligations and Commitments

Below is a summary of our contractual obligations and commitments as of December 31, 2018:

	Total	2019	2020	2021	2022	2023	Thereafter
Contractual cash obligations (principal and interest):				(In thousands)			
Debt obligations [1] [2]	$ 2,531,692	$ 279,632	$ 185,369	$ 410,373	$ 392,723	$ 306,672	$ 956,923
Operating leases [3]	96,304	12,939	12,637	12,300	11,437	8,350	38,641
Capital leases	22,615	1,052	1,073	1,095	1,117	1,139	17,139
Total contractual cash obligations [4]	$ 2,650,611	$ 293,623	$ 199,079	$ 423,768	$ 405,277	$ 316,161	$ 1,012,703

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(1) One-month LIBOR of 2.50% is applied to loans which are variable (no hedge) or variable with an interest rate cap. Additionally, we assumed no additional borrowings on construction loans.

(2) Excludes our proportionate share of unconsolidated real estate venture indebtedness. See additional information in Off-Balance Sheet Arrangements section below.

(3) Includes lease assumption liabilities and payments for ground leases during the term utilized for financial reporting purposes.

(4) Excludes obligations related to construction or development contracts, since payments are only due upon satisfactory performance under the contracts. See Commitments and Contingencies section below for additional information.

As of December 31, 2018, we expect to fund additional capital to certain of our unconsolidated investments totaling approximately $48.6 million, which we anticipate will be primarily expended over the next two to three years.

In December 2018, our Board of Trustees declared a quarterly dividend of $0.225 per common share and a special dividend of $0.10 per common share, both of which were paid in January 2019.

Summary of Cash Flows

The following summary discussion of our cash flows is based on the statements of cash flows and is not meant to be an all-inclusive discussion of the changes in our cash flows:

	Year Ended December 31,		
	2018	2017	2016
		(In thousands)	
Net cash provided by operating activities	$ 188,193	$ 74,183	$ 159,541
Net cash provided by (used in) investing activities	66,327	(7,676)	(258,807)
Net cash provided by (used in) financing activities	(193,545)	239,787	51,083

Cash Flows for the Year Ended December 31, 2018

Cash and cash equivalents and restricted cash increased $61.0 million to $399.5 million as of December 31, 2018 compared to $338.6 million as of December 31, 2017. This increase resulted from $188.2 million of net cash provided by operating activities and $66.3 million of net cash provided by investing activities, partially offset by $193.5 million of net cash used in financing activities. Our outstanding debt was $2.1 billion as of December 31, 2018 compared to $2.2 billion as of December 31, 2017. The $57.1 million decrease in outstanding debt is primarily from repayments of mortgages payable and our revolving credit facility, partially offset by draws under the Tranche A-1 and Tranche A-2 Term Loans, and borrowings under new mortgages payable.

Net cash provided by operating activities of $188.2 million primarily comprised: (i) $227.7 million of net income (before $233.2 million of non-cash items and a $52.2 million gain on sale of real estate) and (ii) $7.8 million of return on capital from unconsolidated real estate ventures, partially offset by (iii) $47.3 million of net change in operating assets and liabilities. Non-cash income adjustments of $233.2 million primarily include depreciation and amortization, share-based compensation expense, (income) loss from unconsolidated real estate ventures, net, deferred rent and reduction of gain on bargain purchase.

Net cash provided by investing activities of $66.3 million primarily comprised: (i) $413.1 million of proceeds from sale of real estate, (ii) $80.3 million of distributions of capital from sales of unconsolidated real estate ventures and (iii) $14.4 million of distributions of capital from unconsolidated real estate ventures, partially offset by (iv) $385.9 million of development costs, construction in progress and real estate additions, (v) $31.2 million of investments in and advances to unconsolidated real estate ventures and (vi) $23.2 million of real estate acquisitions.

Net cash used in financing activities of $193.5 million primarily comprised: (i) $312.9 million of repayment of mortgages payable, (ii) $150.8 million of repayments of our revolving credit facility, (iii) $107.4 million of dividends paid to common shareholders and (iv) $17.4 million of distributions to redeemable noncontrolling interests, partially offset by (v) $250.0 million of proceeds from borrowings under our unsecured term loans, (vi) $118.1 million of aggregate proceeds from borrowings under mortgages payable and (vii) $35.0 million of borrowings under our revolving credit facility.

Cash Flows for the Year Ended December 31, 2017

Cash and cash equivalents and restricted cash increased $306.3 million to $338.6 million as of December 31, 2017 compared to $32.3 million as of December 31, 2016. This increase resulted from $239.8 million of net cash provided by financing activities and $74.2 million of net cash provided by operating activities, partially offset by $7.7 million of net cash used in investing activities. Our outstanding debt was $2.2 billion as of December 31, 2017, a $1.0 billion increase from the balance at December 31, 2016 primarily from mortgages payable assumed in the Combination and borrowings under our credit facility.

Net cash provided by operating activities of $74.2 million primarily comprised: (i) $88.4 million of net income (before $191.9 million of non-cash items and $24.4 million gain on bargain purchase) and (ii) $2.6 million of return on capital from unconsolidated real estate ventures, partially offset by (iii) $16.8 million of net change in operating assets and liabilities. Non-cash adjustments of $191.9 million primarily include depreciation and amortization, share-based compensation expense, deferred rent, deferred income tax benefit, net loss from unconsolidated real estate ventures, bad debt expense and other non-cash items.

Net cash used in investing activities of $7.7 million primarily comprised: (i) $210.6 million of development costs, construction in progress and real estate additions, (ii) $16.3 million of investments in and advances to unconsolidated real estate ventures and (iii) $8.8 million of acquisition of interests in unconsolidated real estate ventures, net of cash acquired, partially offset by (iv) $97.4 million of net cash consideration received in connection with the Combination, (v) $75.0 million of proceeds from the repayment of a receivable by our former parent and (vi) $50.9 million of repayment of notes receivable.

Net cash provided by financing activities of $239.8 million primarily comprised: (i) $366.2 million of proceeds from borrowings under mortgages payable, (ii) $160.2 million of net contributions from our former parent, (iii) $115.8 million of proceeds from borrowings under our revolving credit facility and (iv) $50.0 million of proceeds from borrowings under our unsecured term loan, partially offset by (v) $272.9 million of repayment of mortgages payable, (vi) $115.6 million of repayment of borrowings from former parent, (vii) $26.5 million of dividends paid to common shareholders, (viii) $19.3 million of debt issuance costs, (ix) $17.8 million of capital lease payments and (x) $4.6 million of distributions to redeemable noncontrolling interests.

Off-Balance Sheet Arrangements

Unconsolidated Real Estate Ventures

We consolidate entities in which we have a controlling interest or are the primary beneficiary in a variable interest entity. From time to time, we may have off-balance-sheet unconsolidated real estate ventures and other unconsolidated arrangements with varying structures.

As of December 31, 2018, we have investments in and advances to unconsolidated real estate ventures totaling $322.9 million. For the majority of these investments, we exercise significant influence over, but do not control these entities and therefore account for these investments using the equity method of accounting. For a more complete description of our real estate ventures, see Note 6 to the financial statements.

From time to time, we (or ventures in which we have an ownership interest) have agreed, and may in the future agree with respect to unconsolidated real estate ventures, to (1) guarantee portions of the principal, interest and other amounts in connection with their borrowings, (2) provide customary environmental indemnifications and nonrecourse carve-outs (e.g., guarantees against fraud, misrepresentation and bankruptcy) in connection with their borrowings and (3) provide guarantees to lenders and other third parties for the completion of development projects. We customarily have agreements with our outside partners whereby the partners agree to reimburse the real estate venture or us for their share of any payments made under certain of these guarantees. Amounts that may be required to be paid in future periods in relation to budget overruns or operating losses that are also included in some of our guarantees are not estimable. Guarantees (excluding environmental) terminate either upon the satisfaction of specified circumstances or repayment of the underlying debt. At times, we have agreements with our outside partners whereby we agree to reimburse our partner for their share of any payments made by them under certain guarantees. As of December 31, 2018, we had no principal payment guarantees for our unconsolidated real estate ventures.

As of December 31, 2018, we expect to fund additional capital to certain of our unconsolidated investments totaling approximately $48.6 million, which we anticipate will be primarily expended over the next two to three years.

Reconsideration events could cause us to consolidate these unconsolidated real estate ventures and partnerships in the future or deconsolidate a consolidated entity. We evaluate reconsideration events as we become aware of them. Some triggers to be considered are additional contributions required by each partner and each partners' ability to make those contributions. Under certain of these circumstances, we may purchase our partner's interest. Our unconsolidated real estate ventures are held in entities which appear sufficiently stable to meet their capital requirements; however, if market conditions worsen and our partners are unable to meet their commitments, there is a possibility we may have to consolidate these entities.

Commitments and Contingencies

Insurance

We maintain general liability insurance with limits of $200.0 million per occurrence and in the aggregate, and property and rental value insurance coverage with limits of $2.0 billion per occurrence, with sub-limits for certain perils such as floods and earthquakes on each of our properties. We also maintain coverage, through our wholly owned captive insurance subsidiary, for both terrorist acts and for nuclear, biological, chemical or radiological terrorism events with limits of $2.0 billion per occurrence. These policies are partially reinsured by third-party insurance providers.

We will continue to monitor the state of the insurance market and the scope and costs of coverage for acts of terrorism. 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 the insurance coverage, which could be material.

Our debt, consisting of mortgage loans secured by our properties, revolving credit facility and unsecured term loans contain customary covenants requiring adequate insurance coverage. Although we believe that we currently have adequate insurance coverage, we may not be able to obtain an equivalent amount of coverage at reasonable costs in the future. If lenders insist on greater coverage than we are able to obtain, it could adversely affect the ability to finance or refinance our properties.

Construction Commitments

As of December 31, 2018, we have construction in progress that will require an additional $519.4 million to complete ($440.9 million related to our consolidated entities and $78.5 million related to our unconsolidated real estate ventures at our share), based on our current plans and estimates, which we anticipate will be primarily expended over the next two to three years. These capital expenditures are generally due as the work is performed, and we expect to finance them with debt proceeds, proceeds from asset recapitalizations and sales, and available cash.

Other

There are various legal actions against us in the ordinary course of business. In our opinion, the outcome of such matters will not have a material adverse effect on our financial condition, results of operations or cash flows.

In connection with the Formation Transaction, we entered into an agreement with Vornado regarding tax matters (the "Tax Matters Agreement") that provides special rules that allocate tax liabilities if the distribution of JBG SMITH shares by Vornado, together with certain related transactions, is not tax-free. Under the Tax Matters Agreement, we may be required to indemnify Vornado against any taxes and related amounts and costs resulting from a violation by us of the Tax Matters Agreement, or from the taking of certain restricted actions by us.

Inflation

Substantially all of our office and retail leases contain provisions designed to mitigate the adverse impact of inflation. These provisions generally increase rental rates or reimbursable expenses during the terms of the lease either at (i) fixed rates, (ii) indexed escalations (based on the Consumer Price Index of other measures) or (iii) the lesser of a fixed rate or an indexed escalation. We may be adversely impacted by inflation on the leases that do not contain indexed escalation provisions or when the increases provided by the escalation provisions are less than inflation. In addition, most of our office and retail leases require the tenant to pay an allocable share of operating expenses, including common area maintenance costs, real estate taxes and insurance. We believe that inflationary increases may be at least partially offset by the contractual rent increases and expense escalations described above. The majority of our multifamily properties are subject to one-year leases, which provide us with the opportunity to adjust rental rates annually and mitigate the impact of inflation. We do not believe inflation has had a material impact on our historical financial position or results of operations.

Environmental Matters

Under various federal, state and local laws, ordinances and regulations, an owner of real estate is liable for the costs of removal or remediation of certain hazardous or toxic substances on such real estate. These laws often impose such liability without regard to whether the owner knew of, or was responsible for, the presence of such hazardous or toxic substances. The costs of remediation or removal of such substances may be substantial and the presence of such substances, or the failure to promptly remediate such substances, may adversely affect the owner's ability to sell such real estate or to borrow using such real estate as collateral. In connection with the ownership and operation of our assets, we may be potentially liable for such costs. The operations of current and former tenants at our assets have involved, or may have involved, the use of hazardous materials or generated hazardous wastes. The release of such hazardous materials and wastes could result in us incurring liabilities to remediate any resulting contamination. The presence of contamination or the failure to remediate contamination at our properties may (1) expose us to third-party liability (e.g., for cleanup costs, natural resource damages, bodily injury or property damage), (2) subject our properties to liens in favor of the government for damages and costs the government incurs in connection with the contamination, (3) impose restrictions on the manner in which a property may be used or businesses may be operated, or (4) materially adversely affect our ability to sell, lease or develop the real estate or to borrow using the real estate as collateral. In addition, our assets are exposed to the risk of contamination originating from other sources. While a property owner may not be responsible for remediating contamination that has migrated onsite from an identifiable and viable offsite source, the contaminant's presence can have adverse effects on operations and the redevelopment of our assets. To the extent we send contaminated materials to other locations for treatment or disposal, we may be liable for cleanup of those sites if they become contaminated.

Most of our assets have been subject, at some point, to environmental assessments that are intended to evaluate the environmental condition of the subject and surrounding assets. These environmental assessments generally have included a historical review, a public records review, a visual inspection of the site and surrounding assets, visual or historical evidence of underground storage tanks, and the preparation and issuance of a written report. Soil and/or groundwater subsurface testing is conducted at our assets, when necessary, to further investigate any issues raised by the initial assessment that could reasonably be expected to pose a material concern to the property or result in us incurring material environmental liabilities as a result of redevelopment. They may not, however, have included extensive sampling or subsurface investigations. In each case where the environmental assessments have identified conditions requiring remedial actions required by law, we have initiated appropriate actions. The environmental assessments did not reveal any material environmental contamination that we believe would have a material adverse effect on our overall business, financial condition or results of operations, or that have not been anticipated and remediated during site redevelopment as required by law. Nevertheless, 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 cost to us. As noted in Note 10 to the financial statements, environmental liabilities total $17.9 million as of December 31, 2018 and primarily relate to a liability to remediate pre-existing environmental matters at Potomac Yard Land Bay H, which was acquired in December 2018.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Interest Rate Risk

We have exposure to fluctuations in interest rates, which are sensitive to many factors that are beyond our control. Our exposure to a change in interest rates is summarized in the table below.

	December 31, 2018			December 31, 2017	
	Balance	Weighted Average Effective Interest Rate	Effect of 1% Change in Base Rates	Balance	Weighted Average Effective Interest Rate
Debt (contractual balances):			(Dollars in thousands)		
Mortgages payable					
Variable rate [(1)]	$ 308,918	4.30%	$ 3,132	$ 498,253	3.62%
Fixed rate [(2)]	1,535,734	4.09%	—	1,537,706	4.25%
	$ 1,844,652		$ 3,132	$ 2,035,959	
Credit facility (variable rate):					
Revolving credit facility	$ —	3.60%	$ —	$ 115,751	2.66%
Tranche A-1 Term Loan [(3)]	100,000	3.32%	—	50,000	3.17%
Tranche A-2 Term Loan	200,000	4.05%	2,028	—	—
Pro rata share of debt of unconsolidated entities (contractual balances):					
Variable rate [(1)]	$ 146,980	6.19%	$ 1,490	$ 158,154	4.40%
Fixed rate [(2)]	152,410	4.44%	—	238,138	3.79%
	$ 299,390		$ 1,490	$ 396,292	

____

(1) Includes variable rate mortgages payable with interest rate cap agreements.

(2) Includes variable rate mortgages payable with interest rates fixed by interest rate swap agreements.

(3) As of December 31, 2018 and 2017, the outstanding balance was fixed by interest rate swap agreements.

The fair value of our mortgages payable is estimated by discounting the future contractual cash flows of these instruments using current risk-adjusted rates available to borrowers with similar credit profiles based on market sources. The fair value of our revolving credit facility and unsecured term loans is calculated based on the net present value of payments over the term of the facilities using estimated market rates for similar notes and remaining terms. As of December 31, 2018 and 2017, the estimated fair value of our consolidated debt was $2.2 billion. These estimates of fair value, which are made at the end of the reporting period, may be different from the amounts that may ultimately be realized upon the disposition of our financial instruments.

Hedging Activities

To manage, or hedge, our exposure to interest rate risk, we follow established risk management policies and procedures, including the use of a variety of derivative financial instruments. We do not enter into derivative financial instruments for speculative purposes.

Derivative Financial Instruments Designated as Cash Flow Hedges

Certain derivative financial instruments, consisting of interest rate swap and cap agreements, are designated as cash flow hedges, and are carried at their estimated fair value on a recurring basis. We assess the effectiveness of our cash flow hedges both at inception and on an ongoing basis. If the hedges are deemed to be effective, the fair value is recorded in accumulated other comprehensive income and is subsequently reclassified into "Interest expense" in the period that the hedged forecasted transactions affect earnings. Our cash flow hedges become less than perfectly effective if the critical terms of the hedging instrument and the forecasted transactions do not perfectly match such as notional amounts, settlement dates, reset dates, calculation period and interest rates. In addition, we evaluate the default risk of the counterparty by monitoring the credit worthiness of the counterparty. While management believes its judgments are reasonable, a change in a derivative’s effectiveness as a hedge could materially affect expenses, net income and equity.

As of December 31, 2018 and 2017, we had interest rate swap and cap agreements with an aggregate notional value of $786.4 million and $856.9 million, which were designated as cash flow hedges. As of December 31, 2018 and 2017, the fair value of our interest rate swaps and caps designated as cash flow hedges consisted of assets totaling $7.9 million and $1.5 million included in "Other assets, net" in our balance sheets, and liabilities totaling $1.7 million and $2.6 million included in "Other liabilities, net" in our balance sheets.

Derivative Financial Instruments Not Designated as Hedges

Certain derivative financial instruments, consisting of interest rate swap and cap agreements, are considered economic hedges, but not designated as accounting hedges, and are carried at their estimated fair value on a recurring basis. Realized and unrealized gains are recorded in "Interest expense" in the statements of operations in the period in which the change occurs. As of December 31, 2018 and 2017, we had various interest rate swap and cap agreements with an aggregate notional value of $646.4 million and $563.1 million, which were not designated as cash flow hedges. As of December 31, 2018 and 2017, the fair value of our interest rate swaps and caps not designated as hedges primarily consisted of assets totaling $2.5 million and $635,000 included in "Other assets, net" in our balance sheets.

ITEM 8. Financial Statements and Supplementary Data

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Shareholders and Board of Trustees of JBG SMITH Properties

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of JBG SMITH Properties and subsidiaries (the "Company") as of December 31, 2018 and 2017, the related consolidated statements of operations, comprehensive income, equity, and cash flows, for the year ended December 31, 2018, the related consolidated and combined statements of operations, comprehensive income (loss), equity, and cash flows, for each of the two 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 aspects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018 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, 2018, 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 26, 2019, 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.

Emphasis of a Matter

As discussed in Note 1 to the consolidated and combined financial statements, the historical financial results reflect charges for certain corporate costs allocated by Vornado Realty Trust. These costs may not be reflective of the actual costs which would have been incurred had the Company operated as an independent, standalone entity separate from Vornado Realty Trust.

/s/ Deloitte & Touche LLP
McLean, Virginia
February 26, 2019

We have served as the Company's auditor since 2016.

JBG SMITH PROPERTIES
Consolidated Balance Sheets
(In thousands, except par value amounts)

	December 31, 2018	December 31, 2017
ASSETS		
Real estate, at cost:		
Land and improvements	$ 1,371,874	$ 1,368,294
Buildings and improvements	3,722,930	3,670,268
Construction in progress, including land	697,930	978,942
	5,792,734	6,017,504
Less accumulated depreciation	(1,051,875)	(1,011,330)
Real estate, net	4,740,859	5,006,174
Cash and cash equivalents	260,553	316,676
Restricted cash	138,979	21,881
Tenant and other receivables, net	46,568	46,734
Deferred rent receivable, net	143,473	146,315
Investments in and advances to unconsolidated real estate ventures	322,878	261,811
Other assets, net	264,994	263,923
Assets held for sale	78,981	8,293
TOTAL ASSETS	$ 5,997,285	$ 6,071,807
LIABILITIES, REDEEMABLE NONCONTROLLING INTERESTS AND EQUITY		
Liabilities:		
Mortgages payable, net	$ 1,838,381	$ 2,025,692
Revolving credit facility	—	115,751
Unsecured term loans, net	297,129	46,537
Accounts payable and accrued expenses	130,960	138,607
Other liabilities, net	181,606	161,277
Liabilities related to assets held for sale	3,717	—
Total liabilities	2,451,793	2,487,864
Commitments and contingencies		
Redeemable noncontrolling interests	558,140	609,129
Shareholders' equity:		
Preferred shares, $0.01 par value - 200,000 shares authorized, none issued	—	—
Common shares, $0.01 par value - 500,000 shares authorized; 120,937 and 117,955 shares issued and outstanding as of December 31, 2018 and 2017	1,210	1,180
Additional paid-in capital	3,155,256	3,063,625
Accumulated deficit	(176,018)	(95,809)
Accumulated other comprehensive income	6,700	1,612
Total shareholders' equity of JBG SMITH Properties	2,987,148	2,970,608
Noncontrolling interests in consolidated subsidiaries	204	4,206
Total equity	2,987,352	2,974,814
TOTAL LIABILITIES, REDEEMABLE NONCONTROLLING INTERESTS AND EQUITY	$ 5,997,285	$ 6,071,807

See accompanying notes to the consolidated and combined financial statements.

JBG SMITH PROPERTIES
Consolidated and Combined Statements of Operations
(In thousands, except per share data)

	Year Ended December 31, 2018	2017	2016
REVENUE			
Property rentals	$ 499,835	$ 436,625	$ 401,595
Tenant reimbursements	39,290	37,985	37,661
Third-party real estate services, including reimbursements	98,699	63,236	33,882
Other income	6,358	5,167	5,381
Total revenue	644,182	543,013	478,519
EXPENSES			
Depreciation and amortization	211,436	161,659	133,343
Property operating	148,081	118,836	100,304
Real estate taxes	71,054	66,434	57,784
General and administrative:			
Corporate and other	33,728	39,350	48,753
Third-party real estate services	89,826	51,919	19,066
Share-based compensation related to Formation Transaction and special equity awards	36,030	29,251	—
Transaction and other costs	27,706	127,739	6,476
Total expenses	617,861	595,188	365,726
OTHER INCOME (EXPENSE)			
Income (loss) from unconsolidated real estate ventures, net	39,409	(4,143)	(947)
Interest and other income, net	15,168	1,788	2,992
Interest expense	(74,447)	(58,141)	(51,781)
Gain on sale of real estate	52,183	—	—
Loss on extinguishment of debt	(5,153)	(701)	—
Gain (reduction of gain) on bargain purchase	(7,606)	24,376	—
Total other income (expense)	19,554	(36,821)	(49,736)
INCOME (LOSS) BEFORE INCOME TAX BENEFIT (EXPENSE)	45,875	(88,996)	63,057
Income tax benefit (expense)	738	9,912	(1,083)
NET INCOME (LOSS)	46,613	(79,084)	61,974
Net (income) loss attributable to redeemable noncontrolling interests	(6,710)	7,328	—
Net loss attributable to noncontrolling interests	21	3	—
NET INCOME (LOSS) ATTRIBUTABLE TO COMMON SHAREHOLDERS	$ 39,924	$ (71,753)	$ 61,974
EARNINGS (LOSS) PER COMMON SHARE:			
Basic	$ 0.31	$ (0.70)	$ 0.62
Diluted	$ 0.31	$ (0.70)	$ 0.62
WEIGHTED AVERAGE NUMBER OF COMMON SHARES OUTSTANDING:			
Basic	119,176	105,359	100,571
Diluted	119,176	105,359	100,571

See accompanying notes to the consolidated and combined financial statements.

JBG SMITH PROPERTIES
Consolidated and Combined Statements of Comprehensive Income (Loss)
(In thousands)

	Year Ended December 31,		
	2018	**2017**	**2016**
NET INCOME (LOSS)	$ 46,613	$ (79,084)	$ 61,974
OTHER COMPREHENSIVE INCOME:			
Change in fair value of derivative financial instruments	5,382	1,438	—
Reclassification of net loss on derivative financial instruments from accumulated other comprehensive income into interest expense	1,090	399	—
Other comprehensive income	6,472	1,837	—
COMPREHENSIVE INCOME (LOSS)	53,085	(77,247)	61,974
Net (income) loss attributable to redeemable noncontrolling interests	(6,710)	7,328	—
Other comprehensive income attributable to redeemable noncontrolling interests	(1,384)	(225)	—
Net loss attributable to noncontrolling interests	21	3	—
COMPREHENSIVE INCOME (LOSS) ATTRIBUTABLE TO JBG SMITH PROPERTIES	$ 45,012	$ (70,141)	$ 61,974

See accompanying notes to the consolidated and combined financial statements.

JBG SMITH PROPERTIES
Consolidated and Combined Statements of Equity
(In thousands)

	Common Shares		Additional Paid-In Capital	Accum-ulated Deficit	Accumulated Other Comprehensive Income	Former Parent Equity	Noncontrolling Interests in Consolidated Subsidiaries	Total Equity
	Shares	Amount						
BALANCE AT JANUARY 1, 2016						$ 2,058,976	$ 515	$ 2,059,491
Net income attributable to former parent						61,974	—	61,974
Deferred compensation shares and options, net						4,502	—	4,502
Distributions to former parent, net						(3,763)	(220)	(3,983)
BALANCE AS OF DECEMBER 31, 2016						2,121,689	295	2,121,984
Net loss attributable to common shareholders and noncontrolling interests	—	$ —	$ —	$ (42,729)	$ —	(29,024)	(3)	(71,756)
Deferred compensation shares and options, net	—	—	—	—	—	1,526	—	1,526
Contributions from former parent, net	—	—	—	—	—	333,020	—	333,020
Issuance of common limited partnership units at the Separation	—	—	—	—	—	(96,632)	—	(96,632)
Issuance of common shares at the Separation	94,736	947	2,329,632	—	—	(2,330,579)	—	—
Issuance of common shares in connection with the Combination	23,219	233	864,685	—	—	—	—	864,918
Noncontrolling interests acquired in connection with the Combination	—	—	—	—	—	—	3,586	3,586
Dividends declared on common shares ($0.45 per common share)	—	—	—	(53,080)	—	—	—	(53,080)
Distributions to noncontrolling interests	—	—	—	—	—	—	(171)	(171)
Contributions from noncontrolling interests	—	—	—	—	—	—	499	499
Redeemable noncontrolling interest redemption value adjustment and other comprehensive income allocation	—	—	(130,692)	—	(225)	—	—	(130,917)
Other comprehensive income	—	—	—	— —	1,837	—	—	1,837
BALANCE AS OF DECEMBER 31, 2017	117,955	1,180	3,063,625	(95,809)	1,612	—	4,206	2,974,814
Net income (loss) attributable to common shareholders and noncontrolling interests	—	—	—	39,924	—	—	(21)	39,903
Conversion of common limited partnership units to common shares	2,962	30	109,092	—	—	—	—	109,122
Common shares issued pursuant to Employee Share Purchase Plan	20	—	741	—	—	—	—	741
Dividends declared on common shares ($1.00 per common share)	—	—	—	(120,133)	—	—	—	(120,133)
Distributions to noncontrolling interests	—	—	—	—	—	—	(347)	(347)
Contributions from noncontrolling interests	—	—	—	—	—	—	250	250
Redeemable noncontrolling interests redemption value adjustment and other comprehensive income allocation	—	—	(16,172)	—	(1,384)	—	—	(17,556)
Acquisition of consolidated real estate venture	—	—	(1,666)	—	—	—	(3,884)	(5,550)
Other comprehensive income	—	—	—	—	6,472	—	—	6,472
Other	—	—	(364)	—	—	—	—	(364)
BALANCE AS OF DECEMBER 31, 2018	120,937	$ 1,210	$ 3,155,256	$ (176,018)	$ 6,700	$ —	$ 204	$ 2,987,352

See accompanying notes to the consolidated and combined financial statements.

JBG SMITH PROPERTIES
Consolidated and Combined Statements of Cash Flows
(In thousands)

	Year Ended December 31,		
	2018	2017	2016
OPERATING ACTIVITIES:			
Net income (loss)	$ 46,613	$ (79,084)	$ 61,974
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Share-based compensation expense	52,675	33,693	4,502
Depreciation and amortization, including amortization of debt issuance costs	215,659	164,580	135,072
Deferred rent	(14,056)	(10,388)	(15,551)
(Income) loss from unconsolidated real estate ventures, net	(39,409)	4,143	947
Amortization of above- and below-market lease intangibles, net	(220)	(862)	(1,353)
Amortization of lease incentives	3,406	4,023	3,592
Return on capital from unconsolidated real estate ventures	7,827	2,563	1,520
Reduction of gain (gain) on bargain purchase	7,606	(24,376)	—
Loss on extinguishment of debt	4,536	701	—
Gain on sale of real estate	(52,183)	—	—
Unrealized gain on interest rate swaps and caps	(926)	(1,348)	—
Bad debt expense	3,298	3,807	751
Other non-cash items	1,388	3,955	6,236
Deferred tax benefit	(718)	(10,408)	—
Changes in operating assets and liabilities:			
Tenant and other receivables	(5,582)	(2,098)	(3,693)
Other assets, net	(16,600)	(23,481)	(16,614)
Accounts payable and accrued expenses	(5,984)	16,160	7,667
Other liabilities, net	(19,137)	(7,397)	(25,509)
Net cash provided by operating activities	188,193	74,183	159,541
INVESTING ACTIVITIES:			
Development costs, construction in progress and real estate additions	(385,943)	(210,593)	(237,814)
Acquisition of real estate	(23,246)	—	—
Cash and restricted cash received in connection with the Combination, net	—	97,416	—
Proceeds from sale of real estate	413,077	—	—
Acquisition of interests in unconsolidated real estate ventures, net of cash acquired	(386)	(8,834)	—
Distributions of capital from unconsolidated real estate ventures	14,408	6,929	—
Distributions of capital from sales of unconsolidated real estate ventures	80,279	—	—
Investments in and advances to unconsolidated real estate ventures	(31,197)	(16,321)	(23,027)
Repayment of notes receivable	—	50,934	—
Other investments	(665)	(2,207)	(1,966)
Proceeds from repayment of receivable from former parent	—	75,000	4,000
Net cash provided by (used in) investing activities	66,327	(7,676)	(258,807)
FINANCING ACTIVITIES:			
Contributions from (distributions to) former parent, net	—	160,203	(3,763)
Acquisition of consolidated real estate venture	(5,550)	—	—
Repayment of borrowings from former parent	—	(115,630)	—
Proceeds from borrowings from former parent	—	4,000	79,500
Capital lease payments	(114)	(17,827)	—
Borrowings under mortgages payable	118,141	366,239	—
Borrowings under revolving credit facility	35,000	115,751	—
Borrowings under unsecured term loans	250,000	50,000	—
Repayments of mortgages payable	(312,894)	(272,905)	(24,364)
Repayments of revolving credit facility	(150,751)	—	—
Debt issuance costs	(3,114)	(19,287)	(70)

Proceeds from common stock issued pursuant to Employee Share Purchase Plan	597	—	—
Dividends paid to common shareholders	(107,372)	(26,540)	—
Distributions to redeemable noncontrolling interests	(17,398)	(4,556)	—
Contributions from noncontrolling interests	250	357	—
Distributions to noncontrolling interests	(340)	(18)	(220)
Net cash provided by (used in) financing activities	(193,545)	239,787	51,083
Net increase (decrease) in cash and cash equivalents and restricted cash	60,975	306,294	(48,183)
Cash and cash equivalents and restricted cash as of the beginning of the year	338,557	32,263	80,446
Cash and cash equivalents and restricted cash as of the end of the year	$ 399,532	$ 338,557	$ 32,263

JBG SMITH PROPERTIES
Consolidated and Combined Statements of Cash Flows
(In thousands)

	Year Ended December 31,		
	2018	2017	2016
CASH AND CASH EQUIVALENTS AND RESTRICTED CASH AS OF END OF THE PERIOD:			
Cash and cash equivalents	$ 260,553	$ 316,676	$ 29,000
Restricted cash	138,979	21,881	3,263
Cash and cash equivalents and restricted cash	$ 399,532	$ 338,557	$ 32,263
SUPPLEMENTAL DISCLOSURE OF CASH FLOW AND NON-CASH INFORMATION:			
Transfer of mortgage payable to former parent	$ —	$ 115,630	$ 115,022
Cash paid for interest (net of capitalized interest of $20,804, $12,727 and $4,076 in 2018, 2017 and 2016)	64,605	52,388	45,373
Accrued capital expenditures included in accounts payable and accrued expenses	53,073	12,445	8,851
Write-off of fully depreciated assets	52,272	55,998	100,076
Deferred interest on mortgages payable	3,216	3,714	—
Cash receipts from (payments for) income taxes	1,965	(3,396)	(1,165)
Deconsolidation of 1900 N Street	95,923	—	—
Accrued dividends to common shareholders	39,298	26,540	—
Accrued distributions to redeemable noncontrolling interests	5,896	4,557	—
Acquisition of consolidated real estate venture	—	5,420	—
Conversion of common limited partnership units to common shares	109,208	—	—
Non-cash transactions related to the Formation Transaction:			
Issuance of common limited partnership units at the Separation	—	96,632	—
Issuance of common shares at the Separation	—	2,330,579	—
Issuance of common shares in connection with the Combination	—	864,918	—
Issuance of common limited partnership units in connection with the Combination	—	359,967	—
Contribution from former parent in connection with the Separation	—	172,817	—

See accompanying notes to the consolidated and combined financial statements.

1. Organization and Basis of Presentation

Organization

JBG SMITH Properties ("JBG SMITH") was organized by Vornado Realty Trust ("Vornado" or "former parent") as a Maryland real estate investment trust ("REIT") on October 27, 2016 for the purpose of receiving, via the spin-off on July 17, 2017 (the "Separation"), substantially all of the assets and liabilities of Vornado's Washington, D.C. segment, which operated as Vornado / Charles E. Smith, (the "Vornado Included Assets"). On July 18, 2017, JBG SMITH acquired the management business and certain assets and liabilities (the "JBG Assets") of The JBG Companies ("JBG") (the "Combination"). The Separation and the Combination are collectively referred to as the "Formation Transaction." Unless the context otherwise requires, all references to "we," "us," and "our," refer to the Vornado Included Assets (our predecessor and accounting acquirer) for periods prior to the Separation and to JBG SMITH for periods after the Separation. References to "our share" refers to our ownership percentage of consolidated and unconsolidated assets in real estate ventures. Substantially all of our assets are held by, and our operations are conducted through, JBG SMITH Properties LP ("JBG SMITH LP"), our operating partnership.

Prior to the Separation from Vornado, JBG SMITH was a wholly owned subsidiary of Vornado and had no material assets or operations. On July 17, 2017, Vornado distributed 100% of the then outstanding common shares of JBG SMITH on a pro rata basis to the holders of its common shares. Prior to such distribution by Vornado, Vornado Realty L.P. ("VRLP"), Vornado's operating partnership, distributed common limited partnership units ("OP Units") in JBG SMITH LP on a pro rata basis to the holders of VRLP's common limited partnership units, consisting of Vornado and the other common limited partners of VRLP. Following such distribution by VRLP and prior to such distribution by Vornado, Vornado contributed to JBG SMITH all of the OP Units it received in exchange for common shares of JBG SMITH. Each Vornado common shareholder received one JBG SMITH common share for every two Vornado common shares held as of the close of business on July 7, 2017 (the "Record Date"). Vornado and each of the other limited partners of VRLP received one JBG SMITH LP OP Unit for every two common limited partnership units in VRLP held as of the close of business on the Record Date.

In connection with the Separation, JBG SMITH issued 94.7 million common shares and JBG SMITH LP issued 5.8 million OP Units to parties other than JBG SMITH. In connection with the Combination, JBG SMITH issued 23.2 million common shares and JBG SMITH LP issued 13.9 million OP Units to parties other than JBG SMITH. As of the completion of the Formation Transaction there were 118.0 million JBG SMITH common shares outstanding and 19.8 million JBG SMITH LP OP Units outstanding that were owned by parties other than JBG SMITH. As of December 31, 2018, we, as its sole general partner, controlled JBG SMITH LP and owned 87.8% of its OP Units.

Our operations are presented as if the transfer of the Vornado Included Assets had been consummated prior to all historical periods presented in the accompanying consolidated and combined financial statements at the carrying amounts of such assets and liabilities reflected in Vornado's books and records. The assets and liabilities of the JBG Assets and subsequent results of operations and cash flows are reflected in our consolidated and combined financial statements beginning on the date of the Combination.

We own and operate a portfolio of high-quality commercial and multifamily assets, many of which are amenitized with ancillary retail. Our portfolio reflects our longstanding strategy of owning and operating assets within Metro-served submarkets in the Washington, D.C. metropolitan area that have high barriers to entry and key urban amenities, including being within walking distance of a Metro station.

As of December 31, 2018, our Operating Portfolio consists of 62 operating assets comprising 46 commercial assets totaling approximately 12.9 million square feet (11.3 million square feet at our share) and 16 multifamily assets totaling 6,315 units (4,531 units at our share). Additionally, we have (i) nine assets under construction comprising five commercial assets totaling approximately 1.2 million square feet (927,000 square feet at our share) and four multifamily assets totaling 1,476 units (1,298 units at our share); and (ii) 41 future development assets totaling approximately 23.1 million square feet (19.6 million square feet at our share) of estimated potential development density.

Our revenues are derived primarily from leases with commercial and multifamily tenants, including fixed rents and reimbursements from tenants for certain expenses such as real estate taxes, property operating expenses, and repairs and maintenance. In addition, our third-party asset management and real estate services business provides fee-based real estate services to third parties and the legacy funds (the "JBG Legacy Funds") formerly organized by JBG.

As of December 31, 2018, five of our assets in the aggregate generated approximately 27% of our share of annualized rent. Only the U.S. federal government accounted for 10% or more of our rental revenue, which consists of property rentals and tenant reimbursements, as follows:

	Year Ended December 31,		
(Dollars in thousands)	2018	2017	2016
Rental revenue from the U.S. federal government	$ 94,822	$ 92,192	$ 103,864
Percentage of commercial segment rental revenue	22.0%	24.0%	29.1%
Percentage of total rental revenue	17.6%	19.4%	23.6%

Basis of Presentation

The accompanying consolidated and combined financial statements and notes are prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP"). All intercompany transactions and balances have been eliminated.

The accompanying consolidated and combined financial statements include the accounts of JBG SMITH and our wholly owned subsidiaries and those other entities, including JBG SMITH LP, in which we have a controlling financial interest, including where we have been determined to be the primary beneficiary of a variable interest entity ("VIE"). See Note 7 for additional information on our VIEs. The portions of the equity and net income of consolidated subsidiaries that are not attributable to JBG SMITH are presented separately as amounts attributable to noncontrolling interests in our consolidated and combined financial statements.

References to the financial statements refer to our consolidated and combined financial statements as of December 31, 2018 and 2017, and for each of the three years in the period ended December 31, 2018. References to the balance sheets refer to our consolidated balance sheets as of December 31, 2018 and 2017. References to the statements of operations refer to our consolidated and combined statements of operations for each of the three years in the period ended December 31, 2018. References to the statements of cash flows refer to our consolidated and combined statements of cash flows for each of the three years in the period ended December 31, 2018.

Formation Transaction

JBG SMITH and the Vornado Included Assets were under common control of Vornado for all periods prior to the Separation. The transfer of the Vornado Included Assets from Vornado to JBG SMITH was completed prior to the Separation, at net book values (historical carrying amounts) carved out from Vornado's books and records. For purposes of the formation of JBG SMITH, the Vornado Included Assets were designated as the predecessor and the accounting acquirer of the JBG Assets. Consequently, the financial statements of JBG SMITH, as set forth herein, represent a continuation of the financial information of the Vornado Included Assets as the predecessor and accounting acquirer such that the historical financial information included herein as of any date or for any periods on or prior to the completion of the Combination represents the pre-Combination financial information of the Vornado Included Assets. The financial statements reflect the common shares as of the date of the Separation as outstanding for all periods prior to July 17, 2017. The acquisition of the JBG Assets completed subsequently by JBG SMITH was accounted for as a business combination using the acquisition method whereby identifiable assets acquired and liabilities assumed are recorded at acquisition-date fair values and income and cash flows from the operations were consolidated into the financial statements of JBG SMITH commencing July 18, 2017. Consequently, the financial statements for the periods before and after the Formation Transaction are not directly comparable.

The accompanying financial statements as of December 31, 2018 and 2017 and for the year ended December 31, 2018 include our consolidated accounts. The results of operations for the year ended December 31, 2017 reflect the aggregate operations and changes in cash flows and equity on a combined basis for all periods prior to July 17, 2017 and on a consolidated basis for all periods subsequent to July 17, 2017. The results of operations for the year ended December 31, 2016 include the Vornado Included Assets. Therefore, our results of operations, cash flows and financial condition set forth in this report are not necessarily indicative of our future results of operations, cash flows or financial condition as an independent, publicly traded company.

The historical financial results for the Vornado Included Assets reflect charges for certain corporate costs allocated by the former parent, which were based on either actual costs incurred or a proportion of costs estimated to be applicable, to the Vornado Included Assets based on an analysis of key metrics, including total revenues. Such costs do not necessarily reflect what the actual costs would have been if JBG SMITH had been operating as a separate standalone public company. See Note 20 for additional information.

Reclassification:

To conform to the current year presentation, $7.8 million of expenses incurred in the operation and management of our properties that were previously included in "General and administrative expenses: corporate and other" for the year ended December 31, 2017 have been reclassified to "Property operating expenses". This reclassification relates to the portion of the year ended December 31, 2017 subsequent to the Formation Transaction on July 18, 2017, as general and administrative expenses incurred prior to the Formation Transaction reflect costs allocated by the former parent.

2. Summary of Significant Accounting Policies

Use of Estimates

The preparation of the financial statements in conformity with GAAP requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. The most significant of these estimates include: (i) the underlying cash flows used to establish the fair values recorded in connection with the Combination and used in assessing impairment and (ii) the determination of useful lives for tangible and intangible assets. Actual results could differ from these estimates.

Business Combinations

We account for business combinations, including the acquisition of real estate, using the acquisition method pursuant to which we recognize and measure the identifiable assets acquired, liabilities assumed, and any noncontrolling interests in the acquiree at their acquisition date fair values. Accordingly, we estimate the fair values of acquired tangible assets (consisting of real estate, cash and cash equivalents, tenant and other receivables, investments in unconsolidated real estate ventures and other assets, as applicable), identified intangible assets and liabilities (consisting of the value of in-place leases, above- and below-market leases, options to enter into ground leases and management contracts, as applicable), assumed debt and other liabilities, and noncontrolling interests, as applicable, based on our evaluation of information and estimates available at that date. Based on these estimates, we allocate the purchase price to the identified assets acquired and liabilities assumed. Any excess of the purchase price over the estimated fair value of the net assets acquired is recorded as goodwill. Any excess of the fair value of assets acquired over the purchase price is recorded as a gain on bargain purchase. If, up to one year from the acquisition date, information regarding the fair value of the net assets acquired and liabilities assumed is received and estimates are refined, appropriate adjustments are made on a prospective basis to the purchase price allocation, which may include adjustments to identified assets, assumed liabilities, and goodwill or the gain on bargain purchase, as applicable. The results of operations of acquisitions are prospectively included in our financial statements beginning with the date of the acquisition. Transaction costs related to business combinations are expensed as incurred and included in "Transaction and other costs" in our statements of operations.

The fair values of buildings are determined using the "as-if vacant" approach whereby we use discounted income or cash flow models with inputs and assumptions that we believe are consistent with current market conditions for similar assets. The most significant assumptions in determining the allocation of the purchase price to buildings are the exit capitalization rate, discount rate, estimated market rents and hypothetical expected lease-up periods. We assess fair value of land based on market comparisons and development projects using an income approach of cost plus a margin.

The fair values of identified intangible assets are determined based on the following:

- The value allocable to the above- or below-market component of an acquired in-place lease is determined based upon the present value (using a discount rate which reflects the risks associated with the acquired leases) of the difference between (i) the contractual amounts to be received pursuant to the lease over its remaining term and (ii) management’s estimate of the amounts that would be received using market rates over the remaining term of the lease. Amounts allocated to above- market leases are recorded as "Identified intangible assets" in "Other assets, net" in the balance sheets, and amounts allocated to below-market leases are recorded as "Lease intangible liabilities" in "Other liabilities, net" in the balance sheets. These intangibles are amortized to "Property rentals" in our statements of operations over the remaining terms of the respective leases.
- Factors considered in determining the value allocable to in-place leases during hypothetical lease-up periods related to space that is leased at the time of acquisition include (i) lost rent and operating cost recoveries during the hypothetical lease-up period and (ii) theoretical leasing commissions required to execute similar leases. These intangible assets are recorded as "Identified intangible assets" in "Other assets, net" in the balance sheets and are amortized to "Depreciation and amortization expenses" in our statements of operations over the remaining term of the existing lease.

- The fair value of the in-place property management, leasing, asset management, and development and construction management contracts is based on revenue and expense projections over the estimated life of each contract discounted using a market discount rate. These management contract intangibles are amortized to "Depreciation and amortization expenses" in our statements of operations over the weighted average life of the management contracts.

The fair value of investments in unconsolidated real estate ventures and related noncontrolling interests is based on the estimated fair values of the identified assets acquired and liabilities assumed of each venture, including future expected cash flows from promote interests.

The fair value of the mortgages payable assumed is determined using current market interest rates for comparable debt financings. The fair values of the interest rate swaps and caps are based on the estimated amounts we would receive or pay to terminate the contract at the acquisition date and are determined using interest rate pricing models and observable inputs. The carrying value of cash, restricted cash, working capital balances, leasehold improvements and equipment, and other assets acquired and liabilities assumed approximates fair value.

Real Estate

Real estate is carried at cost, net of accumulated depreciation and amortization. Maintenance and repairs are expensed as incurred and are included in "Property operating expenses" in our statements of operations. As real estate is undergoing redevelopment activities, all property operating expenses directly associated with and attributable to the redevelopment, including interest expense, are capitalized to the extent that we believe such costs are recoverable through the value of the property. The capitalization period ends when redevelopment activities are substantially complete. General and administrative costs are expensed as incurred. Depreciation requires an estimate of the useful life of each property and improvement as well as an allocation of the costs associated with a property to its various components. Depreciation is recognized on a straight-line basis over estimated useful lives, which range from three to 40 years. Tenant improvements are amortized on a straight-line basis over the lives of the related leases, which approximate the useful lives of the tenant improvements. When assets are sold or retired, their costs and related accumulated depreciation are removed from the accounts with the resulting gains or losses reflected in net income or loss for the period in “Depreciation and amortization expense.”

Construction in progress, including land, is carried at cost, and no depreciation is recorded. Real estate undergoing significant renovations and improvements is considered to be under development. All direct and indirect costs related to development activities are capitalized into "Construction in progress, including land" on our balance sheets, except for certain demolition costs, which are expensed as incurred. Direct development costs incurred include: pre-development expenditures directly related to a specific project, development and construction costs, interest, insurance and real estate taxes. Indirect development costs include: employee salaries and benefits, travel and other related costs that are directly associated with the development. Our method of calculating capitalized interest expense is based upon applying our weighted average borrowing rate to the actual accumulated expenditures if the property does not have property specific debt. If the property is encumbered by specific debt, we will capitalize both the interest incurred applicable to that debt and additional interest expense using our weighted average borrowing rate for any accumulated expenditures in excess of the principal balance of the debt encumbering the property. The capitalization of such expenses ceases when the real estate is ready for its intended use, but no later than one-year from substantial completion of major construction activity. If we determine that a construction project is no longer viable, all capitalized pre-development project costs are immediately expensed.

Our assets and related intangible assets are individually reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the assets may not be recoverable. An impairment exists when the carrying amount of an asset exceeds the sum of the undiscounted cash flows expected to result from the use and eventual disposition of the asset. Estimates of future cash flows are based on our current plans, intended holding periods and available market information at the time the analyses are prepared. An impairment loss is recognized if the carrying amount of the asset is not recoverable and is measured based on the excess of the property’s carrying amount over its estimated fair value. If our estimates of future cash flows, anticipated holding periods, or fair values change, based on market conditions or otherwise, our evaluation of impairment charges may be different and such differences could be material to our financial statements. Estimates of future cash flows are subjective and are based, in part, on assumptions regarding future occupancy, rental rates and capital requirements that could differ materially from actual results.

Cash and Cash Equivalents

Cash and cash equivalents consist of highly liquid investments with a purchase date life to maturity of three months or less and are carried at cost, which approximates fair value, due to their short-term maturities.

Restricted Cash

Restricted cash consists primarily of proceeds from property dispositions held in escrow, security deposits held on behalf of our tenants 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, including the receivable arising from deferred rent receivable, and maintain an allowance for doubtful accounts for the estimated losses resulting from the inability of tenants to make required payments under lease agreements. We exercise judgment in establishing these allowances and consider payment history and current credit status in developing these estimates.

Investments in and Advances to Real Estate Ventures

We analyze our real estate ventures to determine whether the entities should be consolidated. If it is determined that these investments do not require consolidation because the entities are not VIEs in accordance with the Consolidation Topic of the Financial Accounting Standards Board ("FASB"), Accounting Standards Codification ("ASC"), we are not considered the primary beneficiary of the entities determined to be VIEs, we do not have voting control, and/or the limited partners (or non-managing members) have substantive participatory rights, then the selection of the accounting method used to account for our investments in unconsolidated real estate ventures is generally determined by our voting interests and the degree of influence we have over the entity. Management uses its judgment when determining if we are the primary beneficiary of, or have a controlling financial interest in, an entity in which we have a variable interest. Factors considered in determining whether we have the power to direct the activities that most significantly impact the entity’s economic performance include risk and reward sharing, experience and financial condition of the other partners, voting rights, involvement in day-to-day capital and operating decisions and the extent of our involvement in the entity.

We use the equity method of accounting for investments in unconsolidated real estate ventures when we own 20% or more of the voting interests and have significant influence but do not have a controlling financial interest, or if we own less than 20% of the voting interests but have determined that we have significant influence. Under the equity method, we record our investments in and advances to these entities in our balance sheets, and our proportionate share of earnings or losses earned by the real estate venture is recognized in "Income (loss) from unconsolidated real estate ventures, net" in the accompanying statements of operations. We earn revenues from the management services we provide to unconsolidated entities. These fees are determined in accordance with the terms specific to each arrangement and may include property and asset management fees or transactional fees for leasing, acquisition, development and construction, financing, and legal services provided. We account for this revenue gross of our ownership interest in each respective real estate venture and recognize such revenue in "Third-party real estate services, including reimbursements" in our statements of operations. Our proportionate share of related expenses is recognized in "Income (loss) from unconsolidated real estate ventures, net" in our statements of operations. We may also earn incremental promote distributions if certain financial return benchmarks are achieved upon ultimate disposition of the underlying properties. Management fees are recognized when earned, and promote fees are recognized when certain earnings events have occurred, and the amount is determinable and collectible. Any promote fees are reflected in "Income (loss) from unconsolidated real estate ventures, net" in our statements of operations.

With regard to distributions from unconsolidated real estate ventures, we use the information that is available to us to determine the nature of the underlying activity that generated the distributions. Using the nature of distribution approach, cash flows generated from the operations of an unconsolidated real estate venture are classified as a return on investment (cash inflow from operating activities) and cash flows that from property sales, debt refinancing or sales of our investments are classified as a return of investment (cash inflow from investing activities).

On a periodic basis, we evaluate our investments in unconsolidated entities for impairment. We assess whether there are any indicators, including underlying property operating performance and general market conditions, that the value of our investments in unconsolidated real estate ventures may be impaired. An investment in a real estate venture is considered impaired if we determine that its fair value is less than the net carrying value of the investment in that real estate venture on an other-than-temporary basis. Cash flow projections for the investments consider property level factors such as expected future operating income, trends and prospects, as well as the effects of demand, competition and other factors. We consider various qualitative factors to determine if a decrease in the value of our investment is other-than-temporary. These factors include age of the venture, our intent and ability to retain our investment in the entity, financial condition and long-term prospects of the entity and relationships with our partners and banks. If we believe that the decline in the fair value of the investment is temporary, no impairment charge is recorded. If our analysis indicates that there is an other-than temporary impairment related to the investment in a particular real estate venture, the carrying value of the venture will be adjusted to an amount that reflects the estimated fair value of the investment.

Intangibles

Intangible assets consist of in-place leases, below-market ground rent obligations, above-market real estate leases and options to enter into ground leases that were recorded in connection with the acquisition of properties. Intangible assets also include management and leasing contracts acquired in the Combination. Intangible liabilities consist of above-market ground rent obligations and below-market real estate leases that are also recorded in connection with the acquisition of properties. Both intangible assets and liabilities are amortized and accreted using the straight-line method over their applicable remaining useful life. When a lease or contract is terminated early, any remaining unamortized or unaccreted balances are charged to earnings. The useful lives of intangible assets are evaluated each reporting period with any changes in estimated useful lives being accounted for over the revised remaining useful life.

Assets Held for Sale

Assets, primarily consisting of real estate, are classified as held for sale when all the necessary criteria are met. The criteria include (i) management, having the authority to approve action, commits to a plan to sell the property in its present condition, (ii) the sale of the property is at a price reasonable in relation to its current fair value and (iii) the sale is probable and expected to be completed within one year. Real estate held for sale is carried at the lower of carrying amounts or estimated fair value less disposal costs. Depreciation and amortization is not recognized on real estate classified as held for sale.

Deferred Costs

Deferred financing costs consist of loan issuance costs directly related to financing transactions that are deferred and amortized over the term of the related loan as a component of interest expense. Unamortized deferred financing costs related to our mortgages payable and unsecured term loan are presented as a direct deduction from the carrying amounts of the related debt instruments, while such costs related to our revolving credit facility are included in other assets.

Direct salaries, third-party fees and other costs incurred by us to originate a lease are capitalized in "Other assets, net" in the balance sheets and are amortized against the respective leases using the straight-line method over the term of the related leases.

Noncontrolling Interests

We identify our noncontrolling interests separately within the equity section on the balance sheets. Amounts of consolidated net income (loss) attributable to redeemable noncontrolling interests and to the noncontrolling interests in consolidated subsidiaries are presented separately in the statements of operations.

Redeemable Noncontrolling Interests - Redeemable noncontrolling interests consists of OP Units issued in conjunction with the Formation Transaction and our venture partner's interest in 965 Florida Avenue. The OP Units became redeemable for our common shares or cash beginning August 1, 2018, subject to certain limitations. Redeemable noncontrolling interests are generally redeemable at the option of the holder and are presented in the mezzanine section between total liabilities and shareholders' equity on the balance sheets. The carrying amount of redeemable noncontrolling interests is adjusted to its redemption value at the end of each reporting period, but no less than its initial carrying value, with such adjustments recognized in "Additional paid-in capital". See Note 12 for additional information.

Noncontrolling Interests - Noncontrolling interests represents the portion of equity that we do not own in entities we consolidate, including interests in consolidated real estate ventures.

Derivative Financial Instruments and Hedge Accounting

Derivative financial instruments are used at times to manage exposure to variable interest rate risk. Derivative financial instruments are recognized as either assets or liabilities and are measured at fair value. The accounting for changes in the fair value of a derivative depends on the intended use of the derivative and the resulting designation.

Derivative Financial Instruments Designated as Cash Flow Hedges - Certain derivative financial instruments, consisting of interest rate swap and cap agreements, are designated as cash flow hedges, and are carried at their estimated fair value on a recurring basis. We assess the effectiveness of our cash flow hedges both at inception and on an ongoing basis. If the hedges are deemed to be effective, the fair value is recorded in accumulated other comprehensive income and is subsequently reclassified into "Interest expense" in the period that the hedged forecasted transactions affect earnings. Our cash flow hedges become less than perfectly effective if the critical terms of the hedging instrument and the forecasted transactions do not perfectly match such as notional amounts, settlement dates, reset dates, calculation period and interest rates. In addition, we evaluate the default risk of the counterparty by monitoring the creditworthiness of the counterparty.

Derivative instruments and hedging activities require management to make judgments on the nature of its derivatives and their effectiveness as hedges. These judgments determine if the changes in fair value of the derivative instruments are reported in the statements of operations or as a component of comprehensive income and as a component of shareholders' equity on the balance sheets.

Derivative Financial Instruments Not Designated as Hedges - Certain derivative financial instruments, consisting of interest rate swap and cap agreements, are considered economic hedges, but not designated as accounting hedges, and are carried at their estimated fair value on a recurring basis. Realized and unrealized gains are recorded in "Interest expense" in the statements of operations in the period in which the change occurs.

Fair Value of Assets and Liabilities

ASC 820, Fair Value Measurement and Disclosures, 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.

Revenue Recognition

Property rentals income includes base rents that each tenant pays in accordance with the terms of its respective lease and is reported on a straight-line basis over the non-cancellable term of the lease, which includes the effects of periodic step-ups in rent and rent abatements under the leases. We commence rental revenue recognition when the tenant takes possession of the leased space or controls the physical use of the leased space and the leased space is substantially ready for its intended use. 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 property rentals revenue on a straight-line basis over the term of the lease. Differences between rental income recognized and amounts due under the respective lease agreements are recorded as an increase or decrease to "Deferred rent receivable, net" on our balance sheets. Property rentals also includes the amortization/accretion of acquired above- and below-market leases.

Tenant reimbursements provide for the recovery of all or a portion of the operating expenses and real estate taxes of the respective assets. Tenant reimbursements are accrued in the same periods as the related expenses are incurred.

Third-party real estate services revenue, including reimbursements, is determined in accordance with the terms specific to each arrangement and may include property and asset management fees or transactional fees for leasing, acquisition, development and construction, financing, and legal services provided. These fees are determined in accordance with the terms specific to each arrangement and are recognized as the related services are performed. Development and construction fees earned from providing services to our unconsolidated real estate ventures are recorded on a percentage of completion basis.

Third-Party Real Estate Services Expenses

Third-party real estate services expenses include the costs associated with the management services provided to our unconsolidated real estate ventures and other third parties. We allocate personnel and other overhead costs using the estimates of the time spent performing services for our third-party real estate services and other allocation methodologies.

Transaction and Other Costs

Transaction and other costs consist primarily of fees and expenses incurred in connection with the Formation Transaction, including amounts incurred for transition services provided by our former parent, integration costs and severance costs, as well as pursuit costs related to other completed, potential and pursued transactions. Transaction and other costs are expensed as incurred.

Income Taxes

We have elected to be taxed as a REIT under sections 856-860 of the Internal Revenue Code of 1986, as amended (the "Code"). Under those sections, a REIT which distributes at least 90% of its REIT taxable income as dividends 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. Prior to the Separation, Vornado operated as a REIT and distributed 100% of its REIT taxable income to its shareholders; accordingly, no provision for federal income taxes has been made in the accompanying financial statements for the periods prior to the Separation. We currently adhere and intend to continue to adhere to these requirements and to maintain our REIT status in future periods.

As a REIT, we can reduce our taxable income by distributing all or a portion of such taxable income to shareholders. Future distributions will be declared and paid at the discretion of the Board of Trustees and will depend upon cash generated by operating activities, our financial condition, capital requirements, annual dividend requirements under the REIT provisions of the Code and such other factors as our Board of Trustees deems relevant.

We also participate in the activities conducted by our subsidiary entities that have elected to be treated as taxable REIT subsidiaries ("TRS") under the Code. As such, we are subject to federal, state, and local taxes on the income from these activities. Income taxes attributable to our TRSs are accounted for under the asset and liability method. Under the asset and liability method, deferred income taxes arise from temporary differences between the tax basis of assets and liabilities and their reported amounts in the financial statements, which will result in taxable or deductible amounts in the future. We provide for a valuation allowance for deferred income tax assets if we believe all or some portion of the deferred tax asset may not be realized. Any increase or decrease in the valuation allowance that results from a change in circumstances that causes a change in the estimated ability to realize the related deferred tax asset is included in deferred tax benefit (expense).

ASC 740-10, Income Taxes, provides guidance for how uncertain tax positions should be recognized, measured, presented and disclosed in the financial statements. ASC 740-10 requires the evaluation of tax positions taken in the course of preparing our tax returns to determine whether the tax positions are "more-likely-than-not" of being sustained by the applicable tax authority. Tax benefits of positions not deemed to meet the more-likely-than-not threshold are recorded as a tax expense in the current year.

Earnings (Loss) Per Common Share

Basic earnings (loss) per common share is computed by dividing net income (loss) attributable to common shareholders by the weighted average common shares outstanding during the period. Unvested and vested share-based payment awards that entitle holders to receive non-forfeitable dividends, which include OP Units and long-term incentive partnership units ("LTIP Units"), are considered participating securities. Consequently, we are required to apply the two-class method of computing basic and diluted earnings that would otherwise have been available to common shareholders. Under the two-class method, earnings for the period are allocated between common shareholders and participating securities based on their respective rights to receive dividends. During periods of net loss, losses are allocated only to the extent the participating securities are required to absorb their share of such losses. Diluted earnings per common share reflects the potential dilution of the assumed exchange of various unit and share-based payment awards into common shares to the extent they are dilutive.

Share-Based Compensation

The fair value of OP Units, formation awards ("Formation Awards"), LTIP Units, LTIP Units with time-based vesting requirements ("Time-Based LTIP Units"), performance-based LTIP Units ("Performance-Based LTIP Units") and Employee Share Purchase Plan ("ESPP") common shares granted to our trustees, management and employees is determined, depending on the type of award, using the Monte Carlo or Black-Scholes methods, which is intended to estimate the fair value of the awards at the grant date using dividend yields, expected volatilities that are primarily based on available implied data and peer group companies' historical data and post-vesting restriction periods. The risk-free interest rate is based on the U.S. Treasury yield curve in effect at the time of grant. The shortcut method is used for determining the expected life used in the valuation method.

Compensation expense is based on the fair value of our common shares at the date of the grant and is recognized ratably over the vesting period using a graded vesting attribution model. We account for forfeitures as they occur. Distributions paid on unvested OP Units, LTIP Units, Time-Based LTIP Units and Performance-Based LTIP Units are charged to "Net income attributable to noncontrolling interests" in the statements of operations.

Recent Accounting Pronouncements

The following table provides a brief description of recent significant accounting pronouncements by the Financial Accounting Standards Board ("FASB") that have been or will be required to be adopted by us:

Standard	Description	Date of Adoption	Effect on the Financial Statements or Other Significant Matters
Standards adopted			
ASU 2014-09, Revenue from Contracts with Customers (Topic 606), as clarified and amended by ASU 2016-08, ASU 2016-10 and ASU 2016-12	This standard 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. It requires an entity to recognize revenue when it transfers 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.	January 2018	We utilized the modified retrospective method of adoption. The standard excludes from its scope the areas of accounting that most significantly affect our revenue recognition, including accounting for leases and financial instruments. Our evaluation determined there were no required changes to our recognition of revenue related to our third-party real estate services, tenant reimbursements, property and asset management fees, or transactional/management fees for leasing, development and construction. Our evaluation also determined there were no required changes to our recognition of promote fees and dispositions of real estate properties as we did not have any deferred gains due to continuing involvement at the time of adoption. Therefore, the adoption of this standard did not have a material impact on our financial statements. We adopted the practical expedient of this standard to only assess the recognition of revenue for open contracts at the date of adoption and there was no adjustment to the opening balance of our accumulated deficit at January 1, 2018. The comparative information has not been restated and continues to be reported under the accounting standards in effect for that period.
ASU 2018-09, Codification Improvements	These amendments provide clarifications and corrections to certain ASC subtopics including the following: 220-10 (Income Statement - Reporting Comprehensive Income - Overall), 470-50 (Debt - Modifications and Extinguishments), 480-10 (Distinguishing Liabilities from Equity - Overall), 718-740 (Compensation - Stock Compensation - Income Taxes), 805-740 (Business Combinations - Income Taxes), 815-10 (Derivatives and Hedging - Overall), and 820-10 (Fair Value Measurement - Overall).	December 2018	The adoption and implementation of this standard did not have a material impact on our financial statements.

Standard	Description	Date of Adoption	Effect on the Financial Statements or Other Significant Matters
Standard not yet adopted			
ASU 2016-02, Leases (Topic 842), as clarified and amended by ASU 2018-01, ASU 2018-10, ASU 2018-11 and ASU 2018-20	This standard establishes 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 of 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 ASU also clarifies that an assessment of whether a land easement meets the definition of a lease under the new lease standard is required. The provisions of this standard are effective for fiscal years beginning after December 15, 2018 and should be applied through a modified retrospective transition, which includes optional practical expedients related to leases that commenced before the effective date and allows the new requirements to be applied on the date of adoption rather than the beginning of the earliest comparative period presented.	January 2019	We completed our evaluation of the implementation of this standard. ASU 2016-02 will more significantly impact the accounting for leases in which we are the lessee. We have leases for which we anticipate recording operating right-of-use assets totaling $31.0 million to $41.0 million and operating lease liabilities totaling $33.0 million to $43.0 million, which are equal to the present value of the remaining minimum lease payments 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 will no longer be able to capitalize internal leasing costs and instead will be required to expense these costs as incurred. Capitalized internal leasing costs were $6.5 million, $2.9 million and $2.5 million for each of the three years in the period ended December 31, 2018. We will apply the modified retrospective approach of adoption and will elect the transition practical expedients, including the Relief Package for existing leases, the Easement practical expedient for existing easements, but not the Hindsight expedient.

3. The Combination

In the Combination on July 18, 2017, we acquired the JBG Assets in exchange for approximately 37.2 million common shares and OP Units. The Combination has been accounted for at fair value under the acquisition method of accounting. The following allocation of the purchase price is based on the fair value of the assets acquired and liabilities assumed (in thousands):

Fair value of purchase consideration:		
Common shares and OP Units	$	1,224,885
Cash		20,573
Total consideration paid	$	1,245,458
Fair value of assets acquired and liabilities assumed:		
Land and improvements	$	338,072
Building and improvements		609,156
Construction in progress, including land		699,800
Leasehold improvements and equipment		7,890
Real estate		1,654,918
Cash		104,529
Restricted cash		13,460
Investments in and advances to unconsolidated real estate ventures		241,142
Identified intangible assets		138,371
Notes receivable [(1)]		50,934
Identified intangible liabilities		(8,687)
Mortgages payable assumed [(2)]		(768,523)
Capital lease obligations assumed [(3)]		(33,543)
Lease assumption liabilities [(4)]		(48,127)
Deferred tax liability [(5)]		(18,610)
Other liabilities acquired, net		(60,048)
Noncontrolling interests in consolidated subsidiaries		(3,588)
Net assets acquired		1,262,228
Gain on bargain purchase [(6)]		16,770
Total consideration paid	$	1,245,458

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(1) During the year ended December 31, 2017, we received proceeds of $50.9 million from the repayment of the notes receivable acquired in the Combination.

(2) Subject to various interest rate swap and cap agreements assumed in the Combination that are considered economic hedges, but not designated as accounting hedges.

(3) In the Combination, two ground leases were assumed that were determined to be capital leases. On July 25, 2017, we purchased a land parcel located in Reston, Virginia associated with one of the ground leases for $19.5 million.

(4) Includes a $14.0 million payment to a tenant, which was paid in 2018, and a $34.1 million lease liability we assumed in relocating a tenant to one of our office buildings. The $34.1 million assumed lease liability is based on the contractual payments we assumed under the tenant's previous lease, which are partially offset by estimated sub-tenant income we anticipate receiving as we actively pursue a sub-tenant.

(5) Related to the management and leasing contracts acquired in the Combination.

(6) The Combination resulted in a gain on bargain purchase of $24.4 million for the year ended December 31, 2017 because the fair value of the identifiable net assets acquired exceeded the purchase consideration. As a result of finalizing our fair value estimates used in the purchase price allocation related to the Combination, during the year ended December 31, 2018, we adjusted the fair value of certain assets acquired and liabilities assumed consisting of a decrease of $468,000 to investments in and advances to unconsolidated real estate ventures, an increase of $4.7 million to lease assumption liabilities and an increase of $2.4 million to other liabilities acquired, resulting in a reduction of the gain on bargain purchase of $7.6 million for the year ended December 31, 2018. The purchase consideration was based on the fair value of the common shares and OP Units issued in the Combination. We have concluded that all acquired assets and liabilities were recognized and that the valuation procedures and resulting estimates of fair values were appropriate.

The fair value of the common shares and OP Units purchase consideration was determined as follows (in thousands, except exchange ratio and price per share/unit):

Outstanding common shares and common limited partnership units prior to the Combination		100,571
Exchange ratio [(1)]		2.71
Common shares and OP Units issued in consideration		37,164
Price per share/unit [(2)]	$	37.10
Fair value of common shares and OP Units issued in consideration	$	1,378,780
Fair value adjustment to OP Units due to transfer restrictions		(43,304)
Portion of consideration attributable to performance of future services [(3)]		(110,591)
Fair value of common shares and OP Units purchase consideration	$	1,224,885

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(1) Represents the implied exchange ratio of one common share and OP Unit of JBG SMITH for 2.71 common shares and common limited partnership units prior to the Combination.

(2) Represents the volume weighted average share price on July 18, 2017.

(3) OP Unit consideration paid to certain of the owners of the JBG Assets which have a fair value of $110.6 million is subject to post-combination employment with vesting over periods of either 12 or 60 months and amortization is recognized as compensation expense over the period of employment in "General and administrative expense: Share-based compensation related to Formation Transaction and special equity awards" in the statements of operations.

The JBG Assets acquired on July 18, 2017 comprise: (i) 30 operating assets comprising 21 commercial assets totaling approximately 4.1 million square feet (2.4 million square feet at our share) and nine multifamily assets with 2,883 units (1,099 units at our share); (ii) 11 commercial and multifamily assets under construction totaling over 2.5 million square feet (2.2 million square feet at our share); (iii) two near-term development commercial and multifamily assets totaling approximately 401,000 square feet (242,000 square feet at our share); (iv) 26 future development assets totaling approximately 11.7 million square feet (8.5 million square feet at our share) of estimated potential development density; and (v) JBG/Operating Partners, L.P., a real estate services company providing investment, development, asset management, property management, leasing, construction management and other services. Before the Combination, JBG/Operating Partners, L.P. was owned by 20 unrelated individuals, 19 of whom became our employees and three of whom serve on our Board of Trustees.

The fair values of tangible and identified intangible assets and liabilities, which have definite lives, are as follows:

		Total Fair Value	Weighted Average Amortization Period	Useful Life [(1)]
		(In thousands)	(In years)	
Tangible assets:				
Building and improvements	$	543,584		3 - 40 years
Tenant improvements		65,572		Shorter of useful life or remaining life of the respective lease
Total building and improvements	$	609,156		
Leasehold improvements	$	4,422		Shorter of useful life or remaining life of the respective lease
Equipment		3,468		5 years
Total leasehold improvements and equipment	$	7,890		
Identified intangible assets:				
In-place leases	$	60,317	6.4	Remaining life of the respective lease
Above-market real estate leases		11,732	6.3	Remaining life of the respective lease
Below-market ground leases		332	88.5	Remaining life of the respective lease
Option to enter into ground lease		17,090	N/A	Remaining life of contract
Management and leasing contracts [(2)]		48,900	7.5	Estimated remaining life of contracts, ranging between 3 - 9 years
Total identified intangible assets	$	138,371		
Identified intangible liabilities:				
Below-market real estate leases	$	8,687	10.3	Remaining life of the respective lease

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(1) In determining these useful lives, we considered the length of time the asset had been in existence, the maintenance history, as well as anticipated future maintenance, and any contractual stipulations that might limit the useful life.

(2) Includes in-place property management, leasing, asset management and development management contracts.

Costs related to the Formation Transaction (such as advisory, severance, legal, accounting, valuation and other professional fees) are included in "Transaction and other costs" in our statements of operations. Transaction and other costs of $27.7 million for the year ended December 31, 2018 comprised fees and expenses incurred in connection with the Formation Transaction (including transition services provided by our former parent, integration costs and severance costs) of $15.9 million, costs related to other completed, potential and pursued transactions of $9.0 million and costs related to the successful pursuit of an Amazon.com, Inc. ("Amazon") headquarters at our properties in National Landing (“Amazon HQ2”) of $2.8 million. Transaction and other costs of $127.7 million for the year ended December 31, 2017 consist primarily of fees and expenses incurred in connection with the Formation Transaction, including severance and transaction bonus expense of $40.8 million, investment banking fees of $33.6 million, legal fees of $13.9 million and accounting fees of $10.8 million.

The following pro forma information for the year ended December 31, 2017 is presented as if the Formation Transaction had occurred on January 1, 2016. This pro forma information is based upon historical financial statements, adjusted for certain factually supported items directly related to the Formation Transaction. This pro forma information does not purport to represent what the actual results of our operations would have been, nor does it purport to predict the results of operations of future periods. The pro forma information was adjusted to exclude transaction and other costs of $127.7 million and the gain on bargain purchase of $24.4 million and their related income tax benefits for the year ended December 31, 2017.

	Year Ended December 31, 2017
	(In thousands)
Unaudited pro forma information:	
Total revenue	$ 637,672
Net loss attributable to common shareholders	(19,343)

The total revenue and net loss of the JBG Assets for the year ended December 31, 2017 included in our statements of operations from the acquisition date was $71.3 million and $23.1 million.

4. Acquisitions, Dispositions and Assets Held for Sale

Acquisitions

In December 2018, we purchased a 4.25-acre land parcel, Potomac Yard Land Bay H located in Alexandria, Virginia, for $23.0 million through a reverse Section 1031 of the Code like-kind exchange agreement with a third party intermediary. See Note 7 for further discussion. In conjunction with the acquisition, we recorded a liability of $15.1 million, based on the fair value estimate to remediate pre-existing environmental matters, which was capitalized as part of the cost of the land.

In December 2018, we acquired the remaining 3.1% interest in West Half, a real estate venture, for $5.0 million, which increased our interest to 100.0%. Prior to the acquisition, West Half was a consolidated VIE.

Dispositions

The following is a summary of disposition activity for the year ended December 31, 2018:

Date Disposed	Assets	Segment	Location	Total Square Feet	Gross Sales Price	Cash Proceeds from Sale (1)	Gain on Sale of Real Estate
					(In thousands)		
February 13, 2018	Summit - MWAA	Commercial	Reston, Virginia	—	$ 2,154	$ 2,154	$ 455
April 3, 2018	Summit I and II / Summit Land (2)	Commercial	Reston, Virginia	284,118	95,000	35,240	6,189
May 1, 2018	Bowen Building (3)	Commercial	Washington, D.C.	231,402	140,000	136,488	27,207
September 21, 2018	Executive Tower (4)	Commercial	Washington, D.C.	129,831	121,445	113,267	12,378
October 23, 2018	1233 20th Street (5)	Commercial	Washington, D.C.	149,684	65,000	21,229	4,354
October 25, 2018	Falkland Chase - North (out-of-service portion)	Multifamily	Silver Spring, Maryland	13,284	3,819	3,819	1,600
Total				808,319	$ 427,418	$ 312,197	$ 52,183

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(1) Net of related mortgage loan payments.

(2) Total square feet included 700,000 square feet of estimated potential development density. In connection with the sale, we repaid the related $59.0 million mortgage loan.

(3) In connection with the sale, we repaid $115.0 million of the then outstanding balance on our revolving credit facility.

(4) Proceeds from the sale were held in escrow and classified as "Restricted cash" on our balance sheet as of December 31, 2018.

(5) In connection with the sale, we repaid the related $41.9 million mortgage loan.

In August 2018, JP Morgan, our partner in the real estate venture that owned the Investment Building, a 401,000 square foot office building located in Washington, D.C., acquired our 5.0% interest in the venture. In December 2018, our unconsolidated real estate venture with Canadian Pension Plan Investment Board ("CPPIB") sold The Warner, a 583,000 square foot office building located in Washington, D.C. See Note 6 for additional information.

Assets Held for Sale

As of December 31, 2018 and 2017, we had certain real estate properties that were classified as held for sale. The amounts included in "Assets held for sale" in our balance sheets primarily represent real estate investment balances. The following is a summary of assets held for sale:

Assets	Segment	Location	Total Square Feet	Assets Held for Sale	Liabilities Related to Assets Held for Sale
				(In thousands)	
December 31, 2018					
Commerce Executive (1)	Commercial	Reston, Virginia	388,562	$ 78,981	$ 3,717
December 31, 2017					
Summit - MWAA (2)	Commercial	Reston, Virginia	—	$ 1,699	$ —
Potomac Yard Land Bay G (3)	Other	Alexandria, Virginia	—	6,594	—
				$ 8,293	$ —

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(1) In July 2018, the buyer's deposit related to the contract to sell Commerce Executive became non-refundable. In February 2019, we sold Commerce Executive for $115.0 million. The sale also included approximately 894,000 square feet of estimated potential development density. The sale was part of a reverse 1031 like-kind exchange. See Note 7 for additional information.

(2) As previously disclosed, in February 2018, Summit - MWAA was sold for $2.2 million.

(3) During the second quarter of 2018, the buyer forfeited their deposit and the property was removed from assets held for sale.

5. Tenant and Other Receivables, Net

The following is a summary of tenant and other receivables:

	December 31,	
	2018	2017
	(In thousands)	
Tenants	$ 31,362	$ 30,672
Third-party real estate services	12,443	8,954
Other	9,463	12,992
Allowance for doubtful accounts	(6,700)	(5,884)
Total tenant and other receivables, net	$ 46,568	$ 46,734

We incurred bad debt expense of approximately $3.3 million, $3.8 million and $750,600 during each of the three years in the period ended December 31, 2018, which is included in "Property operating expenses" in the statements of operations.

6. Investments in and Advances to Unconsolidated Real Estate Ventures

The following is a summary of the composition of our investments in and advances to unconsolidated real estate ventures:

Real Estate Venture Partners	Ownership Interest [(1)]	December 31, 2018	December 31, 2017
		(In thousands)	
CPPIB	55.0% - 68.5%	$ 97,521	$ 36,317
Landmark	1.8% - 49.0%	84,320	95,368
CBREI Venture	5.0% - 64.0%	73,776	79,062
Berkshire Group	50.0%	43,937	27,761
Brandywine	30.0%	13,777	13,741
CIM Group ("CIM") and Pacific Life Insurance Company ("PacLife")	16.7%	9,339	—
JP Morgan	—%	—	9,296
Other		128	246
Total investments in unconsolidated real estate ventures		322,798	261,791
Advances to unconsolidated real estate ventures		80	20
Total investments in and advances to unconsolidated real estate ventures		$ 322,878	$ 261,811

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(1) Ownership interests as of December 31, 2018. We have multiple investments with certain venture partners with varying ownership interests.

In January 2018, we invested $10.1 million for a 16.67% interest in a real estate venture with CIM and PacLife, which purchased the 1,152-key Wardman Park hotel, located adjacent to the Woodley Park Metro Station in northwest Washington, D.C. Prior to the acquisition by this venture, the JBG Legacy Funds owned a 47.64% interest in the Wardman Park hotel. The JBG Legacy Funds did not receive any proceeds from the sale, as the net proceeds were used to satisfy the prior mortgage debt. A third-party asset manager oversees the hotel operations on behalf of the venture and our involvement will increase only to the extent the land development opportunity becomes the primary business plan for the asset.

In February 2018, we entered into a real estate venture with CPPIB to develop and own 1900 N Street, an under construction commercial asset in Washington, D.C. We contributed 1900 N Street, valued at $95.9 million, to the real estate venture, and CPPIB has committed to contribute approximately $101.3 million to the venture for a 45.0% interest, which will reduce our ownership interest from 100.0% at the real estate venture's formation to 55.0% as contributions are funded.

In June 2018, the real estate venture with CPPIB that owns 1101 17th Street, a 216,000 square foot office building located in Washington, D.C., in which we have a 55.0% ownership interest, refinanced a mortgage loan payable that was collateralized by the property. The terms of the new mortgage loan eliminated the principal guaranty provisions that had been included in the prior loan. At the time of refinancing, distributions and our share of the cumulative earnings of the venture exceeded our investment in the venture by $5.4 million, which resulted in a negative investment balance. After the elimination of the principal guaranty provisions in the prior mortgage loan, we no longer guarantee the obligations of the venture or are obligated to provide further financial support to the venture. Accordingly, we recognized the $5.4 million negative investment balance as income within "Income from unconsolidated real estate ventures, net" in our statements of operations for the year ended December 31, 2018, which results in a zero investment balance in the real estate venture that owns 1101 17th Street in our balance sheet as of December 31, 2018. We have also suspended the equity method accounting for this real estate venture. We will recognize as income any future distributions from the venture until our share of unrecorded earnings and contributions exceed the cumulative excess distributions previously recognized in income. During the year ended December 31, 2018, we recognized income of $8.3 million related to distributions from the real estate venture that owns 1101 17th Street, which is included in "Income from unconsolidated real estate ventures, net" in our statement of operations.

In August 2018, JP Morgan, our partner in the real estate venture that owned the Investment Building, a 401,000 square foot office building located in Washington, D.C., acquired our 5.0% interest in the venture for $24.6 million, resulting in a gain of $15.5 million, which is included in "Income from unconsolidated real estate ventures, net" in our statement of operations for the year ended December 31, 2018.

In December 2018, our unconsolidated real estate venture with CPPIB sold The Warner, a 583,000 square foot office building located in Washington, D.C., for $376.5 million. In connection with the sale, the unconsolidated real estate venture recognized a gain on sale of $32.5 million, of which our proportionate share was $20.6 million, which is included in "Income from unconsolidated real estate ventures, net" in our statement of operations for the year ended December 31, 2018. Additionally, in connection with the sale, our unconsolidated real estate venture repaid the related mortgage payable of $270.5 million.

The following is a summary of the debt of our unconsolidated real estate ventures:

	Weighted Average Effective Interest Rate (1)	December 31, 2018	December 31, 2017
		(In thousands)	
Variable rate (2)	5.53%	$ 461,704	$ 534,500
Fixed rate (3)	4.02%	665,662	657,701
Unconsolidated real estate ventures - mortgages payable		1,127,366	1,192,201
Unamortized deferred financing costs		(1,998)	(2,000)
Unconsolidated real estate ventures - mortgages payable, net (4)		$ 1,125,368	$ 1,190,201

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(1) Weighted average effective interest rate as of December 31, 2018.

(2) Includes variable rate mortgages payable with interest rate cap agreements.

(3) Includes variable rate mortgages payable with interest rates fixed by interest rate swap agreements.

(4) See Note 19 for additional information on guarantees of the debt of certain of our unconsolidated real estate ventures.

The following is a summary of the financial information for our unconsolidated real estate ventures:

	December 31,	
	2018	2017
Combined balance sheet information:	(In thousands)	
Real estate, net	$ 2,050,985	$ 2,106,670
Other assets, net	169,264	264,731
Total assets	$ 2,220,249	$ 2,371,401
Borrowings, net	$ 1,125,368	$ 1,190,201
Other liabilities, net	94,845	76,416
Total liabilities	1,220,213	1,266,617
Total equity	1,000,036	1,104,784
Total liabilities and equity	$ 2,220,249	$ 2,371,401

	Year Ended December 31,		
	2018	2017	2016
Combined income statement information:		(In thousands)	
Total revenue	$ 300,032	$ 135,256	$ 68,118
Operating income [1]	56,262	14,741	19,283
Net income (loss)	(1,155)	(7,593)	5,234

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(1) Includes gain on sale of The Warner of $32.5 million recognized by our unconsolidated real estate venture with CPPIB during the year ended December 31, 2018.

7. Variable Interest Entities

We hold various interests in entities deemed to be VIEs, which we evaluate at acquisition, formation, after a change in the ownership agreement or a change in the real estate venture's economics to determine if the VIEs should be consolidated in our financial statements or should no longer be considered a VIE. Certain criteria we assess in determining whether the VIEs should be consolidated relate to our at-risk equity, our control over significant business activities, our voting rights, the noncontrolling interest kick-out rights and whether we are the primary beneficiary of the VIE.

Unconsolidated VIEs

As of December 31, 2018 and 2017, we have interests in entities deemed to be VIEs that are in the development stage and do not hold sufficient equity at risk or conduct substantially all their operations on behalf of an investor with disproportionately few voting rights. Although we are engaged to act as the managing partner in charge of day-to-day operations of these investees, we are not the primary beneficiary of these VIEs as we do not hold unilateral power over activities that, when taken together, most significantly impact the respective VIE’s performance. We account for our investment in these entities under the equity method. As of December 31, 2018 and 2017, the net carrying amounts of our investment in these entities were $232.8 million and $163.5 million, which are included in "Investments in and advances to unconsolidated real estate ventures" in our balance sheets. Our equity in the income of unconsolidated VIEs is included in "Income from unconsolidated real estate ventures, net" in our statements of operations. Our maximum exposure to loss in these entities is limited to our investments, construction commitments and debt guarantees. See Note 19 for additional information.

Consolidated VIEs

JBG SMITH LP is our most significant consolidated VIE. We hold the majority membership interest in the operating partnership, act as the general partner and exercise full responsibility, discretion and control over its day-to-day management.

The noncontrolling interests of the operating partnership do not have substantive liquidation rights, substantive kick-out rights without cause, or substantive participating rights that could be exercised by a simple majority of noncontrolling interest members (including by such a member unilaterally). Because the noncontrolling interest holders do not have these rights, the operating partnership is a VIE. As general partner, we have the power to direct the core activities of the operating partnership that most significantly affect its performance, and through our majority interest in the operating partnership have both the right to receive benefits from and the obligation to absorb losses of the operating partnership. Accordingly, we are the primary beneficiary of the operating partnership and consolidate the operating partnership in our financial statements. As we conduct our business and hold our assets and liabilities through the operating partnership, the total assets and liabilities of the operating partnership comprise substantially all of our consolidated assets and liabilities.

In conjunction with the acquisition of Potomac Yard Land Bay H located in Alexandria, Virginia in December 2018, we entered into a reverse Code Section 1031 like-kind exchange agreement with a third party intermediary, which, for a maximum of 180 days, allowed us to defer for tax purposes, gains on the sale of other properties identified and sold within this period. Until the earlier of the termination of the exchange agreement or 180 days after the acquisition date, the third party intermediary was the legal owner of the entity that owned this property. The agreement that governed the operations of this entity provided us with the power to direct the activities that most significantly impacted the entity's economic performance. This entity is deemed a VIE as of December 31, 2018 primarily because it may not have sufficient equity at risk to finance its activities without additional subordinated financial support from other parties. We determined that we are the primary beneficiary of the VIE as a result of having the power to direct the activities that most significantly impact its economic performance and the obligation to absorb losses, as well as the right to receive benefits, that could be potentially significant to the VIE. Accordingly, we consolidated the property and its operations as of the acquisition date. Legal ownership of this entity was transferred to us by the qualified intermediary after of the sale of Commerce Executive in February 2019.

We also consolidate certain other VIEs in which we control the most significant business activities. These entities are VIEs because they are in the development stage and do not hold sufficient equity at risk. We are the primary beneficiaries of these VIEs because the noncontrolling interest holders do not have substantive kick-out or participating rights and we control all of the significant business activities.

As of December 31, 2018, we consolidated two VIEs with total assets and liabilities, excluding the operating partnership, of $94.8 million and $43.4 million. As of December 31, 2017, we consolidated two VIEs with total assets and liabilities, excluding the operating partnership, of $111.0 million and $8.8 million.

In December 2018, we acquired the remaining interest in West Half. Prior to the acquisition, West Half was a consolidated VIE. See Note 4 for additional information.

8. Other Assets, Net

The following is a summary of other assets, net:

	December 31, 2018	December 31, 2017
	(In thousands)	
Deferred leasing costs	$ 202,066	$ 171,153
Accumulated amortization	(72,465)	(67,180)
Deferred leasing costs, net	129,601	103,973
Identified intangible assets, net	89,859	126,467
Prepaid expenses	6,482	9,038
Deferred financing costs on credit facility, net	4,806	6,654
Deposits	3,633	6,317
Derivative agreements, at fair value	10,383	2,141
Other	20,230	9,333
Total other assets, net	$ 264,994	$ 263,923

The following is a summary of the composition of identified intangible assets, net:

	December 31, 2018	December 31, 2017
Identified intangible assets:	(in thousands)	
In-place leases	$ 38,216	$ 72,086
Above-market real estate leases	9,414	12,066
Below-market ground leases	2,215	2,547
Option to enter into ground lease	17,090	17,090
Management and leasing contracts	48,900	48,900
Other	166	206
Total identified intangibles assets	116,001	152,895
Accumulated amortization:		
In-place leases	11,602	20,015
Above-market real estate leases	2,405	1,600
Below-market ground leases	1,448	1,365
Option to enter into ground lease	251	78
Management and leasing contracts	10,297	3,209
Other	139	161
Total accumulated amortization	26,142	26,428
Identified intangible assets, net	$ 89,859	$ 126,467

The following is a summary of amortization expense included in the statements of operations related to identified intangible assets:

	Year Ended December 31,		
	2018	2017	2016
In-place lease amortization [1]	$ 11,807	$ 10,216	$ 485
Above-market real estate lease amortization [2]	2,390	1,428	78
Below-market ground lease amortization [3]	85	87	85
Option to enter into ground lease amortization [3]	173	—	—
Management and leasing contract amortization [1]	7,088	3,209	—
Other amortization [1]	18	14	92
Total identified intangible asset amortization	$ 21,561	$ 14,954	$ 740

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(1) Amounts are included in "Depreciation and amortization expenses" in our statements of operations.

(2) Amounts are included in "Property rentals revenue" in our statements of operations.

(3) Amounts are included in "Property operating expenses" in our statements of operations.

As of December 31, 2018, the estimated amortization of identified intangible assets is as follows for the next five years and thereafter:

Year ending December 31,	Amount
	(in thousands)
2019	$ 16,184
2020	13,720
2021	10,591
2022	9,506
2023	8,924
Thereafter	30,934
Total	$ 89,859

9. Debt

Mortgages Payable

The following is a summary of mortgages payable:

	Weighted Average Effective Interest Rate [1]	December 31,	
		2018	2017
		(In thousands)	
Variable rate [2]	4.30%	$ 308,918	$ 498,253
Fixed rate [3]	4.09%	1,535,734	1,537,706
Mortgages payable		1,844,652	2,035,959
Unamortized deferred financing costs and premium/ discount, net		(6,271)	(10,267)
Mortgages payable, net		$ 1,838,381	$ 2,025,692

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(1) Weighted average effective interest rate as of December 31, 2018.

(2) Includes variable rate mortgages payable with interest rate cap agreements.

(3) Includes variable rate mortgages payable with interest rates fixed by interest rate swap agreements.

As of December 31, 2018, the net carrying value of real estate collateralizing our mortgages payable, excluding assets held for sale, totaled $2.3 billion. Our mortgage loans contain covenants that limit our ability to incur additional indebtedness on these properties and in certain circumstances, require lender approval of tenant leases and/or yield maintenance upon repayment prior to maturity. Certain of our mortgage loans are recourse to us. As of December 31, 2018, we were not in default under any mortgage loan.

During the year ended December 31, 2018, aggregate borrowings totaled $118.1 million, of which $47.5 million relates to the principal balance on a new mortgage loan collateralized by 1730 M Street and the remainder related to construction draws under mortgages payable. We repaid mortgages payable with an aggregate principal balance of $298.1 million and recognized losses on the extinguishment of debt in conjunction with these repayments of $5.2 million for the year ended December 31, 2018.

In the Combination, we assumed mortgages payable with an aggregate principal balance of $768.5 million. In addition, we entered into mortgages payable with an aggregate principal balance of $79.3 million during the year ended December 31, 2017 with an ability to draw an additional $143.7 million for construction. During the year ended December 31, 2017, we repaid mortgages payable with an aggregate principal balance of $250.0 million, which includes mortgages payable totaling $64.8 million assumed in the Combination. We recognized losses on the extinguishment of debt in conjunction with these repayments of $701,000 for the year ended December 31, 2017.

As of December 31, 2018 and 2017, we had various interest rate swap and cap agreements with an aggregate notional value of $1.3 billion and $1.4 billion on certain of our mortgages payable, which mature on various dates concurrent with the maturity of the related mortgages payable. During the year ended December 31, 2018, we entered into various interest rate swap and cap agreements on certain of our mortgages payable with an aggregate notional value of $381.3 million. See Note 17 for additional information.

Credit Facility

In July 2017, we entered into a $1.4 billion credit facility, consisting of a $1.0 billion revolving credit facility maturing in July 2021, with two six-month extension options, a delayed draw $200.0 million unsecured term loan ("Tranche A-1 Term Loan") maturing in January 2023, and a delayed draw $200.0 million unsecured term loan ("Tranche A-2 Term Loan") maturing in July 2024. The interest rate for the credit facility varies based on a ratio of our total outstanding indebtedness to a valuation of certain real property and assets and ranges (a) in the case of the revolving credit facility, from LIBOR plus 1.10% to LIBOR plus 1.50%, (b) in the case of the Tranche A-1 Term Loan, from LIBOR plus 1.20% to LIBOR plus 1.70% and (c) in the case of the Tranche A-2 Term Loan, from LIBOR plus 1.55% to LIBOR plus 2.35%. There are various LIBOR options in the credit facility, and we elected the one-month LIBOR option as of December 31, 2018. As of December 31, 2018, we were not in default under our credit facility.

In July 2017, in connection with the Combination, we drew $115.8 million on the revolving credit facility and $50.0 million under the Tranche A-1 Term Loan. In connection with the execution of the credit facility, we incurred $11.2 million in debt issuance costs during the year ended December 31, 2017. In October 2017, we entered into an interest rate swap with a notional value of $50.0 million effectively to convert the variable interest rate applicable to our Tranche A-1 Term Loan to a fixed interest rate.

In January 2018, we drew $50.0 million under the Tranche A-1 Term Loan in accordance with the delayed draw provisions of the credit facility, bringing the outstanding borrowings under the term loan facility to $100.0 million. Concurrent with the draw, we entered into an interest rate swap agreement effectively to convert the variable interest rate to a fixed interest rate. As of December 31, 2018 and 2017, we had interest rate swaps with an aggregate notional value of $100.0 million and $50.0 million effectively to convert the variable interest rate applicable to our Tranche A-1 Term Loan to a fixed interest rate, providing weighted average base interest rates under the facility agreement of 2.12% and 1.97% per annum. The interest rate swaps mature in January 2023, concurrent with the maturity of our Tranche A-1 Term Loan.

In July 2018, we drew $200.0 million under the Tranche A-2 Term Loan, in accordance with the delayed draw provisions of the credit facility.

The following is a summary of amounts outstanding under the credit facility:

	Interest Rate [1]	December 31, 2018	December 31, 2017
		(In thousands)	
Revolving credit facility [2] [3] [4] [5]	3.60%	$ —	$ 115,751
Tranche A-1 Term Loan	3.32%	$ 100,000	$ 50,000
Tranche A-2 Term Loan	4.05%	200,000	—
Unsecured term loans		300,000	50,000
Unamortized deferred financing costs, net		(2,871)	(3,463)
Unsecured term loans, net		$ 297,129	$ 46,537

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(1) Interest rate as of December 31, 2018.

(2) As of December 31, 2018 and 2017, letters of credit with an aggregate face amount of $5.7 million were provided under our revolving credit facility.

(3) As of December 31, 2018 and 2017, net deferred financing costs related to our revolving credit facility totaling $4.8 million and $6.7 million were included in "Other assets, net."

(4) In May 2018, in connection with the sale of the Bowen Building, we repaid $115.0 million of the then outstanding balance on our revolving credit facility. See Note 4 for additional information.

(5) The interest rate for the revolving credit facility excludes a 0.15% facility fee.

Principal Maturities

Principal maturities of debt outstanding as of December 31, 2018, including mortgages payable and the term loans, are as follows:

Year ending December 31,	Amount
	(In thousands)
2019	$ 182,467
2020	97,141
2021	331,881
2022	327,500
2023	277,736
Thereafter	927,927
Total	$ 2,144,652

10. Other Liabilities, Net

The following is a summary of other liabilities, net:

	December 31, 2018	December 31, 2017
	(In thousands)	
Lease intangible liabilities	$ 40,179	$ 44,917
Accumulated amortization	(26,081)	(26,950)
Lease intangible liabilities, net	14,098	17,967
Prepaid rent	21,998	15,751
Lease assumption liabilities and accrued tenant incentives	32,422	50,866
Capital lease obligation	15,704	15,819
Security deposits	17,696	13,618
Environmental liabilities [1]	17,898	2,900
Ground lease deferred rent payable	3,510	3,730
Net deferred tax liability	6,878	8,202
Dividends payable	45,193	31,097
Other	6,209	1,327
Total other liabilities, net	$ 181,606	$ 161,277

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(1) Includes a $15.1 million liability to remediate pre-existing environmental matters related to Potomac Yard Land Bay H, which was acquired in December 2018.

Amortization expense included in "Property rentals" in the statements of operations related to lease intangible liabilities for each of the three years in the period ended December 31, 2018 was $2.6 million, $2.3 million and $1.4 million.

As of December 31, 2018, the estimated amortization of lease intangible liabilities is as follows for the next five years and thereafter:

Year ending December 31,	Amount
	(in thousands)
2019	$ 2,232
2020	2,019
2021	1,753
2022	1,734
2023	1,726
Thereafter	4,634
Total	$ 14,098

11. Income Taxes

For the years ended December 31, 2018 and 2017, we have elected to be taxed as a REIT, and our former parent also elected to be taxed as a REIT for the year ended December 31, 2016. Accordingly, we incurred no federal income tax expense for any of the three years in the period ended December 31, 2018 related to our REIT subsidiaries. The only federal income taxes included in the accompanying financial statements relate to activities of our TRSs. Due to the passage of federal tax reform legislation, which was signed into law on December 22, 2017 and which we refer as the 2017 Tax Act, our TRSs were required to decrease the net deferred tax liability, which resulted in a net tax benefit of $3.9 million during the year ended December 31, 2017. The recorded tax charges in 2017 for the impact of the 2017 Tax Act were made using the current available information and technical guidance on the interpretations of the 2017 Tax Act. As permitted by Securities and Exchange Commission Staff Accounting Bulletin 118, Income Tax Accounting Implications of the Tax Cuts and Jobs Act, we recorded estimates and have subsequently finalized our accounting analysis based on the guidance, interpretations and data available as of December 31, 2018. We did not have any changes to our 2017 estimate related to the 2017 Tax Act and therefore, it had no impact to our 2018 financial statements.

Our financial statements include the operations of our TRSs, which are subject to federal, state and local income taxes on their taxable income. As a REIT, we may also be subject to federal excise taxes if we engage in certain types of transactions. Continued qualification as a REIT depends on our ability to satisfy the REIT distribution tests, stock ownership requirements and various other qualification tests. As of December 31, 2018, our TRSs have an estimated federal and state net operating loss of $6.8 million, which will expire in 2037 and 2038. The net basis of our assets and liabilities for tax reporting purposes is approximately $114.0 million lower than the amounts reported in our balance sheet as of December 31, 2018.

The following is a summary of our income tax benefit (expense):

	Year Ended December 31,		
	2018	2017	2016
		(in thousands)	
Current tax benefit (expense)	$ 20	$ (496)	$ (1,083)
Deferred tax benefit (expense)	718	10,408	—
Income tax benefit (expense)	$ 738	$ 9,912	$ (1,083)

As of December 31, 2018 and 2017, we have a net deferred tax liability of $6.9 million and $8.2 million primarily related to the management and leasing contracts assumed in the Combination, partially offset by deferred tax assets associated with tax versus book differences, related general and administrative expenses and the net operating loss for 2018 and 2017. We are subject to federal, state and local income tax examinations by taxing authorities for 2015 through 2018.

	December 31,	
	2018	2017
	(in thousands)	
Deferred tax assets:		
Accrued bonus	$ —	$ 1,675
Net operating loss	2,326	1,710
Deferred revenue	998	71
Bad debt expense	583	111
Other	198	623
Total deferred tax assets	4,105	4,190
Valuation allowance	(469)	—
Total deferred tax assets, net of valuation allowance	3,636	4,190
Deferred tax liabilities:		
Management and leasing contracts	(9,905)	(11,840)
Other	(609)	(552)
Total deferred tax liabilities	(10,514)	(12,392)
Net deferred tax liability	$ (6,878)	$ (8,202)

During 2018, we established a valuation allowance attributable to a portion of the federal loss carry forward as we do not consider it more likely than not that a deferred tax asset will be realized.

During the year ended December 31, 2018, our Board of Trustees declared cash dividends totaling $1.00 (regular dividends of $0.90 per common share and a special dividend of $0.10 per common share) of which $0.42 was taxable as ordinary income for federal income tax purposes in 2018, $0.355 were capital gain distributions and the remaining $0.225 will be determined in 2019. During the year ended December 31, 2017, our Board of Trustees declared cash dividends of $0.45 per common share of which $0.385 was taxable as ordinary income for federal income tax purposes in 2017 and $0.065 were capital gains distributions. No dividends were declared or paid in 2016.

12. Redeemable Noncontrolling Interests

JBG SMITH LP

In July 2017, JBG SMITH LP issued 19.8 million OP Units to persons other than JBG SMITH that became redeemable for cash or, at our election, our common shares beginning on August 1, 2018, subject to certain limitations. During the year ended December 31, 2018, unitholders redeemed 3.0 million OP units, which we elected to redeem for an equivalent number of our common shares. As of December 31, 2018, outstanding OP Units totaled 16.8 million, representing a 12.2% interest in JBG SMITH LP. On our balance sheets, our redeemable noncontrolling interests are presented at the higher of their redemption value at the end of each reporting period or their carrying value, with such adjustments recognized in "Additional paid-in capital." Redemption value is equivalent to the market value of one of our common shares at the end of the period multiplied by the number of vested OP units outstanding. In 2019, unitholders redeemed 1.7 million OP units, which we elected to redeem for an equivalent number of our common shares.

Consolidated Real Estate Venture

In November 2017, we became a partner in a real estate venture that owns an under construction multifamily asset located at 965 Florida Avenue in Washington, D.C. Pursuant to the terms of the 965 Florida Avenue real estate venture agreement, we will fund all capital contributions until our ownership interest reaches a maximum of 97.0%. Our partner can redeem its interest for cash two years after delivery, but no later than seven years subsequent to delivery. As of December 31, 2018, we held an 88.1% ownership interest in the real estate venture.

Below is a summary of the activity of redeemable noncontrolling interests:

	Year Ended December 31,					
	2018			2017		
	JBG SMITH LP	Consolidated Real Estate Venture	Total	JBG SMITH LP	Consolidated Real Estate Venture	Total
	(In thousands)					
Balance as of beginning of period	$ 603,717	$ 5,412	$ 609,129	$ —	$ —	$ —
Fair value of OP Unit redemptions	(109,208)	—	(109,208)	—	—	—
OP Units issued at the Separation	—	—	—	96,632	—	96,632
OP Units issued in connection with the Combination [(1)]	—	—	—	359,967	—	359,967
Net income (loss) attributable to redeemable noncontrolling interests	6,641	69	6,710	(7,320)	(8)	(7,328)
Other comprehensive income	1,384	—	1,384	225	—	225
Contributions (distributions)	(18,737)	500	(18,237)	(9,113)	5,420	(3,693)
Share-based compensation expense	52,190	—	52,190	32,634	—	32,634
Adjustment to redemption value	16,172	—	16,172	130,692	—	130,692
Balance as of end of period	$ 552,159	$ 5,981	$ 558,140	$ 603,717	$ 5,412	$ 609,129

[(1)] Excludes certain OP Units issued as part of the Combination which had an estimated fair value of $110.6 million, the vesting of which is subject to post-combination employment. See Note 13 for additional information.

13. Share-Based Payments and Employee Benefits

OP UNITS

The acquisition of JBG/Operating Partners, L.P. in the Combination, resulted in the issuance of 3.3 million OP Units to its former owners with an estimated grant-date fair value of $110.6 million. The OP Units were subject to post-combination vesting over periods of either 12 or 60 months based on continued employment. The significant assumptions used to value the OP Units included expected volatility (18.0% to 27.0%), risk-free interest rates (1.3% to 1.5%) and post-vesting restriction periods (1 year to 3 years). Compensation expense for these OP Units is recognized over the graded vesting period. See Note 3 for additional information.

The following table presents information regarding the OP Units activity:

	Unvested Shares	Weighted Average Grant-Date Fair Value
Unvested at December 31, 2017	3,086,962	33.49
Vested	(86,975)	37.10
Unvested at December 31, 2018	2,999,987	33.39

The total-grant date fair value of the OP Units that vested during the years ended December 31, 2018 and 2017 was $3.2 million and $7.2 million.

JBG SMITH 2017 Omnibus Share Plan

On June 23, 2017, our Board of Trustees adopted the JBG SMITH 2017 Omnibus Share Plan (the "Plan"), effective as of July 17, 2017, and authorized the reservation of approximately 10.3 million of our common shares pursuant to the Plan. On July 10, 2017, our then sole-shareholder approved the Plan. As of December 31, 2018, there were 4.8 million common shares available for issuance under the Plan.

Formation Awards

Pursuant to the Plan, on July 18, 2017, we granted approximately 2.7 million Formation Awards based on an aggregate notional value of approximately $100.0 million divided by the volume-weighted average price on July 18, 2017 of $37.10 per common share. In 2018, we granted 93,784 Formation Awards based on an aggregate notional value of approximately $3.2 million divided by the volume-weighted average price on the date of issuance of $34.40 per common share.

The Formation Awards are structured in the form of profits interests in JBG SMITH LP that provide for a share of appreciation determined by the increase in the value of a common share at the time of conversion over the volume-weighted average price of a common share at the time the formation unit was granted. The Formation Awards, subject to certain conditions, generally vest 25% on each of the third and fourth anniversaries and 50% on the fifth anniversary, of the date granted, subject to continued employment with JBG SMITH through each vesting date.

The value of vested Formation Awards is realized through conversion of the award into a number of LTIP Units, and subsequent conversion into a number of OP Units determined based on the difference between the volume-weighted average price of a common share at the time the Formation Award was granted and the value of a common share on the conversion date. The conversion ratio between Formation Awards and OP Units, which starts at zero, is the quotient of (i) the excess of the value of a common share on the conversion date above the per share value at the time the Formation Award was granted over (ii) the value of a common share as of the date of conversion. Like options, Formation Awards have a finite 10-year term over which their value is allowed to increase and during which they may be converted into LTIP Units (and in turn, OP Units). Holders of Formation Awards will not receive distributions or allocations of net income or net loss prior to vesting and conversion to LTIP Units.

The aggregate grant-date fair value of the Formation Awards granted during the years ended December 31, 2018 and 2017 was $725,000 and $23.7 million estimated using Monte Carlo simulations. Compensation expense for these awards is being recognized over a five-year period. The significant assumptions used to value the awards included:

	Year Ended December 31,	
	2018	2017
Expected volatility	27.0% to 29.0%	26.0%
Dividend yield	2.5% to 2.7%	2.3%
Risk-free interest rate	2.8% to 3.0%	2.3%
Expected life	7 years	7 years

The following table presents information regarding the Formation Awards activity:

	Unvested Shares	Weighted Average Grant-Date Fair Value
Unvested at December 31, 2017	2,673,814	$ 8.84
Granted	93,784	7.73
Vested	(39,970)	8.32
Forfeited	(72,234)	8.84
Unvested at December 31, 2018	2,655,394	8.81

The total-grant date fair value of the Formation Awards that vested during the year ended December 31, 2018 was $333,000.

LTIP, Time-Based LTIP and Special Time-Based LTIP Units

On July 18, 2017, we granted a total of 47,166 fully vested LTIP Units to the seven independent trustees in the notional amount of $250,000 each. The LTIP Units may not be sold while such non-employee trustee is serving on the Board. On the same date, we also granted 59,927 LTIP units to a key employee of which 50% vested immediately and the remaining 50% vests ratably from the 31st to the 60th month following the grant date.

In May 2018, as part of their annual compensation, we granted a total of 25,770 fully vested LTIP Units to non-employee trustees with an aggregate grant-date fair value of approximately $794,000.

During the years ended December 31, 2018 and 2017, we granted 367,519 and 302,518 Time-Based LTIP Units to management and other employees with a weighted average grant-date fair value of $31.48 and $33.71 per unit that vest over four years, 25.0% per year, subject to continued employment. Compensation expense for these units is being recognized over a four-year period.

Additionally, during the year ended December 31, 2018, related to our successful pursuit of Amazon HQ2, we granted 356,591 Special Time-Based LTIP Units to management and other employees with a weighted average grant-date fair value of $36.84 per unit. Vesting of the Special Time-Based LTIP Units is conditioned on Amazon entering into definitive lease or asset purchase documentation with JBG SMITH prior to the fourth anniversary of the grant date; if such condition is satisfied, then the Special Time-Based LTIP Units vest 50% on each of the fourth and fifth anniversaries of the grant date, subject to continued employment. Compensation expense for these units is being recognized over a five-year period.

The aggregate grant-date fair value of the LTIP, Time-Based LTIP and Special Time-Based LTIP Units granted (collectively "Granted LTIPs") during the years ended December 31, 2018 and 2017 was $25.5 million and $13.7 million. Net income and net loss is allocated to each of the Granted LTIPs. Holders of the Granted LTIPs have the right to convert all or a portion of vested units into OP Units, which are then subsequently exchangeable for our common shares. Granted LTIPs do not have redemption rights, but any OP Units into which units are converted are entitled to redemption rights. Granted LTIPs, generally, vote with the OP Units and do not have any separate voting rights except in connection with actions that would materially and adversely affect the rights of the Granted LTIPs. The significant assumptions used to value these awards included:

	Year Ended December 31,	
	2018	2017
Expected volatility	20.0% to 22.0%	17.0% to 19.0%
Risk-free interest rate	1.9% to 2.6%	1.3% to 1.5%
Post-grant restriction periods	2 to 3 years	2 to 3 years

The following table presents information regarding Granted LTIP activity:

	Unvested Shares	Weighted Average Grant-Date Fair Value
Unvested at December 31, 2017	332,207	$ 33.68
Granted	749,880	34.01
Vested	(110,723)	32.91
Forfeited	(8,702)	32.51
Unvested at December 31, 2018	962,662	34.03

The total-grant date fair value of the Granted LTIPs that vested during the years ended December 31, 2018 and 2017 was $3.6 million and $2.5 million.

Performance-Based LTIP and Special Performance-Based LTIP Units

During the years ended December 31, 2018 and 2017, we granted 567,106 and 605,072 Performance-Based LTIP Units to management and other employees under the Plan. Also, during the year ended December 31, 2018, related to our successful pursuit of Amazon HQ2, we granted 511,555 Special Performance-Based LTIP Units to management and other employees.

Performance-Based LTIP Units, including the Special Performance-Based LTIP Units, are performance-based equity compensation pursuant to which participants have the opportunity to earn LTIP Units based on the relative performance of the total shareholder return ("TSR") of our common shares compared to the companies in the FTSE NAREIT Equity Office Index, over the defined performance period beginning on the grant date, inclusive of dividends and stock price appreciation.

Our Performance-Based LTIP and Special Performance-Based LTIP Units have a three -year performance period. Fifty percent of any Performance-Based LTIP Units that are earned vest at the end of the three-year performance period and the remaining 50% on the fourth anniversary of the date of grant, subject to continued employment. Vesting of the Special Performance-Based LTIP Units is conditioned on Amazon entering into definitive lease or asset purchase documentation with JBG SMITH prior to the fourth anniversary of the grant date; if such condition is satisfied, then fifty percent of any Special Performance-Based LTIP Units that are earned at the end of the three-year performance period vest on the fourth anniversary of the date of grant and the remaining 50% on the fifth anniversary of the date of grant, subject to continued employment.

The grant-date fair value of the Performance-Based LTIP and Special Performance-Based LTIP Units granted during the years ended December 31, 2018 and 2017 was $21.1 million and $9.7 million valued using Monte Carlo simulations. Compensation expense for the Performance-Based LTIP Units is being recognized over a four-year period, while Compensation expense for the Special Performance Based LTIP Units is being recognized over a five-year period. The significant assumptions used to value both the Performance-Based LTIP and Special Performance-Based LTIP Units included:

	Year Ended December 31,	
	2018	2017
Expected volatility	19.9% to 26.0%	18.0%
Dividend yield	2.5% to 2.7%	2.3%
Risk-free interest rate	2.3% to 3.0%	1.5%

The following table presents information regarding the Performance-Based LTIP and Special Performance-Based LTIP Units activity:

	Unvested Shares	Weighted Average Grant-Date Fair Value
Unvested at December 31, 2017	604,522	$ 15.95
Granted	1,078,661	19.52
Forfeited	(25,605)	16.29
Unvested at December 31, 2017	1,657,578	18.27

JBG SMITH 2017 Employee Share Purchase Plan

The JBG SMITH 2017 ESPP authorizes the issuance of up to 2.1 million common shares. The ESPP provides eligible employees an option to purchase, through payroll deductions, our common shares at a discount of 15.0% of the closing price of a common shares on relevant determination dates, provided that the fair market value of common shares, determined as of the first day of the relevant offering period, purchased by any eligible employee may not exceed $25,000 in any calendar year. The maximum aggregate number of common shares reserved for issuance under the ESPP will automatically increase on January 1 of each year, unless the Compensation Committee of the Board of Trustees determines to limit any such increase, by the lesser of (i) 0.10% of the total number of outstanding common shares on December 31 of the preceding calendar year or (ii) 206,600 common shares.

Pursuant to the ESPP, employees purchased 20,178 common shares for $597,000 during the year ended December 31, 2018. Compensation expense for the year ended December 31, 2018 was $144,000 valued using the Black-Scholes model. The significant assumptions used to value the ESPP common shares included expected volatility (21.0%), dividend yield (2.5%), risk-free interest rate (2.0%) and expected life (six months). As of December 31, 2018, there were 2.0 million common shares authorized and available for issuance under the ESPP.

Share-Based Compensation Expense

Share-based compensation expense is summarized as follows:

	Year Ended December 31,		
	2018	2017	2016
		(In thousands)	
Time-Based LTIP Units	$ 10,095	$ 2,211	—
Performance-Based LTIP Units	5,271	1,172	—
LTIP Units	794	—	—
Other equity awards [1]	3,826	1,526	4,502
Share-based compensation expense - other	19,986	4,909	4,502
Formation Awards	5,606	5,169	$ —
OP Units [2]	29,455	21,467	—
LTIP Units [2]	277	2,615	—
Special Performance-Based LTIP Units	323	—	—
Special Time-Based LTIP Units	369	—	—
Share-based compensation related to Formation Transaction and special equity awards [3]	36,030	29,251	—
Total share-based compensation expense	56,016	34,160	4,502
Less amount capitalized	(3,341)	(467)	—
Share-based compensation expense	$ 52,675	$ 33,693	$ 4,502

[1] For the year ended December 31, 2018, primarily includes compensation expense for certain executives who have elected to receive all or a portion of any cash bonus that may be paid in 2019, related to 2018 service, in the form of fully vested LTIP Units. For the years ended December 31, 2017 and 2016, represents share-based compensation expense related to equity awards prior to the Formation Transaction.

[2] Represents share-based compensation expense for LTIP Units and OP Units subject to post-Combination employment obligations.

[3] Included in "General and administrative expense: Share-based compensation related to Formation Transaction and special equity awards" in the accompanying statements of operations.

As of December 31, 2018, we had $119.0 million of total unrecognized compensation expense related to unvested share-based payment arrangements (unvested OP Units, Formation Awards, Time-Based LTIP Units, Special Time-Based LTIP Units, Performance-Based LTIP Units and Special Performance-Based LTIP Units). This expense is expected to be recognized over a weighted average period of 2.8 years.

Employee Benefits

We have a 401(k) defined contribution plan (the "401(k) Plan") covering substantially all of our officers and employees which permits participants to defer compensation up to the maximum amount permitted by law. We provide a discretionary matching contribution. Employees' contributions vest immediately and our matching contributions vest over five years. Our contributions for each of the three years in the period ended December 31, 2018 were $1.8 million, $3.6 million and $2.4 million.

14. Interest Expense

The following is a summary of interest expense included in the statements of operations:

	Year Ended December 31,		
	2018	2017	2016
		(In thousands)	
Interest expense	$ 91,651	$ 69,178	$ 54,379
Amortization of deferred financing costs	4,661	3,011	1,478
Net loss (gain) on derivative financial instruments not designated as cash flow hedges:			
Net unrealized	(926)	(1,348)	—
Net realized	(135)	27	—
Capitalized interest	(20,804)	(12,727)	(4,076)
Interest expense	$ 74,447	$ 58,141	$ 51,781

15. Earnings (Loss) Per Common Share

The following summarizes the calculation of basic and diluted earnings per common share and provides a reconciliation of the amounts of net income (loss) available to common shareholders used in calculating basic and diluted earnings per common share:

	Year Ended December 31,		
	2018	2017	2016
		(In thousands, except per share amounts)	
Net income (loss)	$ 46,613	$ (79,084)	$ 61,974
Net (income) loss attributable to redeemable noncontrolling interests	(6,710)	7,328	—
Net loss attributable to noncontrolling interests	21	3	—
Net income (loss) attributable to common shareholders	39,924	(71,753)	61,974
Distributions to participating securities	(2,599)	(1,655)	—
Net income (loss) available to common shareholders — basic and diluted	$ 37,325	$ (73,408)	$ 61,974
Weighted average number of common shares outstanding — basic and diluted [(1)]	119,176	105,359	100,571
Earnings (loss) per common share:			
Basic	$ 0.31	$ (0.70)	$ 0.62
Diluted	$ 0.31	$ (0.70)	0.62

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(1) Reflects the weighted average common shares attributable to the Vornado Included Assets as of the date of the Separation for all periods prior to July 17, 2017,

The effect of the redemption of OP Units that were outstanding as of December 31, 2018 and 2017 is excluded in the computation of basic and diluted earnings per common share, as the assumed exchange of such units for common shares on a one-for-one basis was antidilutive (the assumed redemption of these units would have no impact on the determination of diluted earnings per share). Since vested and outstanding OP Units, which are held by noncontrolling interests, are attributed gains and losses at an identical proportion to the common shareholders, the gains and losses attributable and their equivalent weighted average OP Unit impact are excluded from net income (loss) available to common shareholders and from the weighted average number of common shares outstanding in calculating basic and diluted earnings per common share. Performance-Based LTIP Units, Special Performance-Based LTIP Units and Formation Awards, which totaled 3.9 million and 3.3 million for the years ended December 31, 2018 and 2017, were excluded from the calculation of diluted earnings per common share as they were antidilutive, but potentially could be dilutive in the future.

16. Future Minimum Rental Income

We lease space to tenants under operating leases that expire at various dates through the year 2036. The leases provide for the payment of fixed base rents payable monthly in advance as well as reimbursements of real estate taxes, insurance and maintenance costs. Retail leases may also provide for the payment by the lessee of additional rents based on a percentage of their sales. As of December 31, 2018, future base rental revenue under these non-cancelable operating leases excluding extension options is as follows:

Year ending December 31,	Amount
	(In thousands)
2019	$ 377,427
2020	321,205
2021	287,463
2022	256,352
2023	215,203
Thereafter	1,188,767

In December 2018, we leased (as landlord) the unimproved land at 1700 M Street for a 99-year term, with no extension options. 1700 M Street is a 34,000 square foot development site located in Washington, D.C.

17. Fair Value Measurements

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

To manage or hedge our exposure to interest rate risk, we follow established risk management policies and procedures, including the use of a variety of derivative financial instruments. We do not enter into derivative financial instruments for speculative purposes.

As of December 31, 2018 and 2017, we had various derivative financial instruments consisting of interest rate swap and cap agreements that are measured at fair value on a recurring basis. The net unrealized gain on our derivative financial instruments designated as cash flow hedges was $8.3 million and $1.8 million as of December 31, 2018 and 2017 and was recorded in "Accumulated other comprehensive income" in the balance sheet, of which a portion was reclassified to "Redeemable noncontrolling interests" as of December 31, 2018. Within the next 12 months, we expect to reclassify $3.5 million as a decrease to interest expense. The net unrealized gain on our derivative financial instruments not designated as cash flow hedges was $926,000 and $1.3 million for the years ended December 31, 2018 and 2017 and is recorded in "Interest expense" in our statements of operations. The fair values of the derivative financial instruments are based on the estimated amounts we would receive or pay to terminate the contracts at the reporting date and are determined using interest rate pricing models and observable inputs. The derivative financial instruments are classified within Level 2 of the valuation hierarchy.

The following are assets and liabilities measured at fair value on a recurring basis:

	Fair Value Measurements			
	Total	Level 1	Level 2	Level 3
December 31, 2018	(In thousands)			
Derivative financial instruments designated as cash flow hedges:				
Classified as assets in "Other assets, net"	$ 7,913	$ —	$ 7,913	$ —
Classified as liabilities in "Other liabilities, net"	1,723	—	1,723	—
Derivative financial instruments not designated as cash flow hedges:				
Classified as assets in "Other assets, net"	2,470	—	2,470	—
December 31, 2017				
Derivative financial instruments designated as cash flow hedges:				
Classified as assets in "Other assets, net"	$ 1,506	$ —	$ 1,506	$ —
Classified as liabilities in "Other liabilities, net"	2,640	—	2,640	—
Derivative financial instruments not designated as cash flow hedges:				
Classified as assets in "Other assets, net"	635	—	635	—
Classified as liabilities in "Other liabilities, net"	22	—	22	—

The fair values of our derivative financial instruments were determined using widely accepted valuation techniques, including discounted cash flow analysis on the expected cash flows of the derivative financial instrument. This analysis reflected the contractual terms of the derivative, including the period to maturity, and used observable market-based inputs, including interest rate market data and implied volatilities in such interest rates. While it was determined that the majority of the inputs used to value the derivatives fall within Level 2 of the fair value hierarchy under authoritative accounting guidance, the credit valuation adjustments associated with the derivatives also utilized Level 3 inputs, such as estimates of current credit spreads to evaluate the likelihood of default. However, as of December 31, 2018, the significance of the impact of the credit valuation adjustments on the overall valuation of the derivative financial instruments was assessed and it was determined that these adjustments were not significant to the overall valuation of the derivative financial instruments. As a result, it was determined that the derivative financial instruments in their entirety should be classified in Level 2 of the fair value hierarchy. The net unrealized gain included in "Other comprehensive income" was primarily attributable to the net change in unrealized gains or losses related to the interest rate swaps that were outstanding as of December 31, 2018, none of which were reported in the statements of operations because they were documented and qualified as hedging instruments.

Financial Assets and Liabilities Not Measured at Fair Value

As of December 31, 2018 and 2017, all financial instruments and liabilities were reflected in our balance sheets at amounts which, in our estimation, reasonably approximated their fair values, except for the following:

	December 31, 2018		December 31, 2017	
	Carrying Amount [(1)]	Fair Value	Carrying Amount [(1)]	Fair Value
	(In thousands)			
Financial liabilities:				
Mortgages payable	$ 1,844,652	$ 1,870,078	$ 2,035,959	$ 2,060,899
Revolving credit facility	—	—	115,751	115,768
Unsecured term loans	300,000	300,727	50,000	50,029

[(1)] The carrying amount consists of principal only.

The fair value of the mortgages payable, revolving credit facility and unsecured term loans was determined using Level 2 inputs of the fair value hierarchy.

18. Segment Information

We review operating and financial data for each property on an individual basis; therefore, each of our individual properties is a separate operating segment. As of December 31, 2018, we redefined our reportable segments to be aligned with our new method of internal reporting and the way our Chief Executive Officer, who is also our Chief Operating Decision Maker ("CODM"), makes key operating decisions, evaluates financial results, allocates resources and manages our business. Accordingly, we aggregate our operating segments into three reportable segments (commercial, multifamily, and third-party asset management and real estate services) based on the economic characteristics and nature of our assets and services. To conform to the current period presentation, we have reclassified the prior period segment financial data for certain properties that had been classified as part of other to the commercial and multifamily segments and the elimination of intersegment activity has been included as part of other. The commercial segment was previously referred to as the office segment.

The CODM measures and evaluates the performance of our operating segments, with the exception of the third-party asset management and real estate services business, based on the net operating income ("NOI") of properties within each segment. NOI includes property rental revenues and tenant reimbursements and deducts property operating expenses and real estate taxes.

With respect to the third-party asset management and real estate services business, the CODM reviews revenues streams generated by this segment ("Third-party real estate services, including reimbursements"), as well as the expenses attributable to the segment ("General and administrative: third-party real estate services"), which are disclosed separately in the statements of operations. Management company assets primarily consist of management and leasing contracts with a net book value of $38.6 million and $45.7 million and are classified in "Other assets, net" in the balance sheets as of December 31, 2018 and 2017. Consistent with internal reporting presented to our CODM and our definition of NOI, the third-party asset management and real estate services operating results are excluded from the NOI data below.

The following table reflects the reconciliation of net income (loss) attributable to common shareholders to consolidated NOI:

	Year Ended December 31,		
	2018	2017	2016
		(In thousands)	
Net income (loss) attributable to common shareholders	$ 39,924	$ (71,753)	$ 61,974
Add:			
Depreciation and amortization expense	211,436	161,659	133,343
General and administrative expense:			
Corporate and other	33,728	39,350	48,753
Third-party real estate services	89,826	51,919	19,066
Share-based compensation related to Formation Transaction and special equity awards	36,030	29,251	—
Transaction and other costs	27,706	127,739	6,476
Interest expense	74,447	58,141	51,781
Loss on extinguishment of debt	5,153	701	—
Reduction of gain (gain) on bargain purchase	7,606	(24,376)	—
Income tax expense (benefit)	(738)	(9,912)	1,083
Net (income) loss attributable to redeemable noncontrolling interests	6,710	(7,328)	—
Less:			
Third-party real estate services, including reimbursements	98,699	63,236	33,882
Other income	6,358	5,167	5,381
Income (loss) from unconsolidated real estate ventures, net	39,409	(4,143)	(947)
Interest and other income, net	15,168	1,788	2,992
Gain on sale of real estate	52,183	—	—
Net loss attributable to noncontrolling interests	21	3	—
Consolidated NOI	**$ 319,990**	**$ 289,340**	**$ 281,168**

Below is a summary of NOI by segment. Items classified in other include future development assets, corporate entities and the elimination of intersegment activity.

	Year Ended December 31, 2018			
	Commercial	Multifamily	Other	Total
	(In thousands)			
Rental revenue:				
Property rentals	$ 395,089	$ 102,617	$ 2,129	$ 499,835
Tenant reimbursements	34,953	6,740	(2,403)	39,290
Total rental revenue	430,042	109,357	(274)	539,125
Rental expense:			—	
Property operating	118,288	31,502	(1,709)	148,081
Real estate taxes	53,324	14,280	3,450	71,054
Total rental expense	171,612	45,782	1,741	219,135
Consolidated NOI	$ 258,430	$ 63,575	$ (2,015)	$ 319,990

	Year Ended December 31, 2017			
	Commercial	Multifamily	Other	Total
	(In thousands)			
Rental revenue:				
Property rentals	$ 351,517	$ 86,439	$ (1,331)	$ 436,625
Tenant reimbursements	32,380	5,130	475	37,985
Total rental revenue	383,897	91,569	(856)	474,610
Rental expense:				
Property operating	97,701	24,623	(3,488)	118,836
Real estate taxes	50,546	11,030	4,858	66,434
Total rental expense	148,247	35,653	1,370	185,270
Consolidated NOI	$ 235,650	$ 55,916	$ (2,226)	$ 289,340

	Year Ended December 31, 2016			
	Commercial	Multifamily	Other	Total
	(In thousands)			
Rental revenue:				
Property rentals	$ 323,133	$ 63,401	$ 15,061	$ 401,595
Tenant reimbursements	33,361	3,454	846	37,661
Total rental revenue	356,494	66,855	15,907	439,256
Rental expense:			—	
Property operating	91,148	17,238	(8,082)	100,304
Real estate taxes	46,115	6,993	4,676	57,784
Total rental expense	137,263	24,231	(3,406)	158,088
Consolidated NOI	$ 219,231	$ 42,624	$ 19,313	$ 281,168

The following is a summary of certain balance sheet data by segment:

		Commercial		Multifamily		Other		Total
December 31, 2018				(In thousands)				
Real estate, at cost	$	3,634,472	$	1,656,974	$	501,288	$	5,792,734
Investments in and advances to unconsolidated real estate ventures		177,173		109,232		36,473		322,878
Total assets [1]		3,707,255		1,528,177		761,853		5,997,285
December 31, 2017								
Real estate, at cost	$	4,023,544	$	1,480,812	$	513,148	$	6,017,504
Investments in and advances to unconsolidated real estate ventures		134,138		98,835		28,838		261,811
Total assets [1]		3,612,947		1,403,452		1,055,408		6,071,807

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(1) Includes assets held for sale. See Note 4 for additional information.

19. Commitments and Contingencies

Insurance

We maintain general liability insurance with limits of $200.0 million per occurrence and in the aggregate, and property and rental value insurance coverage with limits of $2.0 billion per occurrence, with sub-limits for certain perils such as floods and earthquakes on each of our properties. We also maintain coverage, through our wholly owned captive insurance subsidiary, for both terrorist acts and for nuclear, biological, chemical or radiological terrorism events with limits of $2.0 billion per occurrence. These policies are partially reinsured by third-party insurance providers.

We will continue to monitor the state of the insurance market and the scope and costs of coverage for acts of terrorism. 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 the insurance coverage, which could be material.

Our debt, consisting of mortgage loans secured by our properties, revolving credit facility and unsecured term loans contain customary covenants requiring adequate insurance coverage. Although we believe that we currently have adequate insurance coverage, we may not be able to obtain an equivalent amount of coverage at reasonable costs in the future. If lenders insist on greater coverage than we are able to obtain, it could adversely affect the ability to finance or refinance our properties.

Construction Commitments

As of December 31, 2018, we have construction in progress that will require an additional $519.4 million to complete ($440.9 million related to our consolidated entities and $78.5 million related to our unconsolidated real estate ventures at our share), based on our current plans and estimates, which we anticipate will be primarily expended over the next two to three years. These capital expenditures are generally due as the work is performed, and we expect to finance them with debt proceeds, proceeds from asset recapitalizations and sales, and available cash.

Environmental Matters

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 that we believe would have a material adverse effect on our overall business, financial condition or results of operations, or that have not been anticipated and remediated during site redevelopment as required by law. Nevertheless, 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 cost to us. As noted in Note 10, environmental liabilities total $17.9 million as of December 31, 2018 and primarily relate to a liability to remediate pre-existing environmental matters at Potomac Yard Land Bay H, which was acquired in December 2018.

Other

There are various legal actions against us in the ordinary course of business. In our opinion, the outcome of such matters will not have a material adverse effect on our financial condition, results of operations or cash flows.

From time to time, we (or ventures in which we have an ownership interest) have agreed, and may in the future agree with respect to unconsolidated real estate ventures, to (1) guarantee portions of the principal, interest and other amounts in connection with their borrowings, (2) provide customary environmental indemnifications and nonrecourse carve-outs (e.g., guarantees against fraud, misrepresentation and bankruptcy) in connection with their borrowings and (3) provide guarantees to lenders and other third parties for the completion of development projects. We customarily have agreements with our outside partners whereby the partners agree to reimburse the real estate venture or us for their share of any payments made under certain of these guarantees. Amounts that may be required to be paid in future periods in relation to budget overruns or operating losses that are also included in some of our guarantees are not estimable. Guarantees (excluding environmental) terminate either upon the satisfaction of specified circumstances or repayment of the underlying debt. At times, we have agreements with our outside partners whereby we agree to reimburse our partner for their share of any payments made by them under certain guarantees. As of December 31, 2018, we had no principal payment guarantees for our unconsolidated real estate ventures.

We also may guarantee portions of the principal, interest and other amounts in connection with the borrowings of our consolidated entities. As of December 31, 2018, the aggregate amount of principal payment guarantees was $8.3 million for our consolidated entities.

As of December 31, 2018, we expect to fund additional capital to certain of our unconsolidated investments totaling approximately $48.6 million, which we anticipate will be primarily expended over the next two to three years.

In connection with the Formation Transaction, we entered into an agreement with Vornado regarding tax matters (the "Tax Matters Agreement") that provides special rules that allocate tax liabilities if the distribution of JBG SMITH shares by Vornado, together with certain related transactions, is not tax-free. Under the Tax Matters Agreement, we may be required to indemnify Vornado against any taxes and related amounts and costs resulting from a violation by us of the Tax Matters Agreement, or from the taking of certain restricted actions by us.

We are obligated under non-cancelable operating leases including ground leases on certain of our properties through 2106. As of December 31, 2018, future minimum rental payments under non-cancelable operating leases, capital leases and lease assumption liabilities are as follows:

Year ending December 31,	**Amount**
	(In thousands)
2019	$ 13,991
2020	13,710
2021	13,395
2022	12,554
2023	9,489
Thereafter	55,780
Total	$ 118,919

During each of the three years in the period ended December 31, 2018, we recognized approximately $11.2 million, $4.7 million and $2.1 million of rental expense related to our non-cancelable operating and capital leases.

20. Transactions with Vornado and Related Parties

Transactions with Vornado

As described in Note 1, the accompanying financial statements present the operations of the Vornado Included Assets as carved-out from the financial statements of Vornado for all periods prior to July 17, 2017.

Certain centralized corporate costs borne by Vornado for management and other services including, but not limited to, accounting, reporting, legal, tax, information technology and human resources have been allocated to the assets in the financial statements based on either actual costs incurred or a proportion of costs estimated to be applicable to the Vornado Included Assets based on key metrics including total revenue. The total amounts allocated during the years ended December 31, 2017 and 2016 were $13.0 million and $20.7 million. These allocated amounts are included as a component of "General and administrative expense: Corporate and other" expenses on the statements of operations and do not necessarily reflect what actual costs would have been if the Vornado Included Assets were a separate standalone public company.

In connection with the Formation Transaction, we entered into an agreement with Vornado under which Vornado provides operational support for an initial period of up to two years. These services include information technology, financial reporting and payroll services. The charges for these services are based on an hourly or per transaction fee arrangement including reimbursement for overhead and out-of-pocket expenses. The total charges for the years ended December 31, 2018 and 2017 were $3.6 million and $2.2 million. Pursuant to an agreement, we are providing Vornado with leasing and property management services for certain of its assets that were not part of the Separation. The total revenue related to these services for the years ended December 31, 2018 and 2017 were $2.1 million and $779,000. We believe that the terms of both of these agreements are comparable to those that would have been negotiated based on market rates.

In connection with the Formation Transaction, we entered into a Tax Matters Agreement with Vornado. See Note 19 for additional information.

In August 2014, we completed a $185.0 million financing of the Universal Buildings, a 687,000 square foot office complex located in Washington, D.C. In connection with this financing, pursuant to a note agreement dated August 12, 2014, we used a portion of the financing proceeds and made an $86.0 million loan to Vornado at LIBOR plus 2.9% due August 2019. At the Separation, Vornado repaid the outstanding balance of the loan and related accrued interest. We recognized interest income of $1.8 million and $3.3 million during the years ended December 31, 2017 and 2016.

In connection with the development of The Bartlett, prior to the Separation, we entered into various note agreements with Vornado whereby we could borrow up to a maximum of $170.0 million. Vornado contributed these note agreements along with accrued and unpaid interest to JBG SMITH at the Separation. We incurred interest expense of $4.1 million during each of the years ended December 31, 2017 and 2016.

In June 2016, the $115.0 million mortgage loan (including $608,000 of accrued interest) secured by the Bowen Building, a 231,000 square foot office building located in Washington, D.C., was repaid with the proceeds of a $115.6 million draw on our former parent's revolving credit facility. We repaid our former parent with amounts drawn under our revolving credit facility at the Combination. We incurred interest expense related to the mortgage loan of $1.3 million and $1.1 million during the years ended December 31, 2017 and 2016.

We have agreements that are terminable on the second anniversary of the Combination with Building Maintenance Services ("BMS"), a wholly owned subsidiary of Vornado, to supervise cleaning, engineering and security services at our properties. We paid BMS $20.9 million, $13.6 million and $12.1 million during each of the three years in the period ended December 31, 2018, which are included in "Property operating expenses" in our statements of operations.

We entered into a consulting agreement with Mitchell Schear, a member of our Board of Trustees and formerly the president of Vornado's Washington, D.C. segment. The consulting agreement expired on December 31, 2017 and provided for the payment of consulting fees and expenses at the rate of $169,400 per month for the 24 months following the Separation, including after the expiration of the consulting agreement. The amount due under this consulting agreement of $4.1 million was expensed in connection with the Combination. As of December 31, 2018, the remaining liability is $1.1 million. Additionally, in March 2017, Vornado amended Mr. Schear's employment agreement to provide for the payment of severance, bonus and post-employment services. A total of $16.4 million was expensed in connection with the Separation during the year ended December 31, 2017.

Transactions with Real Estate Ventures

Our third-party asset management and real estate services business provides fee-based real estate services to third parties and the JBG Legacy Funds. We provide services for the benefit of the JBG Legacy Funds that own interests in the assets retained by the JBG Legacy Funds. In connection with the contribution of the JBG Assets to us, it was determined that the general partner and managing member interests in the JBG Legacy Funds that were held by former JBG executives (and who became members of our management team and/or Board of Trustees) would not be transferred to us and remain under the control of these individuals. In addition, certain members of our senior management and Board of Trustees have an ownership interest in the JBG Legacy Funds and own carried interests in each fund and in certain of our real estate ventures that entitles them to receive additional compensation if the fund or real estate venture achieves certain return thresholds. This third-party real estate services revenue, including reimbursements, from these JBG Legacy Funds for the years ended December 31, 2018 and 2017 was $33.8 million and $19.9 million. As of December 31, 2018 and 2017, we had receivables from the JBG Legacy Funds totaling $3.6 million and $3.1 million for third-party real estate services, including reimbursements.

We rent our corporate offices from an unconsolidated real estate venture and incurred expenses totaling $4.9 million and $2.3 million during the years ended December 31, 2018 and 2017, which is recorded in "General and administrative expense: Corporate and other" in our statements of operations.

Registration Rights Agreements

In connection with the Formation Transaction, we entered into a registration rights agreement with certain former investors in the JBG Legacy Funds that received our common shares in the Formation Transaction (the "Shares Registration Rights Agreement") and a separate registration rights agreement with the certain former investors in the JBG Legacy Funds and certain employees of JBG entities that received OP Units in the Formation Transaction (the "OP Units Registration Rights Agreement" and together with the Shares Registration Rights Agreement, the "Registration Rights Agreements"). Certain holders of common shares and OP Units who may benefit from the Registration Rights Agreements are members of our management team and/or Board of Trustees. Our obligations under the Shares Registration Rights Agreement were fully satisfied in January 2018.

21. Quarterly Financial Data (unaudited)

2018	First Quarter	Second Quarter [1]	Third Quarter [2]	Fourth Quarter [3]
	(In thousands, except per share data)			
Total revenue	$ 163,037	$ 159,447	$ 158,443	$ 163,255
Net income (loss)	(4,786)	24,023	26,382	994
Net income (loss) attributable to common shareholders	(4,190)	20,574	22,830	710
Earnings (loss) per share:				
Basic	(0.04)	0.17	0.19	(0.01)
Diluted	(0.04)	0.17	0.19	(0.01)

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[1] During the second quarter of 2018, we recognized a gain on the sale of real estate of $33.4 million from the sale of Summit I and II and the Bowen Building, a reduction to the gain on bargain purchase of $7.6 million related to the final adjustments to the fair value of certain asset acquired and liabilities assumed in the Formation Transaction and a loss on the extinguishment of debt of $4.5 million.

[2] During the third quarter of 2018, we recognized a gain of $15.5 million related to the sale of our interest in a real estate venture that owned the Investment Building and a gain on the sale of real estate of $11.9 million from the sale of Executive Tower.

[3] During the fourth quarter of 2018, we recognized a gain of $20.6 million from the sale of The Warner by our unconsolidated real estate venture with CPPIB, transaction and other costs of $15.6 million related to expenses incurred in connection with the Formation Transaction (including transition services provided by our former parent, integration costs, and severance costs), costs related to the pursuit of Amazon HQ2, and costs related to other completed, potential and pursued transactions, and a gain on the sale of real estate of $6.4 million, primarily from the sale of 1233 20th Street and the out-of-service portion of Falkland Chase - North.

2017	First Quarter	Second Quarter	Third Quarter [1]	Fourth Quarter [2]
	(In thousands, except per share data)			
Total revenue	$ 116,272	$ 118,020	$ 152,350	$ 156,371
Net income (loss)	6,318	11,341	(77,991)	(18,752)
Net income (loss) attributable to common shareholders	6,318	11,341	(69,831)	(16,418)
Earnings (loss) per share:				
Basic	0.06	0.11	(0.61)	(0.15)
Diluted	0.06	0.11	(0.61)	(0.15)

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[1] During the third quarter of 2017, we recognized transaction and other costs of $104.1 million, a gain on bargain purchase of $27.8 million and share-based compensation expense of $14.4 million in connection with the completion of the Formation Transaction.

[2] During the fourth quarter of 2017, we recognized share-based compensation expense of $14.8 million and transaction and other costs of $12.6 million in connection with the completion of the Formation Transaction in the third quarter of 2017. Additionally, we recognized a reduction to the gain on bargain purchase of $3.4 million related to adjustments to the fair value of certain assets acquired and liabilities assumed in the Formation Transaction. See Note 3 for additional information.

22. Subsequent Event

In 2019, we issued an additional 442,395 LTIP Units and 477,640 Performance-Based LTIP Units to management and employees with an estimated aggregate fair value of $24.5 million.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURES

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

As required by Rule 13a-15(b) under the Securities Exchange Act of 1934, as amended, we carried out an evaluation, under the supervision and with the participation of management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that as of December 31, 2018, our disclosure controls and procedures were effective.

Management's Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over our financial reporting (as such term is defined in Rule 13a-15(f) and 15d-15(f) under the Exchange Act). Our internal control over financial reporting is a process designed under the supervision of our Chief Executive Officer and Chief Financial Officer to provide reasonable assurance regarding the reliability of financial reporting and the preparation of our financial statements for external reporting purposes in accordance with U.S. generally accepted accounting principles. Our internal control over financial reporting includes policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect transactions and dispositions of our assets, (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. generally accepted accounting principles, and that receipts and expenditures are being made only in accordance with authorizations of our management and directors, and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisitions, use or disposition of our assets that could have a material effect on our financial statements.

As of December 31, 2018, 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 (COSO). Based on this assessment, management has concluded that our internal control over financial reporting was effective as of December 31, 2018.

Deloitte & Touche LLP, an independent registered public accounting firm, has audited our financial statements and has issued a report on the effectiveness of our internal control over financial reporting, which is included herein.

Changes in Internal Control over Financial Reporting

There have been no changes in our internal control over financial reporting during the quarter ended December 31, 2018 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Shareholders and Board of Trustees of JBG SMITH Properties

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of JBG SMITH Properties and subsidiaries (the "Company") as of December 31, 2018, 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, 2018, 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, 2018, of the Company and our report dated February 26, 2019, expressed an unqualified opinion on those financial statements and financial statement schedules.

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
McLean, Virginia
February 26, 2019

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information regarding trustees is incorporated herein by reference from the section entitled "Proposal One: Election of Trustees—Nominees for Election as Trustees" in our definitive Proxy Statement (the "2019 Proxy Statement") to be filed pursuant to Regulation 14A of the Securities Exchange Act of 1934, as amended, for our 2019 Annual Meeting of Shareholders to be held on May 2, 2019. The 2019 Proxy Statement will be filed within 120 days after the end of our fiscal year ended December 31, 2018.

ITEM 11. EXECUTIVE COMPENSATION

The information included under the following captions in our 2019 Proxy Statement is incorporated herein by reference: "Compensation Discussion and Analysis," "Compensation Committee Report," "Compensation of Executive Officers," "Corporate Governance and Board Matters—Compensation of Trustees" and "Corporate Governance and Board Matters—Compensation Committee Interlocks and Insider Participation."

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Information regarding security ownership of certain beneficial owners and management is incorporated herein by reference from the section entitled "Security Ownership of Certain Beneficial Owners and Management" and "Compensation of Executive Officers—Equity Compensation Plan Information" in our 2019 Proxy Statement.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information regarding transactions with related persons and trustee independence is incorporated herein by reference from the sections entitled "Certain Relationships and Related Party Transactions" and "Corporate Governance and Board Matters—Corporate Governance Profile" in the Company's 2019 Proxy Statement.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information regarding principal auditor fees and services and the audit committee's pre-approval policies are incorporated herein by reference from the sections entitled "Proposal Four: Ratification of the Appointment of Independent Registered Public Accounting Firm—Principal Accountant Fees and Services" and "Proposal Four: Ratification of the Appointment of Independent Registered Public Accounting Firm—Pre-Approval Policies and Procedures" in our 2019 Proxy Statement.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) The following consolidated and combined information is included in this Form 10-K:

(1) Financial Statements

Report of Independent Registered Public Accounting Firm
Consolidated Balance Sheets as of December 31, 2018 and 2017
Consolidated and Combined Statements of Operations for the years ended December 31, 2018, 2017 and 2016
Consolidated and Combined Statements of Comprehensive Income (Loss) for the years ended December 31, 2018, 2017 and 2016
Consolidated and Combined Statements of Equity for the years ended December 31, 2018, 2017 and 2016
Consolidated and Combined Statements of Cash Flows for the years ended December 31, 2018, 2017 and 2016
Notes to Consolidated and Combined Financial Statements

These financial statements are set forth in Item 8 of this report and are hereby incorporated by reference.

(2) Financial Statement Schedules

Schedules other than those listed above are omitted because they are not applicable or the information required is included in the financial statements or the notes thereto.

SCHEDULE II
JBG SMITH PROPERTIES
VALUATION AND QUALIFYING ACCOUNTS

	Balance at Beginning of Year	Additions Charged Against Operations	Adjustments to Valuation Accounts	Uncollectible Accounts Written-off	Balance at End of Year
			(In thousands)		
Allowance for doubtful accounts [1] for year ended December 31:					
2018	$ 6,285	$ 3,298	$ —	$ (1,989)	$ 7,594
2017	$ 4,526	$ 3,807	$ —	$ (2,048)	$ 6,285
2016	$ 4,431	$ 751	$ —	$ (656)	$ 4,526

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[1] Includes allowance for doubtful accounts related to tenant and other receivables and deferred rent receivable.

SCHEDULE III
JBG SMITH PROPERTIES
REAL ESTATE AND ACCUMULATED DEPRECIATION
December 31, 2018

		Initial Cost to Company			Gross Amounts at Which Carried at Close of Period					
Description	Encumbrances[(1)]	Land and Improvements	Buildings and Improvements	Costs Capitalized Subsequent to Acquisition[(2)]	Land and Improvements	Buildings and Improvements	Total	Accumulated Depreciation and Amortization	Date of Construction[(3)]	Date Acquired
Commercial Operating Assets										
Universal Buildings	$ 182,467	$ 69,393	$ 143,320	$ 23,829	$ 68,612	$ 167,930	$ 236,542	$ 53,606	1956	2007
2101 L Street	137,453	32,815	51,642	88,181	39,768	132,870	172,638	43,414	1975	2003
1700 M Street	—	34,178	46,938	(25,937)	55,179	—	55,179	—		2002, 2006
1730 M Street	47,500	10,095	17,541	15,625	10,687	32,574	43,261	13,021	1964	2002
1600 K Street	—	19,870	10,308	364	19,870	10,672	30,542	1,280	1950	2017
Courthouse Plaza 1 and 2	—	—	105,475	50,652	—	156,127	156,127	64,721	1989	2002
2121 Crystal Drive	136,728	21,503	87,329	53,027	22,071	139,788	161,859	70,404	1985	2002
2345 Crystal Drive	—	23,126	93,918	41,679	23,683	135,040	158,723	57,974	1988	2002
2231 Crystal Drive	—	20,611	83,705	21,694	21,132	104,878	126,010	42,194	1987	2002
1550 Crystal Drive	—	17,988	70,525	19,854	17,996	90,371	108,367	38,157	1980	2002
RTC - West	88,854	30,326	134,108	5,819	30,425	139,828	170,253	9,969	1988	2017
RTC - West Retail	6,889	2,894	—	8,338	2,894	8,338	11,232	407	2017	2017
2011 Crystal Drive	—	18,940	76,921	38,777	18,991	115,647	134,638	48,727	1984	2002
2451 Crystal Drive	—	16,755	68,047	28,915	17,337	96,380	113,717	38,652	1990	2002
1235 S. Clark Street	78,000	15,826	56,090	28,656	16,293	84,279	100,572	33,875	1981	2002
241 18th Street S.	—	13,867	54,169	32,344	16,812	83,568	100,380	33,725	1977	2002
251 18th Street S.	34,294	12,305	49,360	56,515	15,729	102,451	118,180	39,602	1975	2002
1215 S. Clark Street	—	13,636	48,380	54,601	14,017	102,600	116,617	31,987	1983	2002
201 12th Street S.	32,863	14,766	52,750	23,357	15,126	75,747	90,873	30,413	1987	2002
800 North Glebe Road	107,500	28,168	140,983	2,307	28,168	143,290	171,458	8,790	1982	2017
2200 Crystal Drive	—	13,104	30,050	34,732	13,454	64,432	77,886	19,870	1968	2002
1901 South Bell Street	—	11,669	36,918	21,887	12,009	58,465	70,474	26,342	1968	2002
1225 S. Clark Street	—	11,176	43,495	20,292	11,490	63,473	74,963	25,616	1968	2002
Crystal City Marriott	—	8,000	47,191	15,733	8,224	62,700	70,924	22,162	1968	2004
2100 Crystal Drive	—	10,287	23,590	31,413	10,588	54,702	65,290	23,839	1968	2002
200 12th Street S.	16,507	8,016	30,552	20,211	8,241	50,538	58,779	20,974	1985	2002
2001 Jefferson Davis Highway	—	7,300	16,746	11,870	7,481	28,435	35,916	11,411	1967	2002
1800 South Bell Street	—	—	28,702	7,368	212	35,858	36,070	15,602	1969	2002
Crystal City Shops at 2100	—	4,059	9,309	5,175	4,049	14,494	18,543	6,098	1968	2002
Crystal Drive Retail	—	—	20,465	4,461	55	24,871	24,926	11,813	2003	2004
Vienna Retail	—	1,763	641	41	1,763	682	2,445	230	1981	2005
7200 Wisconsin Avenue	—	34,683	92,059	4,712	34,683	96,771	131,454	5,373	1986	2017
One Democracy Plaza	—	—	33,628	7,873	—	41,501	41,501	23,617	1987	2002
4749 Bethesda Avenue Retail	—	2,480	11,830	26	2,872	11,464	14,336	257	2016	2017
CEB Tower at Central Place	234,000	74,420	230,280	54,714	74,877	284,537	359,414	8,956	2018	2017
Commercial Construction Assets										
1770 Crystal Drive	—	10,771	44,276	(9,067)	—	45,980	45,980	1,674	1974-1980	2002
Central District Retail	—	4,194	—	16,388	—	20,582	20,582	5		2002
4747 Bethesda Avenue	—	29,030	10,040	68,070	—	107,140	107,140	—		2017
Multifamily Operating Assets										
Fort Totten Square	73,600	24,390	90,404	826	24,390	91,230	115,620	5,433	2015	2017
WestEnd25	97,881	67,049	5,039	110,465	68,210	114,343	182,553	27,229	2009	2007
North End Retail	—	5,847	9,333	(291)	5,847	9,042	14,889	481	2015	2017
RiverHouse Apartments	307,710	118,421	125,078	84,970	138,763	189,706	328,469	63,413	1960	2007
The Bartlett	220,000	41,687	—	224,948	41,867	224,768	266,635	15,988	2016	2007

220 20th Street	—	8,434	19,340	100,624	8,761	119,637	128,398	31,277	2009	2017
2221 South Clark Street	—	7,405	16,981	41,394	7,542	58,238	65,780	6,558	1964	2002

Description	Encumbrances[(1)]	Initial Cost to Company: Land and Improvements	Initial Cost to Company: Buildings and Improvements	Costs Capitalized Subsequent to Acquisition[(2)]	Gross Amounts at Which Carried at Close of Period: Land and Improvements	Gross Amounts at Which Carried at Close of Period: Buildings and Improvements	Gross Amounts at Which Carried at Close of Period: Total	Accumulated Depreciation and Amortization	Date of Construction[(3)]	Date Acquired
Falkland Chase - South & West	41,008	18,530	44,232	570	18,530	44,802	63,332	2,941	1938	2017
Falkland Chase - North	—	9,810	22,706	(2,239)	8,992	21,285	30,277	1,429	1938	2017
1221 Van Street	—	27,386	63,775	25,293	28,182	88,272	116,454	3,613		2017
Multifamily Construction Assets										
West Half	—	45,668	17,902	96,284	—	159,854	159,854	—		2017
965 Florida Avenue		14,306	—	42,045	—	56,351	56,351	—		2017
Atlantic Plumbing C	—	47,678	13,952	66,708	—	128,338	128,338	—		2017
Future Development Assets										
1900 Crystal Drive	—	16,811	53,187	(25,598)	—	44,400	44,400	243	1968	2002
Capitol Point - North	—	32,730	—	18,374	50,829	275	51,104	—		2017
Metropolitan Park 6-8	—	65,259	1,326	27,777	82,898	11,464	94,362	31		2007
Pen Place - Land Parcel	—	104,473	55	(30,618)	61,970	11,940	73,910	6		2007
Potomac Yard Land Bay G - Parcels A - F	—	20,318	—	7,955	26,914	1,359	28,273	1		
Potomac Yard Land Bay H	—	38,369	—	—	38,369	—	38,369	—		
RTC - West Land	1,398	29,956	—	1,792	29,956	1,792	31,748	—		2017
Square 649	—	15,550	6,451	(2,183)	12,672	7,146	19,818	427		2005
Other Future Development Assets	—	71,686	15,286	14,629	72,394	29,207	101,601	330		
Corporate								—		
Corporate	300,000	—	—	18,408	—	18,408	18,408	7,718		2017
	2,144,652	1,479,777	2,606,328	1,706,629	1,371,874	4,420,860	5,792,734	1,051,875		
Held for sale:										
Commerce Executive [(4)]	—	13,401	58,705	31,113	13,140	90,079	103,219	34,969		2017
	$ 2,144,652	$ 1,493,178	$ 2,665,033	$ 1,737,742	$ 1,385,014	$ 4,510,939	$ 5,895,953	$ 1,086,844		

Note: Depreciation of the buildings and improvements is calculated over lives ranging from the life of the lease to 40 years. The net basis of our assets and liabilities for tax reporting purposes is approximately $114.0 million lower than the amounts reported in our balance sheet as of December 31, 2018.

(1) Represents the contractual debt obligations.

(2) Includes asset impairments recognized, amounts written off in connection with redevelopment activities, partial sale of assets and the reclassification of the net book value of assets to construction in progress.

(3) Date of original construction, many assets have had substantial renovation or additional construction. See "Costs Capitalized Subsequent to Acquisition" column.

(4) In February 2019, we sold Commerce Executive for $115.0 million.

The following is a reconciliation of real estate and accumulated depreciation:

	Year Ended December 31, 2018	2017	2016
	(In thousands)		
Real Estate:			
Balance at beginning of the year	$ 6,025,797	$ 4,155,391	$ 4,038,206
Additions during the year:			
Land and improvements	19,431	428,702	—
Buildings and improvements	282,988	1,489,409	217,261
Held for sale	94,926	8,293	—
Less: Assets sold or written-off	(527,189)	(55,998)	(100,076)
Balance at end of the year	$ 5,895,953	$ 6,025,797	$ 4,155,391
Accumulated Depreciation:			
Balance at beginning of period	$ 1,011,330	$ 930,769	$ 908,233
Additions during the year:			
Additions charged to operating expenses	116,377	136,559	122,612

Held for sale	34,969	—	—
Less: Accumulated depreciation on assets sold or written-off	(75,832)	(55,998)	(100,076)
Balance at end of period	$ 1,086,844	$ 1,011,330	$ 930,769

(3) Exhibit Index

Exhibits	Description
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 our Registration Statement on Form 10, filed on June 12, 2017).
2.2	Amendment to Master Transaction Agreement, dated as of July 17, 2017, 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 our Current Report on Form 8-K, filed on July 21, 2017).
2.3	Agreement and Plan of Merger, dated as of July 17, 2017, by and between JBG/Fund VI Transferred, L.L.C. and JBGS/Fund VI OP Mergerco, L.L.C. (incorporated by reference to Exhibit 2.3 to our Current Report on Form 8-K, filed on July 21, 2017).
2.4	Agreement and Plan of Merger, dated as of July 17, 2017, by and between JBG/Fund VII Transferred, L.L.C. and JBGS/Fund VII OP Mergerco, L.L.C. (incorporated by reference to Exhibit 2.4 to our Current Report on Form 8-K, filed on July 21, 2017).
2.5	Agreement and Plan of Merger, dated as of July 17, 2017, by and between JBG/Fund IX Transferred, L.L.C. and JBGS/Fund IX OP Mergerco, L.L.C. (incorporated by reference to Exhibit 2.5 to our Current Report on Form 8-K, filed on July 21, 2017).
2.6	Contribution and Assignment Agreement, dated as of July 18, 2017, by and between JBG SMITH Properties LP and JBG/Fund VIII Legacy, L.L.C. (incorporated by reference to Exhibit 2.6 to our Current Report on Form 8-K, filed on July 21, 2017).
2.7	Contribution and Assignment Agreement, dated as of July 18, 2017, by and between JBG SMITH Properties LP and JBG/UDM Legacy, L.L.C. (incorporated by reference to Exhibit 2.7 to our Current Report on Form 8-K, filed on July 21, 2017).
2.8	Agreement and Plan of Merger, dated as of July 17, 2017, by and between JBG/Operating Partners, L.P. and JBGS/OP Mergerco, L.L.C. (incorporated by reference to Exhibit 2.8 to our Current Report on Form 8-K, filed on July 21, 2017).
2.9	Contribution and Assignment Agreement, dated as of July 18, 2017, by and between JBG Properties, Inc. and JBG SMITH Properties LP (incorporated by reference to Exhibit 2.9 to our Current Report on Form 8-K, filed on July 21, 2017).
2.10	Separation and Distribution Agreement, dated as of July 17, 2017, by and among Vornado Realty Trust, Vornado Realty L.P., JBG SMITH Properties and JBG SMITH Properties LP (incorporated by reference to Exhibit 2.2 to our Current Report on Form 8-K, filed on July 21, 2017).
3.1	Declaration of Trust of JBG SMITH Properties, as amended and restated (incorporated by reference to Exhibit 3.1 to our Current Report on Form 8-K, filed on July 21, 2017).
3.2	Articles Supplementary to Declaration of Trust of JBG SMITH Properties (incorporated by reference to Exhibit 3.1 to our Current Report on Form 8-K, filed on March 6, 2018).
3.3	Articles of Amendment to Declaration of Trust of JBG SMITH Properties (incorporated by reference to Exhibit 3.1 to our current report on Form 8-K, filed on May 3, 2018).
3.4	Amended and Restated Bylaws of JBG SMITH Properties (incorporated by reference to Exhibit 3.3 to our Annual Report on Form 10-K, filed on March 12, 2018).
10.1	First Amended and Restated Limited Partnership Agreement of JBG SMITH Properties LP, dated as of July 17, 2017 (incorporated by reference to Exhibit 10.1 to our Annual Report on Form 10-K, filed on March 12, 2018).
10.2	Tax Matters Agreement, dated as of July 17, 2017, by and between Vornado Realty Trust and JBG SMITH Properties (incorporated by reference to Exhibit 10.1 to our Current Report on Form 8-K, filed on July 21, 2017).
10.3	Employee Matters Agreement, dated as of July 17, 2017, by and between Vornado Realty Trust, Vornado Realty L.P., JBG SMITH Properties and JBG SMITH Properties LP (incorporated by reference to Exhibit 10.2 to our Current Report on Form 8-K, filed on

July 21, 2017).

10.4 Transition Services Agreement, dated as of July 17, 2017, by and between Vornado Realty Trust and JBG SMITH Properties (incorporated by reference to Exhibit 10.3 to our Current Report on Form 8-K, filed on July 21, 2017).

Exhibits	Description
10.5	Credit Agreement, dated as of July 18, 2017, by and among JBG SMITH Properties LP, as Borrower, the financial institutions party thereto as lenders, and Wells Fargo Bank, National Association, as Administrative Agent (incorporated by reference to Exhibit 10.4 to our Current Report on Form 8-K, filed on July 21, 2017).
10.6	Registration Rights Agreement, dated as of July 18, 2017, by and among JBG SMITH Properties and the holders listed on Schedule I thereto (for holders of common shares of JBG SMITH Properties received in the combination) (incorporated by reference to Exhibit 10.5 to our Current Report on Form 8-K, filed on July 21, 2017).
10.7	Registration Rights Agreement, dated as of July 18, 2017, by and among JBG SMITH Properties and the holders listed on Schedule I thereto (for holders of OP Units of JBG SMITH LP received in the combination) (incorporated by reference to Exhibit 10.6 to our Current Report on Form 8-K, filed on July 21, 2017).
10.8†	Form of JBG SMITH Properties Unit Issuance Agreement (incorporated by reference to Exhibit 10.7 to our Current Report on Form 8-K, filed on July 21, 2017).
10.9†	JBG SMITH Properties Non-Employee Trustee Unit Issuance Agreement, dated July 18, 2017, by and among, JBG SMITH Properties, JBG SMITH Properties LP, Michael J. Glosserman and Glosserman Family JBG Operating, L.L.C. (incorporated by reference to Exhibit 10.8 to our Current Report on Form 8-K, filed on July 21, 2017).
10.10†	Amended and Restated Employment Agreement, dated as of June 16, 2017, by and between JBG SMITH Properties and W. Matthew Kelly (incorporated by reference to Exhibit 10.5 to our Registration Statement on Form 10, filed on June 21, 2017).
10.11†	Amended and Restated Employment Agreement, dated as of June 16, 2017, by and between JBG SMITH Properties and David P. Paul (incorporated by reference to Exhibit 10.7 to our Registration Statement on Form 10, filed on June 21, 2017).
10.12†	Amended and Restated Employment Agreement, dated as of June 16, 2017, by and between JBG SMITH Properties and Robert A. Stewart (incorporated by reference to Exhibit 10.10 to our Registration Statement on Form 10, filed on June 21, 2017).
10.13†	Employment Agreement, dated as of July 17, 2017, by and between JBG SMITH Properties and Stephen W. Theriot (incorporated by reference to Exhibit 10.11 to our Current Report on Form 8-K, filed on July 21, 2017).
10.14†**	Employment Agreement, dated as of February 21, 2019, by and between JBG SMITH Properties and Madumita Moina Banerjee.
10.15†	Form of Indemnification Agreement between JBG SMITH Properties and each of its trustees and executive officers (incorporated by reference to Exhibit 10.12 to our Current Report on Form 8-K, filed on July 21, 2017).
10.16†	Formation Unit Grant Letter, dated as of October 31, 2016, by and between JBG SMITH Properties and Steven Roth (incorporated by reference to Exhibit 10.15 to our Registration Statement on Form 10, filed on January 24, 2017).
10.17†	Consulting Agreement, dated as of March 10, 2017, by and between JBG SMITH Properties and Mitchell Schear (incorporated by reference to Exhibit 10.16 to our Registration Statement on Form 10, filed on June 12, 2017).
10.18†	JBG SMITH Properties 2017 Employee Share Purchase Plan (incorporated by reference to Exhibit 10.9 to our Current Report on Form 8-K, filed on July 21, 2017).
10.19	Amendment No. 1 to the JBG SMITH Properties 2017 Employee Share Purchase Plan, effective January 1, 2018 (incorporated by reference to Exhibit 10.20 to our Annual Report on Form 10-K, filed on March 12, 2018).
10.20†	JBG SMITH Properties 2017 Omnibus Share Plan (incorporated by reference to Exhibit 10.10 to our Current Report on Form 8-K, filed on July 21, 2017).
10.21†	Form of JBG SMITH Properties Formation Unit Agreement (incorporated by reference to Exhibit 10.18 to our Registration Statement on Form 10, filed on June 12, 2017).
10.22†	Form of JBG SMITH Properties Formation Unit Agreement for Non-Employee Trustees (incorporated by reference to Exhibit 10.19 to our Registration Statement on Form 10, filed on June 12, 2017).
10.23†	Form of JBG SMITH Properties Restricted LTIP Unit Agreement (incorporated by reference to Exhibit 10.20 to our Registration Statement on Form 10, filed on June 12, 2017).
10.24†	Form of JBG SMITH Properties Performance LTIP Unit Agreement (incorporated by reference to Exhibit 10.21 to our Registration Statement on Form 10, filed on June 12, 2017).

Exhibits	Description
10.25	Form of 2018 Performance LTIP Unit Agreement (incorporated by reference to Exhibit 10.26 to our Annual Report on Form 10-K, filed on March 12, 2018).
10.26†	Form of JBG SMITH Properties Non-Employee Trustee Restricted LTIP Unit Agreement (incorporated by reference to Exhibit 10.22 to our Registration Statement on Form 10, filed on June 21, 2017).
10.27†	Form of JBG SMITH Properties Non-Employee Trustee Restricted Stock Agreement (incorporated by reference to Exhibit 10.23 to our Registration Statement on Form 10, filed on June 21, 2017).
10.28†	Form of JBG SMITH Properties Non-Employee Trustee Unit Issuance Agreement (incorporated by reference to Exhibit 10.24 to our Registration Statement on Form 10, filed on June 21, 2017).
10.29	Side Letter to Tax Matters Agreement, dated as of August 13, 2018, by and between Vornado Realty Trust and JBG SMITH Properties (incorporated by reference to Exhibit 10.1 to our Current Report on Form 10-Q filed on November 7, 2018.)
21.1**	List of Subsidiaries of the Registrant
23.1**	Consent of Independent Registered Public Accounting Firm
31.1**	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934, as amended and Section 302 of the Sarbanes-Oxley Act of 2002
31.2**	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934, as amended and Section 302 of the Sarbanes-Oxley Act of 2002
32.1**	Certification of Chief Executive Officer and Chief Financial Officer pursuant to Rule 13a-14(b) under the Securities Exchange Act of 1934, as amended and 18 U.S.C 1350, as created by Section 906 of the Sarbanes- Oxley Act of 2002
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema
101.CAL	XBRL Extension Calculation Linkbase
101.LAB	XBRL Extension Labels Linkbase
101.PRE	XBRL Taxonomy Extension Presentation Linkbase
101.DEF	XBRL Taxonomy Extension Definition Linkbase

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** Filed herewith.

† Denotes a management contract or compensatory plan, contract or arrangement.

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.

JBG SMITH Properties

Date: February 26, 2019

/s/ Stephen W. Theriot
Stephen W. Theriot

Chief Financial Officer
(Principal Financial and 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:

SIGNATURE	TITLE	DATE
/s/ Steven Roth Steven Roth	Chairman of the Board	February 26, 2019
/s/ Robert Stewart Robert Stewart	Executive Vice Chairman	February 26, 2019
/s/ W. Matthew Kelly W. Matthew Kelly	Chief Executive Officer	February 26, 2019
/s/ Stephen W. Theriot Stephen W. Theriot	Chief Financial Officer (Principal Financial and Accounting Officer)	February 26, 2019
/s/ Scott Estes Scott Estes	Trustee	February 26, 2019
/s/ Alan Forman Alan Forman	Trustee	February 26, 2019
/s/ Michael J. Glosserman Michael J. Glosserman	Trustee	February 26, 2019
/s/ Charles E. Haldeman, Jr. Charles E. Haldeman, Jr.	Trustee	February 26, 2019
/s/ Carol Melton Carol Melton	Trustee	February 26, 2019
/s/ William Mulrow William Mulrow	Trustee	February 26, 2019
/s/ Mitchell N. Schear Mitchell N. Schear	Trustee	February 26, 2019
/s/ Ellen Shuman Ellen Shuman	Trustee	February 26, 2019
/s/ John F. Wood John F. Wood	Trustee	February 26, 2019

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Section 2: EX-10.14 (EXHIBIT 10.14)

Exhibit 10.14

EMPLOYMENT AGREEMENT

Employment Agreement (the "Agreement"), dated as of February 21, 2019, by and between JBG SMITH Properties, a Maryland real estate investment trust (together with its affiliates, the "Company"), with its principal offices in Chevy Chase, Maryland and Madhumita Moina Banerjee ("Executive").

Recitals

Executive is currently employed by the Company; and

The Company and Executive desire to set forth the terms of Executive's continued employment.

NOW, THEREFORE, in consideration of the mutual covenants set forth below, the parties hereby agree as follows:

Agreement

1. Employment. The Company hereby agrees to continue to employ Executive, and Executive hereby accepts such continued employment, on the terms and conditions hereinafter set forth.

2. Term. The term of Executive's employment hereunder by the Company will commence on the date hereof (the "Effective Date") and will continue until July 18, 2020(the "Initial Period"). On the expiration of the Initial Period, the term will automatically renew for one year periods unless either party notifies in writing the other party of nonrenewal at least 180 days prior to the renewal date (the Initial Period and any subsequent renewal periods, the "Employment Period").

3. Position and Duties. During the Employment Period, Executive will serve as Executive Vice President and Head of Capital Markets of the Company and will report to the Company's Chief Executive Officer. Executive will have those powers and duties normally associated with the position of Executive Vice President and Head of Capital Markets and such other powers and duties as may be reasonably prescribed by or at direction of the Chief Executive Officer or the board of trustees of the Company (the "Board"), provided that such other powers and duties are consistent with Executive's position as Executive Vice President and Head of Capital Markets of the Company. Executive will devote substantially all of her working time, attention and energies during normal business hours (other than absences due to illness or vacation) to the performance of her duties for the Company and its affiliates. Without the consent of the Board, during the Employment Period, Executive will not serve on the board of directors, trustees or any similar governing body of more than one for-profit entity (with the exception of any entity which has been disclosed to the Company on a list provided to the Company by Executive coincident with the execution of this Agreement). Notwithstanding the above, Executive will be permitted, to the extent such activities do not substantially interfere with the performance by Executive of her duties and responsibilities hereunder or violate Section 11(a), (b) or (c) of this Agreement, to (i) manage Executive's (and her immediate family's) personal, financial and legal affairs, and (ii) serve on civic or charitable boards or committees (it being expressly understood and agreed that Executive's continuing to serve on the board and/or committees on which Executive is serving, or with which Executive is otherwise associated, as of the Effective Date (each of which has been disclosed to the Company on a list provided to the Company by Executive coincident with the execution of this Agreement), will be deemed not to interfere with the performance by Executive of her duties and responsibilities under this Agreement).

4. Place of Performance. The place of employment of Executive will be at the Company's offices in the Washington D.C. metropolitan area.

5. Compensation and Related Matters.

(a) *Base Salary*. During the Employment Period, the Company will pay Executive a base salary at the rate of not less than $375,000 per year ("Base Salary"). Executive's Base Salary will be paid in approximately equal installments in accordance with the Company's customary payroll practices. Executive's Base Salary shall be reviewed at last annually for possible increase, but not decrease. If Executive's Base Salary is increased by the Company, such increased Base Salary will then constitute the Base Salary for all purposes of this Agreement.

(b) *Annual Bonus*. During the Employment Period, Executive will be entitled to receive an annual bonus ("Annual Bonus") of the greater of $425,000 or 100% of Base Salary at target performance, with the actual amount earned payable in cash. Such bonus shall be paid no later than March 15th of the year following the year in which it was earned.

(c) *Annual Long-Term Incentive Awards*.

(i) Prior to the date hereof, Executive received certain grants of long-term incentive partnership units ("LTIP Units") and outperformance plan units ("OPP Units") under the Company's long-term incentive compensation plan (the "LTI Plan"), which grants have such terms and conditions as set forth in the applicable award agreements issued pursuant to the LTI Plan.

(ii) The amount of future grants and the terms of such grants will be determined in the sole discretion of the Compensation Committee of the Board.

(d) *Initial Formation Award*. Prior to the date hereof, the Company granted Executive certain initial formation partnership units (in the form of profits interests which provide for a share of appreciation above the fair market value on the grant date) (the "Initial Formation Award"). The Initial Formation Award has such terms and conditions as set forth in the applicable award agreement issued pursuant to the LTI Plan. Notwithstanding this paragraph 5(d), the parties acknowledge and agree that, if applicable tax laws change such that the Initial Formation Award becomes taxable to Executive as ordinary income, the Initial Formation Award may be restructured by the Company in a way that permits the Company a tax deduction while preserving substantially similar pre-tax economics to Executive.

(e) *Welfare, Pension and Incentive Benefit Plans*. During the Employment Period, Executive will be entitled to participate in such 401(k) and employee welfare and benefit plans and programs of the Company as are made available to the Company's senior level executives or to its employees generally, as such plans or programs may be in effect from time to time, including, without limitation, health, medical, dental, long-term disability and life insurance plans.

(f) *Expenses*. The Company will promptly reimburse Executive for all reasonable business expenses upon the presentation of reasonably itemized statements of such expenses in accordance with the Company's policies and procedures now in force or as such policies and procedures may be modified with respect to all senior executive officers of the Company.

(g) *Vacation*. Executive will be entitled to vacation in accordance with the Company's vacation policy as in effect from time to time.

6. Reasons for Termination. Executive's employment hereunder may or will be terminated during the Employment Period under the following circumstances:

(a) *Death*. Executive's employment hereunder will terminate upon her death.

(b) *Disability*. If, as a result of Executive's incapacity due to physical or mental illness, Executive shall have been substantially unable to perform her duties hereunder for a continuous period of 180 days, and within 30 days after written Notice of Termination is given after such 180-day period, Executive shall not have returned to the substantial performance of her duties on a full-time basis, the Company may terminate Executive's employment hereunder for "Disability". During any period that Executive fails to perform her duties hereunder as a result of incapacity due to physical or mental illness, Executive will continue to receive her full Base Salary set forth in Section 5(a) until her employment terminates.

(c) *Cause*. The Company may terminate Executive's employment for Cause. For purposes of this Agreement, the Company will have "Cause" to terminate Executive's employment upon Executive's:

(i) conviction of, or plea of guilty or nolo contendere to, a felony;

(ii) willful and continued failure to use reasonable best efforts to substantially perform her duties hereunder (other than such failure resulting from Executive's incapacity due to physical or mental illness) that Executive fails to remedy within 30 days after written notice is delivered by the Company to Executive that specifically identifies in reasonable detail the manner in which the Company believes Executive has not used reasonable efforts to perform in all material respects her duties hereunder; or

(iii) willful misconduct (including, but not limited to, a willful breach of the provisions of Section 11) that is materially economically injurious to the Company.

For purposes of this Section 6(c), no act, or failure to act, by Executive will be considered "willful" unless committed in bad faith and without a reasonable belief that the act or omission was in the best interests of the Company.

(d) *Good Reason*. Executive may terminate her employment with "Good Reason" within 120 days after Executive has actual knowledge of the occurrence, without the written consent of Executive, of one of the following events that has not been cured within 30 days after written notice thereof has been given by Executive to the Company setting forth in reasonable detail the basis of the event (provided that such notice must be given to the Company within 60 days of Executive becoming aware of such condition):

(i) a reduction by the Company in Executive's Base Salary or target Annual Bonus under this Agreement;

(ii) a material diminution in Executive's position, authority, duties or responsibilities or the assignment of duties materially and adversely inconsistent with Executive's position as Executive Vice President and Head of Capital Markets;

(iii) a relocation of Executive's location of employment to a location outside of the Washington D.C. metropolitan area; or

(iv) the Company's material breach of any provision of this Agreement or any equity agreement, which will be deemed to include (a) Executive not holding the title of Executive Vice President and Head of Capital Markets of the Company, (b) failure of a successor to the Company to assume this Agreement in accordance with Section 13(a) below and (c) a material change in Executive's reporting relationship such that Executive no longer reports directly to the Company's Chief Executive Officer.

Executive's continued employment during the 90-day period referred to above in this paragraph (d) shall not constitute consent to, or a waiver of rights with respect to, any act or failure to act constituting Good Reason hereunder. Executive's right to terminate her employment hereunder for Good Reason shall not be affected by her incapacity due to physical or mental illness.

(e) *Without Cause*. The Company may terminate Executive's employment hereunder without Cause by providing Executive with a Notice of Termination (as defined in Section 7). This means that, notwithstanding this Agreement, Executive's employment with the Company will be "at will."

(f) *Without Good Reason*. Executive may terminate her employment hereunder without Good Reason by providing the Company with a Notice of Termination.

7. Termination Procedure.

(a) *Notice of Termination*. Any termination of Executive's employment by the Company or by Executive during the Employment Period (other than termination pursuant to Section 6(a)) will be communicated by written Notice of Termination to the other party hereto in accordance with Section 14. For purposes of this Agreement, a "Notice of Termination" means a notice which shall indicate the specific termination provision in this Agreement relied upon and shall set forth in reasonable detail the facts and circumstances claimed to provide a basis for termination of Executive's employment under the provision so indicated if the termination is based on Sections 6(b), (c) or (d).

(b) *Date of Termination*. "Date of Termination" means (i) if Executive's employment is terminated by her death, the date of her death, (ii) if Executive's employment is terminated pursuant to Section 6(b) (Disability), 30 days after Notice of Termination (provided that Executive shall not have returned to the substantial performance of her duties on a full-time basis during such 30-day period), (iii) upon notice to Executive of the Company's intention to not renew the term of this Agreement, pursuant to Section 2, the last day of the Employment Period, and (iv) if Executive's employment terminates for any other reason, the date on which a Notice of Termination is given or any later date (within 30 days after the giving of such notice) set forth in such Notice of Termination; provided, however, that if such termination is due to a Notice of Termination by Executive, the Company shall have the right to accelerate such notice and make the Date of Termination the date of the Notice of Termination or such other date prior to Executive's intended Date of Termination as the Company deems appropriate, which acceleration shall in no event be deemed a termination by the Company without Cause or constitute Good Reason.

(c) *Removal from any Boards and Position*. Upon the termination of Executive's employment with the Company for any reason, she shall be deemed to resign (i) from the board of trustees or directors of any subsidiary of the Company and/or any other board to which she has been appointed or nominated by or on behalf of the Company (including the Board), and (ii) from any position with the Company or any subsidiary of the Company, including, but not limited to, as an officer and trustee or director of the Company and any of its subsidiaries.

8. Compensation upon Termination. This Section provides the payments and benefits to be paid or provided to Executive as a result of her termination of employment. Except as provided in this Section 8, Executive shall not be entitled to anything further from the Company as a result of the termination of her employment, regardless of the reason for such termination.

(a) *Termination for Any Reason*. Following the termination of Executive's employment, regardless of the reason for such termination and including, without limitation, a termination of her employment by the Company for Cause or by Executive without Good Reason or upon expiration of the Employment Period, the Company will:

(i) pay Executive (or her estate in the event of her death) as soon as practicable following the Date of Termination (A) any earned but unpaid Base Salary and (B) any accrued and unused vacation pay to the extent provided by the Company's vacation policy as in effect from time to time, through the Date of Termination;

(ii) reimburse Executive as soon as practicable following the Date of Termination for any amounts due Executive pursuant to Section 5(f) (unless such termination occurred as a result of misappropriation of funds); and

(iii) provide Executive with any compensation and/or benefits as may be due or payable to Executive in accordance with the terms and provisions of any employee benefit plans or programs of the Company.

Upon any termination of Executive's employment hereunder, except as otherwise provided herein, Executive (or her beneficiary, legal representative or estate, as the case may be, in the event of her death) shall be entitled to such rights in respect of any equity awards theretofore made to Executive, and to only such rights, as are provided by the plan or the award agreement pursuant to which such equity awards have been granted to Executive or other written agreement or arrangement between Executive and the Company, provided that all vested profits interests (including any vested portion of the Initial Formation Award) shall remain exchangeable for common partnership units and all vested stock options shall remain exercisable for 60 days following the Date of Termination (or if earlier, through the expiration of the scheduled term of such award).

(b) *Termination by Company without Cause or by Executive for Good Reason*. If Executive's employment is terminated by the Company without Cause or by Executive for Good Reason, Executive will be entitled to the payments and benefits provided in Section 8(a) hereof and, in addition, the Company will, subject to the following paragraph, pay to Executive (i) the Severance Amount, (ii) the Pro Rata Bonus, (iii) the Medical Benefits, (iv) the Equity Vesting Benefits, and (v) any unpaid Annual Bonus for the year preceding the year of termination if the relevant measurement period for such bonus concluded prior to the Date of Termination (the "Unpaid Prior Year Bonus").

(i) The "Severance Amount" will be equal to:

(A) if such termination is following the execution of a definitive agreement the consummation of which would result in, or within two years following, a Change in Control of the Company (and such Change in Control does in fact occur) (a "Qualifying CIC Termination"), two times the sum of Executive's: (x) current Base Salary, and (y) target Annual Bonus, payable in a lump sum within 60 days after the Date of Termination; or

(B) if such termination is not a Qualifying CIC Termination, one times the sum of Executive's (x) current Base Salary, and (y) target Annual Bonus, payable in equal installments over 12 months in accordance with the Company's regular payroll procedures, commencing within 60 days after the Date of Termination.

(ii) The "Pro Rata Bonus" will be equal to:

(A) if such termination is a Qualifying CIC Termination, Executive's target Annual Bonus for the year of termination, paid in a lump sum within 60 days after the Date of Termination; or

(B) if such termination is not a Qualifying CIC Termination, Executive's Annual Bonus earned in the year of termination based on actual performance, paid at the time bonuses are paid to similarly situated employees of the Company;
in either case such amount will be prorated based on the number of days in the year up to and including the Date of Termination and divided by 365.

(iii) The "Medical Benefits" require the Company to provide Executive medical insurance coverage substantially identical to that provided to other senior executives of the Company (which may be provided pursuant to the Consolidated Omnibus Budget Reconciliation Act) for (A) if such termination is a Qualifying CIC Termination, two years following the Termination Date or (B) if such termination is not a Qualifying CIC Termination, 18 months following the

Termination Date. If this agreement to provide benefits continuation raises any compliance issues or impositions of penalties under the Patient Protection and Affordable Care Act or other applicable law, then the parties agree to modify this Agreement so that it complies with the terms of such laws without impairing the economic benefit to Executive.

(iv) The "Equity Vesting Benefits" mean:

(A) if such termination is a Qualifying CIC Termination, vesting of all outstanding unvested equity-based awards (including the Initial Formation Award) on the Date of Termination (with OPP Units and other awards with performance-vesting conditions measured at performance specified in the applicable award agreement); or

(B) if such termination is not a Qualifying CIC Termination, (i) vesting of any outstanding unvested portion of the Initial Formation Award, (ii) vesting of a prorated portion of any OPP Units and other performance-based awards scheduled to vest on the next vesting date based on the number of days completed in the vesting cycle then in process for such awards up to and including the Date of Termination divided by the total number of days in such vesting cycle, with performance-vesting conditions measured at performance specified in the award agreement (e.g., if 300 units were granted on January 1, 2018, the award vests in three annual installments, and the Date of Termination is July 1, 2019, then 50% of the 100 units that would vest on January 1, 2020 will vest (if earned based on performance) and the remaining unvested units will be forfeited) and (iii) full vesting of any outstanding unvested LTIP Units and other equity awards without performance-vesting conditions (excluding the Initial Formation Award);

(v) and, in either case, all vested profits interests shall remain exchangeable for common partnership units and all vested stock options shall remain exercisable for 60 days following the Date of Termination (or if earlier, through the expiration of the scheduled term of such award).

(vi) "Change in Control" shall mean:

(A) Any individual, entity or group (within the meaning of Section 13(d)(3) or 14(d)(2) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")) (a "Person") becomes the beneficial owner (within the meaning of Rule 13d-3 promulgated under the Exchange Act) of 30% or more of either (1) the then-outstanding shares of common stock of the Company (the "Outstanding Company Common Stock") or (2) the combined voting power of the then-outstanding voting securities of the Company entitled to vote generally in the election of trustees (the "Outstanding Company Voting Securities"); provided, however, that, for purposes of this Section 8(b)(v), the following acquisitions shall not constitute a Change of Control: (i) any acquisition directly from the Company, (ii) any acquisition by the Company, (iii) any acquisition by any employee benefit plan (or related trust) sponsored or maintained by the Company or any of its affiliates or (iv) any acquisition by any corporation pursuant to a transaction that complies with Sections 8(b)(v)(C)(1), 8(b)(v)(C)(2) and 8(b)(v)(C)(3);

(B) Any time at which individuals who, as of the date hereof, constitute the Board (the "Incumbent Board") cease for any reason to constitute at least a majority of the Board; provided, however, that any individual becoming a trustee subsequent to the date hereof whose election, or nomination for election by the Company's stockholders, was approved by a vote of at least a majority of the trustees then comprising the Incumbent Board shall be considered as though such individual were a member of the Incumbent Board, but excluding, for this purpose, any such individual whose initial assumption of office occurs as a result of an actual or threatened election contest with respect to the election or removal of trustees or other actual or threatened solicitation of proxies or consents by or on behalf of a Person other than the Board;

(C) Consummation of a reorganization, merger, statutory share exchange or consolidation or similar transaction involving the Company or any of its subsidiaries, a sale or other disposition of all or substantially all of the assets of the Company, or the acquisition of assets or stock of another entity by the Company or any of its subsidiaries (each, a "Business Combination"), in each case unless, following such Business Combination, (1) all or substantially all of the individuals and entities that were the beneficial owners of the Outstanding Company Common Stock and the Outstanding Company Voting Securities immediately prior to such Business Combination beneficially own, directly or indirectly, more than 50% of the then-outstanding shares of common stock and the combined voting power of the then-outstanding voting securities entitled to vote generally in the election of directors or trustees, as the case may be, of the corporation resulting from such Business Combination (including, without limitation, a corporation that, as a result of such transaction, owns the Company or all or substantially all of the Company's assets either directly or through one or more subsidiaries) in substantially the same proportions as their ownership immediately prior to such Business Combination of the Outstanding Company Common Stock and the

Outstanding Company Voting Securities, as the case may be, (2) no Person (excluding any corporation resulting from such Business Combination or any employee benefit plan (or related trust) of the Company or such corporation resulting from such Business Combination) beneficially owns, directly or indirectly, 30% or more of, respectively, the then-outstanding shares of common stock of the corporation resulting from such Business Combination or the combined voting power of the then-outstanding voting securities of such corporation, except to the extent that such ownership existed prior to the Business Combination, and (3) at least a majority of the members of the board of directors or trustees of the corporation resulting from such Business Combination were members of the Incumbent Board at the time of the execution of the initial agreement or of the action of the Board providing for such Business Combination; or

(D) Approval by the stockholders of the Company of a complete liquidation or dissolution of the Company.

As a condition to the payments and other benefits pursuant to Section 8(b), Executive must execute a separation and general release agreement in the form attached hereto as Exhibit A (the "Release"), which must become effective within 55 days following the Date of Termination; provided, however, that if Executive's Date of Termination occurs on or after November 1 of a given calendar year, any such payments (except as provided in Section 8(b)(ii)(B)) shall, subject to Section 9 hereof, be paid (or commence to be paid) in January of the immediately following calendar year.

(c) *Disability*. In the event Executive's employment is terminated for Disability pursuant to Section 6(b), Executive will be entitled to the payments and benefits provided in Section 8(a) hereof and (i) vesting of any outstanding unvested portion of the Initial Formation Award, (ii) vesting of a prorated portion of any outstanding unvested OPP Units scheduled to vest on the next vesting date (if earned pursuant to the terms and conditions of the award agreement) based on the number of days completed in the vesting cycle then in process for such awards up to and including the Date of Termination divided by the total number of days in such vesting cycle, (iii) vesting of all outstanding unvested LTIP Units, (iv) the Pro Rata Bonus and (v) the Unpaid Prior Year Bonus (collectively, the "Death and Disability Vesting Benefits").

(d) *Death*. If Executive's employment is terminated by her death, Executive's beneficiary, legal representative or estate, as the case may be, will be entitled to the payments and benefits provided in Section 8(a) hereof and the Death and Disability Vesting Benefits.

(e) *Nonrenewal of the Agreement by the Company*. Upon notice to Executive of the Company's intention to not renew the term of this Agreement, pursuant to Section 2, and conditioned upon the execution by Executive of the Release, which must become effective within 55 days following the Date of Termination, Executive shall be entitled to receive (i) an amount equal to one times the sum of Executive's (x) current Base Salary, and (y) target Annual Bonus, payable in equal installments over 12 months in accordance with the Company's regular payroll procedures, commencing within 60 days after the Date of Termination, (ii) the Pro Rata Bonus, (iii) the Equity Vesting Benefits and (iv) the Unpaid Prior Year Bonus. Notwithstanding the foregoing, if upon mutual agreement with Executive to continue Executive's employment with the Company, the Company repudiates the notice described in the preceding sentence, Executive shall not be entitled to any payments described in this Section 8(e). For the avoidance of doubt, following a nonrenewal of the Agreement by the Company, Executive shall continue to be subject to those provisions that survive the termination of this Agreement, including without limitation, those provided in Section 11.

9. 409A and Termination. Notwithstanding the foregoing, if necessary to comply with the restriction in Section 409A(a)(2)(B) of the Internal Revenue Code of 1986, as amended (the "Code") concerning payments to "specified employees" (as defined in Section 409A of the Code and applicable regulations thereunder, "Section 409A") any payment on account of Executive's separation from service that would otherwise be due hereunder within six months after such separation shall nonetheless be delayed until the first business day of the seventh month following Executive's date of termination and the first such payment shall include the cumulative amount of any payments that would have been paid prior to such date if not for such restriction, together with interest on such cumulative amount during the period of such restriction at a rate, per annum, equal to the applicable federal short-term rate (compounded monthly) in effect under Section 1274(d) of the Code on the Date of Termination. Notwithstanding anything contained herein to the contrary, Executive shall not be considered to have terminated employment with the Company for purposes of Section 8 hereof unless she would be considered to have incurred a "separation from service" from the Company within the meaning of Section 409A.

10. Section 280G. In the event that any payments or benefits otherwise payable to Executive, whether or not pursuant to this Agreement, (1) constitute "parachute payments" within the meaning of Section 280G of the Code, and (2) but for this Section 10, would be subject to the excise tax imposed by Section 4999 of the Code, then such payments and benefits will be either (x) delivered in full, or (y) delivered as to such lesser extent that would result in no portion of such payments and benefits being subject

to excise tax under Section 4999 of the Code, whichever of the foregoing amounts, taking into account the applicable federal, state and local income and employment taxes and the excise tax imposed by Section 4999 of the Code (and any equivalent state or local excise taxes), results in the receipt by Executive on an after-tax basis, of the greatest amount of benefits, notwithstanding that all or some portion of such payments and benefits may be taxable under Section 4999 of the Code. Unless the Company and Executive otherwise agree in writing, any determination required under this Section 10 will be made in writing by a nationally-recognized accounting or consulting firm selected by the Company in its discretion (the "Accountants"), whose determination will be conclusive and binding upon Executive and the Company for all purposes, other than in the event of manifest error. The Company shall request the Accountants to perform all necessary calculations promptly in connection with the applicable Change in Control or termination of employment. For purposes of making the calculations required by this Section 10, the Accountants may make reasonable assumptions and approximations concerning applicable taxes and may rely on reasonable, good faith interpretations concerning the application of Sections 280G and 4999 of the Code. The Company and Executive agree to furnish to the Accountants such information and documents as the Accountants may reasonably request in order to make a determination under this provision. The Company will bear all costs the Accountants may reasonably incur in connection with any calculations contemplated by this provision. Any reduction in payments and/or benefits required by this provision will occur in the following order: (1) reduction of cash payments; (2) reduction of vesting acceleration of equity awards; and (3) reduction of other benefits paid or provided to Executive. In the event that acceleration of vesting of equity awards is to be reduced, such acceleration of vesting will be cancelled in the reverse order of the date of grant for equity awards. If two or more equity awards are granted on the same date, each award will be reduced on a pro-rata basis. To the extent requested by Executive, the Company shall cooperate with Executive in good faith in valuing, and the Accountants shall take into account the value of, services to be provided by Executive (including Executive agreeing to refrain from performing services pursuant to a covenant not to compete) before, on or after the date of the transaction which causes the application of Section 280G of the Code such that payments in respect of such services may be considered to be "reasonable compensation" within the meaning of Q&A-9 and Q&A-40 to Q&A 44 of the final regulations under Section 280G of the Code and/or exempt from the definition of the term "parachute payment" within the meaning of Q&A-2(a) of such final regulations in accordance with Q&A-5(a) of such final regulations.

11. Confidential Information, Ownership of Documents; Non-Competition; Non-Solicitation.

(a) *Confidential Information*. During the Employment Period and thereafter, Executive shall hold in a fiduciary capacity for the benefit of the Company all trade secrets and confidential information, knowledge or data relating to the Company and its businesses and investments, which shall have been obtained by Executive during Executive's employment by the Company and which is not generally available public or industry knowledge (other than by acts by Executive in violation of this Agreement). Except as may be required or appropriate in connection with her carrying out her duties under this Agreement, Executive shall not, without the prior written consent of the Company or as may otherwise be required by law or any legal process, any statutory obligation or order of any court or statutory tribunal of competent jurisdiction, or as requested by a governmental or administrative agency, or as is necessary in connection with any adversarial proceeding against the Company (in which case Executive shall use her reasonable best efforts in cooperating with the Company (at the Company's expense) in obtaining a protective order against disclosure by a court of competent jurisdiction), communicate or divulge any such trade secrets, information, knowledge or data to anyone other than the Company and those designated by the Company or on behalf of the Company in the furtherance of its business or to perform duties hereunder. For the avoidance of doubt, nothing in this Agreement is intended to impair Executive's rights to make disclosures under any applicable Federal whistleblower law.

(b) *Removal of Documents; Rights to Products*. Executive may not remove any records, files, drawings, documents, models, equipment, and the like relating to the Company's business from the Company's premises without its written consent, unless such removal is in the furtherance of the Company's business or is in connection with Executive's carrying out her duties under this Agreement and, if so removed, they will be returned to the Company promptly after termination of Executive's employment hereunder, or otherwise promptly after removal if such removal occurs following termination of employment. Executive shall and hereby does assign to the Company all rights to trade secrets and other products relating to the Company's business developed by her alone or in conjunction with others at any time while employed by the Company. In the event of any conflict between the provision of this paragraph and of any applicable employee manual or similar policy of the Company, the provisions of this paragraph will govern.

(c) *Protection of Business*. During the Employment Period and until the later of (1)(i) the expiration of the Initial Term and (ii) the first anniversary of the applicable Date of Termination, Executive will not (x) engage in any Competing Business (as defined below) or pursue or attempt to develop any project known to Executive and which the Company is pursuing, developing or attempting to develop as of the Date of Termination (a "Project"), directly or indirectly, alone, in association with or as a shareholder, principal, agent, partner, officer, director, employee or consultant of any other organization or (y) divert to any entity which is engaged in any business conducted by the Company any Project, corporate opportunity or any customer of the Company; and (2)(A) the expiration of the Initial Term and (B) the second anniversary of the applicable Date of Termination, Executive will not solicit any officer, employee (other than secretarial staff) or exclusive or primary consultant of the Company to leave the employ of the Company. Notwithstanding the preceding sentence, Executive shall not be prohibited from owning less than 1% percent of any publicly-traded corporation, whether or not such corporation is in competition with the Company or from owning any passive investment in a hedge fund, private equity fund or similar instrument that, at the time of Executive's acquisition, did not to Executive's knowledge (after reasonable inquiry) hold any investment in any Competing Business (as defined below); provided, that, Executive shall be permitted to invest in mutual funds or ETFs so long as such funds or ETFs are not invested primarily in real estate investment trusts. If, at any time, the provisions of this Section 11(c) shall be determined to be invalid or unenforceable, by reason of being vague or unreasonable as to duration or scope of activity, this Section 11(c) shall be considered divisible and shall become and be immediately amended to only such duration and scope of activity as shall be determined to be reasonable and enforceable by the court or other body having jurisdiction over the matter; and Executive agrees that this Section 11(c) as so amended shall be valid and binding as though any invalid or unenforceable provision had not been included herein. "Competing Business" means any business the primary business of which is being engaged in by the Company in the Washington, D.C. metropolitan area as a principal business as of the Date of Termination (including, without limitation, the development, owning and operating of commercial real estate and the acquisition and disposition of commercial real estate for the purpose of development, owning and operating such real estate).

(d) *Injunctive Relief*. In addition to any other remedy available to the Company under applicable law, in the event of a breach or threatened breach of this Section 11, Executive agrees that the Company shall be entitled to seek injunctive relief in a court of appropriate jurisdiction to remedy any such breach or threatened breach, Executive acknowledging that damages would be inadequate and insufficient.

(e) *Forfeiture of Unvested Equity Awards*. In the event that Executive breaches Section 11(a), 11(b) or 11(c), Executive will forfeit her rights to payment or benefits under all outstanding unvested equity awards including any shares, partnership equity or profits interests to be issued in respect thereof.

(f) *Continuing Operation*. Except as specifically provided in this Section 11, the termination of Executive's employment or of this Agreement shall have no effect on the continuing operation of this Section 11.

12. Indemnification.

(a) The Company agrees that if Executive is made a party to or threatened to be made a party to or is requested to be made a witness in any action, suit or proceeding, whether civil, criminal, administrative or investigative (a "Proceeding"), by reason of the fact that Executive is or was a trustee, director or officer of the Company or is or was serving at the request of the Company or any subsidiary or either thereof as a trustee, director, officer, member, employee or agent of another corporation or a partnership, joint venture, trust or other enterprise, including, without limitation, service with respect to employee benefit plans, whether or not the basis of such Proceeding is alleged action in an official capacity as a trustee, director, officer, member, employee or agent while serving as a trustee, director, officer, member, employee or agent, Executive shall be indemnified and held harmless by the Company to the fullest extent authorized by applicable law (including the advancement of applicable, reasonable legal fees and expenses), as the same exists or may hereafter be amended, against all liabilities, costs, fees and other expenses incurred or suffered by Executive in connection therewith, and such indemnification shall continue as to Executive even if Executive has ceased to be an officer, director, trustee or agent, or is no longer employed by the Company and shall inure to the benefit of her heirs, executors and administrators.

(b) Executive will be entitled to coverage under the Company's directors' and officers' liability insurance policy on substantially the same terms as for the Company's other officers.

13. Successors; Binding Agreement.

(a) *Company's Successors*. No rights or obligations of the Company under this Agreement may be assigned or transferred except that the Company will require any successor (whether direct or indirect, by purchase, merger, consolidation or otherwise) to all or substantially all of the business and/or assets of the Company to expressly assume and agree to perform this Agreement in the same manner and to the same extent that the Company would be required to perform it if no such succession had taken place.

(b) *Executive's Successors*. No rights or obligations of Executive under this Agreement may be assigned or transferred by Executive other than her rights to payments or benefits hereunder, which may be transferred only by will or the laws of descent and distribution. If Executive should die following her Date of Termination while any amounts would still be payable to her hereunder if she had continued to live, all such amounts unless otherwise provided herein shall be paid in accordance with the terms of this Agreement to such person or persons so appointed in writing by Executive, or otherwise to her legal representatives or estate.

14. Notice. For the purposes of this Agreement, notices, demands and all other communications provided for in this Agreement shall be in writing and shall be deemed to have been duly given when delivered either personally or by United States certified or registered mail, return receipt requested, postage prepaid, addressed as follows:

If to Executive:

Address on file with the Company

If to the Company:

JBG SMITH Properties
4445 Willard Avenue, Suite 400
Chevy Chase, Maryland 20815
Attention: General Counsel

15. Resolution of Differences Over Breaches of Agreement. The parties shall use good faith efforts to resolve any controversy or claim arising out of, or relating to this Agreement or the breach thereof, first in accordance with the Company's internal review procedures, except that this requirement shall not apply to any claim or dispute under or relating to Section 11 of this Agreement. If despite their good faith efforts, the parties are unable to resolve such controversy or claim through the Company's internal review procedures, then such controversy or claim shall be resolved by arbitration in Maryland, in accordance with the rules then applicable of the American Arbitration Association (provided that the Company shall pay the filing fee and all hearing fees, arbitrator expenses and compensation fees, and administrative and other fees associated with any such arbitration), and judgment upon the award rendered by the arbitrator(s) may be entered in any court having jurisdiction thereof. If any contest or dispute shall arise between the Company and Executive regarding any provision of this Agreement, the Company shall reimburse Executive for all legal fees and expenses reasonably incurred by Executive in connection with such contest or dispute, but only if Executive is successful in respect of substantially all of Executive's claims brought and pursued in connection with such contest or dispute.

16. Miscellaneous.

(a) *Amendments*. No provisions of this Agreement may be amended, modified, or waived unless such amendment or modification is agreed to in writing signed by Executive and by a duly authorized officer of the Company, and such waiver is set forth in writing and signed by the party to be charged. The invalidity or unenforceability of any provision or provisions of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement, which shall remain in full force and effect.

(b) *Full Settlement*. The Company's obligations to make the payments provided for in this Agreement and otherwise to perform its obligations hereunder will not (absent fraud or willful misconduct or a termination for Cause) be affected by any set-offs, counterclaims, recoupment, defense, or other claim, right or action that the Company may have against Executive or others. After termination of the Employment Period, in no event will Executive be obligated to seek other employment or take any other action by way of mitigation of the amounts payable to Executive under any of the provisions of this Agreement and such amounts will not be reduced whether or not Executive obtains other employment.

(c) *Governing Law*. The validity, interpretation, construction and performance of this Agreement shall be governed by the laws of the State of Maryland without regard to its conflicts of law principles.

17. Entire Agreement. This Agreement sets forth the entire agreement of the parties hereto in respect of the subject matter contained herein and supersedes all prior agreements, term sheets, promises, covenants, arrangements, communications, representations or warranties, whether oral or written, by any officer, employee or representative of any party hereto in respect of such subject matter. Any other prior agreement of the parties hereto in respect of the subject matter contained herein is hereby terminated and cancelled, other than any equity agreements or any compensatory plan or program in which Executive is a participant on the Effective Date. For the avoidance of doubt, nothing in this Agreement addresses or impacts in any way the terms of the Common Partnership Units issued to Executive under that certain Unit Issuance Agreement entered into as of July 18, 2017 by and between Executive, the Company and JBG SMITH Properties LP.

18. 409A Compliance.

(a) This Agreement is intended to comply with the requirements of Section 409A. To the extent that any provision in this Agreement is ambiguous as to its compliance with Section 409A or to the extent any provision in this Agreement must be modified to comply with Section 409A (including, without limitation, Treasury Regulation 1.409A-3(c)), such provision shall be read, or shall be modified (with the mutual consent of the parties, which consent shall not be unreasonably withheld), as the case may be, in such a manner so that all payments due under this Agreement shall comply with Section 409A. For purposes of Section 409A, each payment made under this Agreement shall be treated as a separate payment. In no event may Executive, directly or indirectly, designate the calendar year of payment.

(b) All reimbursements provided under this Agreement shall be made or provided in accordance with the requirements of Section 409A, including, where applicable, the requirement that (i) any reimbursement is for expenses incurred during Executive's lifetime (or during a shorter period of time specified in this Agreement), (ii) the amount of expenses eligible for reimbursement during a calendar year may not affect the expenses eligible for reimbursement in any other calendar year, (iii) the reimbursement of an eligible expense will be made on or before the last day of the calendar year following the year in which the expense is incurred, and (iv) the right to reimbursement is not subject to liquidation or exchange for another benefit.

(c) Executive further acknowledges that any tax liability incurred by Executive under Section 409A of the Code is solely the responsibility of Executive.

19. Representations. Executive represents and warrants to the Company that she is under no contractual or other binding legal restriction which would prohibit her from entering into and performing under this Agreement or that would limit the performance her duties under this Agreement.

20. Withholding Taxes. The Company may withhold from any amounts or benefits payable under this Agreement income taxes and payroll taxes that are required to be withheld pursuant to any applicable law or regulation.

21. Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original, and all of which together shall constitute one and the same instrument. This Agreement shall become binding when one or more counterparts hereof, individually or taken together, shall bear the signatures of all of the parties reflected hereon as the signatories. Photographic, faxed or PDF copies of such signed counterparts may be used in lieu of the originals for any purpose.

[signature page follows]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the date first above written.

COMPANY:

JBG SMITH PROPERTIES, a Maryland real estate investment trust

By: /s/ Steve A. Museles
Name: Steven A. Museles
Title: Chief Legal Officer and Corporate Secretary

EXECUTIVE:

/s/ Madhumita Moina Banerjee
Madhumita Moina Banerjee

EXHIBIT A
GENERAL RELEASE AND WAIVER OF CLAIMS

General Release AND WAIVER OF CLAIMS (this "Release"), by Madhumita Moina Banerjee ("Executive") in favor of JBG SMITH Properties, a Maryland real estate investment trust (together with its affiliates, the "Company"), stockholders, beneficial owners of its stock, its current or former officers, directors, employees, members, attorneys and agents, and their predecessors (including Vornado Realty Trust, a Maryland real estate investment trust and Vornado Realty L.P., a Delaware limited partnership (the "Vornado Parties"), and JBG Properties Inc., a Maryland corporation and JBG/Operating Partners, L.P., a Delaware limited partnership), successors and assigns, individually and in their official capacities (together, the "Released Parties").

WHEREAS, Executive has been employed as Executive Vice President and Head of Capital Markets ;

WHEREAS, Executive's employment with the Company was terminated, effective as of _______________ (the "Termination Date"); and

WHEREAS, Executive is seeking certain payments under Section 8**[**(b)**][**(e)**]** of the Employment agreement entered into by JBG SMITH Properties and the Executive dated as of February 21, 2109 (the "Employment Agreement"), with Company that are conditioned on the effectiveness of this Release.

NOW, THEREFORE, in consideration of the covenants and agreements hereinafter set forth, the parties agree as follows:

1. General Release. Executive knowingly and voluntarily waives, terminates, cancels, releases and discharges forever the Released Parties from any and all suits, actions, causes of action, claims, allegations, rights, obligations, liabilities, demands, entitlements or charges (collectively, "Claims") that Executive (or Executive's heirs, executors, administrators, successors and assigns) has or may have, whether known, unknown or unforeseen, vested or contingent, by reason of any matter, cause or thing occurring at any time before and including the date of this Release arising under or in connection with Executive's employment or termination of employment with the Company, including, without limitation: Claims under United States federal, state or local law and the national or local law of any foreign country (statutory or decisional), for wrongful, abusive, constructive or unlawful discharge or dismissal, for breach of any contract, or for discrimination based upon race, color, ethnicity, sex, age, national origin, religion, disability, sexual orientation, or any other unlawful criterion or circumstance, including rights or Claims under the Age Discrimination in Employment Act of 1967 ("ADEA"), violations of the Equal Pay Act, Title VII of the Civil Rights Act of 1964, the Civil Rights Act of 1991, the Americans with Disabilities Act of 1991, the Employee Retirement Income Security Act, the Worker Adjustment Retraining and Notification Act, the Family Medical Leave Act, including all amendments to any of the aforementioned acts; and violations of any other federal, state, or municipal fair employment statutes or laws, including, without limitation, violations of any other law, rule, regulation, or ordinance pertaining to employment, wages, compensation, hours worked, or any other Claims for compensation or bonuses, whether or not paid under any compensation plan or arrangement; breach of contract; tort and other common law Claims; defamation; libel; slander; impairment of economic opportunity defamation; sexual harassment; retaliation; attorneys' fees; emotional distress; intentional infliction of emotional distress; assault; battery, pain and suffering; and punitive or exemplary damages. In addition, in consideration of the provisions of this Release, Executive further agrees to waive any and all rights under the laws of any jurisdiction in the United States, or any other country, that limit a general release to those Claims that are known or suspected to exist in Executive's favor as of the Effective Date (as defined below).

2. Surviving Claims. Notwithstanding anything herein to the contrary, this Release shall not:

(i) release any Claims for payment of amounts payable under the Employment Agreement (including under Section 8**[**(b)**]** **[**(e)**]** thereof);

(ii) release any Claims for employee benefits under plans covered by ERISA to the extent any such Claim may not lawfully be waived or for any payments or benefits under any plans of the Company that have vested in accordance with the terms of such plans;

(iii) release any Claim that may not lawfully be waived;

(iv) release any Claim for indemnification and D&O insurance in accordance with the Employment Agreement and with applicable laws and the corporate governance documents of the Company; or

(v) prohibit Executive from reporting possible violations of federal law or regulation or making other disclosures that are protected under (or claiming any award under) the whistleblower provisions of federal law or regulation.

3. Additional Representations. Executive further represents and warrants that Executive has not filed any civil action, suit, arbitration, administrative charge, or legal proceeding against any Released Party nor, has Executive assigned, pledged, or hypothecated as of the Effective Date any Claim to any person and no other person has an interest in the Claims that she is releasing.

4. Acknowledgements by Executive. Executive acknowledges and agrees that Executive has read this Release in its entirety and that this Release is a general release of all known and unknown Claims. Executive further acknowledges and agrees that:

(i) this Release does not release, waive or discharge any rights or Claims that may arise for actions or omissions after the Effective Date of this Release and Executive acknowledges that she is not releasing, waiving or discharging any ADEA Claims that may arise after the Effective Date of this Release;

(ii) Executive is entering into this Release and releasing, waiving and discharging rights or Claims only in exchange for consideration which she is not already entitled to receive;

(iii) Executive has been advised, and is being advised by the Release, to consult with an attorney before executing this Release; Executive acknowledges that she has consulted with counsel of her choice concerning the terms and conditions of this Release;

(iv) Executive has been advised, and is being advised by this Release, that she has been given at least **[**21**][**45**]** days within which to consider the Release, but Executive can execute this Release at any time prior to the expiration of such review period; and

(v) Executive is aware that this Release shall become null and void if she revokes her agreement to this Release within seven (7) days following the date of execution of this Release. Executive may revoke this Release at any time during such seven-day period by delivering (or causing to be delivered) to the Company written notice of his revocation of this Release no later than 5:00 p.m. Eastern time on the seventh (7th) full day following the date of execution of this Release (the "Effective Date"). Executive agrees and acknowledges that a letter of revocation that is not received by such date and time will be invalid and will not revoke this Release.

5. Cooperation With Investigations and Litigation. Executive agrees, upon the Company's request, to reasonably cooperate with the Company in any investigation, litigation, arbitration or regulatory proceeding regarding events that occurred during Executive's tenure with the Company or its affiliate, including making herself reasonably available to consult with Company's counsel, to provide information and to give testimony. Company will reimburse Executive for reasonable out-of-pocket expenses Executive incurs in extending such cooperation, so long as Executive provides advance written notice of Executive's request for reimbursement and provides satisfactory documentation of the expenses. Nothing in this section is intended to, and shall not, restrict or limit the Executive from exercising his or her protected rights in Section 4 hereof or restrict or limit the Executive from providing truthful information in response to a subpoena, other legal process or valid governmental inquiry.

6. Non-Disparagement. Executive agrees not to make any defamatory or derogatory statements concerning the Company or any of its affiliates or predecessors and their respective directors, officers and employees. Nothing in this section is intended to, and shall not, restrict or limit the Executive from exercising his or her protected rights in Section 2 hereof or restrict or limit the Executive from providing truthful information in response to a subpoena, other legal process or valid governmental inquiry or in the event of litigation between the Executive and the Company or its affiliates.

7. Governing Law. To the extent not subject to federal law, this Release will be governed by and construed in accordance with the law of the State of Maryland applicable to contracts made and to be performed entirely within that state.

8. Severability. If any provision of this Release should be declared to be unenforceable by any administrative agency or court of law, then remainder of the Release shall remain in full force and effect.

9. Captions; Section Headings. Captions and section headings used herein are for convenience only and are not a part of this Release and shall not be used in construing it.

10. Counterparts; Facsimile Signatures. This Release may be executed in any number of counterparts, each of which when so executed and delivered shall be deemed an original instrument without the production of any other counterpart. Any signature on this Release, delivered by either party by photographic, facsimile or PDF shall be deemed to be an original signature thereto.

IN WITNESS WHEREOF, Executive has signed this Release on _________ ____, 20___. **[To be dated on or after the Termination Date.]**

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Section 3: EX-21.1 (EXHIBIT 21.1)

Exhibit 21.1

SUBSIDIARIES OF THE REGISTRANT
JBG SMITH PROPERTIES
as of December 31, 2018

	Entity	State of Organization
1	1101 Fern Street, L.L.C.	Delaware
2	1200 Eads Street LLC	Delaware
3	1200 Eads Street Sub LLC	Delaware
4	1229-1231 25th Street, L.L.C.	Delaware
5	1244 South Capitol Residential, L.L.C.	Delaware
6	1250 First Street Office, L.L.C.	Delaware
7	1400 Eads Street LLC	Delaware
8	1400 Eads Street Sub LLC	Delaware
9	151 Q Street Co-Investment, L.P.	Delaware
10	151 Q Street REIT, L.L.C.	Delaware
11	151 Q Street Residential, L.L.C.	Delaware
12	1770 Crystal Drive, L.L.C.	Virginia
13	1776 Seed Investors, LP	Delaware
14	1800 Rockville Residential, L.L.C.	Delaware
15	1800 S. Bell, L.L.C.	Virginia
16	220 S. 20th Street Member, L.L.C.	Delaware
17	220 S. 20th Street, L.L.C.	Delaware
18	2101 L STREET, L.L.C.	Delaware
19	35 New York Avenue, L.L.C.	Delaware
20	50 Patterson Office, L.L.C.	Delaware
21	51 N 50 Patterson Corporate Member, L.L.C.	Delaware
22	51 N 50 Patterson Holdings, L.L.C.	Delaware
23	51 N Residential, L.L.C.	Delaware
24	5640 Fishers Associates, L.L.C.	Delaware
25	5640 Fishers GP, L.L.C.	Delaware
26	75 New York Avenue, L.L.C.	Delaware

27	7200 Wisconsin Condo Association, Inc.	Maryland
28	7900 Wisconsin Residential, L.L.C.	Delaware
29	Arna-Eads, L.L.C.	Delaware
30	Arna-Fern, L.L.C.	Delaware
31	Ashley House Member, L.L.C.	Delaware
32	Ashley House Residential, L.L.C.	Delaware
33	Atlantic AB Holdings, L.L.C.	Delaware
34	Atlantic AB Services, L.L.C.	Delaware
35	Atlantic Residential A, L.L.C.	Delaware
36	Atlantic Residential C, L.L.C.	Delaware
37	Atlantic Retail B, L.L.C.	Delaware
38	Blue Lion Cell 2, PC	District of Columbia
39	Blue Lion, L.L.C.	District of Columbia
40	Blue Lion PCC, LLC	District of Columbia
41	Bowen Building, L.P.	Delaware
42	Building Maintenance Service LLC	Delaware
43	Central Place Office, L.L.C.	Delaware
44	Central Place REIT, L.L.C.	Delaware
45	Central Place TRS, L.L.C.	Delaware
46	CESC 1101 17th Street L.L.C.	Delaware
47	CESC 1101 17th Street L.P.	Maryland
48	CESC 1101 17th Street Manager L.L.C.	Delaware

	Entity	State of Organization
49	CESC 1150 17th Street L.L.C.	Delaware
50	CESC 1150 17th Street Manager, L.L.C.	Delaware
51	CESC 1730 M Street L.L.C.	Delaware
52	CESC 2101 L Street L.L.C.	Delaware
53	CESC Commerce Executive Park L.L.C.	Delaware
54	CESC Crystal Square Four L.L.C.	Delaware
55	CESC Crystal/Rosslyn L.L.C.	Delaware
56	CESC Crystal Rosslyn II, L.L.C.	Delaware
57	CESC District Holdings L.L.C.	Delaware
58	CESC Downtown Member L.L.C.	Delaware
59	CESC Engineering TRS, L.L.C.	Delaware
60	CESC Gateway One L.L.C.	Delaware
61	CESC Gateway Two Limited Partnership	Virginia
62	CESC Gateway Two Manager L.L.C.	Virginia
63	CESC Gateway/Square L.L.C.	Delaware
64	CESC Gateway/Square Member L.L.C.	Delaware
65	CESC H Street L.L.C.	Delaware
66	CESC Mall L.L.C.	Virginia
67	CESC Mall Land L.L.C.	Delaware
68	CESC One Courthouse Plaza Holdings LLC	Delaware
69	CESC One Courthouse Plaza L.L.C.	Delaware
70	CESC One Democracy Plaza L.P.	Maryland
71	CESC One Democracy Plaza Manager L.L.C.	Delaware
72	CESC Park Five Land L.L.C.	Delaware
73	CESC Park Five Manager L.L.C.	Virginia
74	CESC Park Four Land L.L.C.	Delaware
75	CESC Park Four Manager L.L.C.	Virginia
76	CESC Park One Land L.L.C.	Delaware
77	CESC Park One Manager L.L.C.	Delaware
78	CESC Park Three Land L.L.C.	Delaware
79	CESC Park Three Manager L.L.C.	Virginia
80	CESC Park Two L.L.C.	Delaware
81	CESC Park Two Land L.L.C.	Delaware
82	CESC Plaza Five Limited Partnership	Virginia
83	CESC Plaza Limited Partnership	Virginia
84	CESC Plaza Manager L.L.C.	Virginia
85	CESC Potomac Yard LLC	Delaware
86	CESC Square L.L.C.	Virginia
87	CESC TRS, L.L.C.	Delaware
88	CESC Two Courthouse Plaza Limited Partnership	Virginia
89	CESC Two Courthouse Plaza Manager L.L.C.	Delaware
90	CESC Water Park L.L.C.	Virginia
91	Charles E. Smith Commercial Realty L.P.	Delaware
92	Crystal City Development, L.L.C.	Delaware
93	Crystal Gateway 3 Owner, L.L.C.	Delaware
94	Crystal Tech Fund LP	Delaware
95	Fairways I Residential, L.L.C.	Delaware
96	Fairways II Residential, L.L.C.	Delaware
97	Fairways Residential REIT, L.L.C.	Delaware
98	Falkland Chase Residential I, L.L.C.	Delaware
99	Falkland Chase Residential II, L.L.C.	Delaware
100	Falkland/REC Holdco, L.L.C.	Delaware

101	Falkland/REC Holdco Member, L.L.C.	Delaware

	Entity	State of Organization
102	Falkland Road Residential, L.L.C.	Delaware
103	Fifth Crystal Park Associates Limited Partnership	Virginia
104	First Crystal Park Associates Limited Partnership	Virginia
105	Fishers I GP, L.L.C.	Delaware
106	Fishers II GP, L.L.C.	Delaware
107	Fishers III GP, L.L.C.	Delaware
108	Fishers Place I Associates, L.L.C.	Delaware
109	Fishers Place II Associates, L.L.C.	Delaware
110	West Half Residential III, L.L.C.	Delaware
111	Florida Avenue Residential, L.L.C.	Delaware
112	Fort Totten North, L.L.C.	Delaware
113	Fourth Crystal Park Associates Limited Partnership	Virginia
114	H Street Building Corporation	Delaware
115	H Street Management LLC	Delaware
116	James House Member, L.L.C.	Delaware
117	James House Residential, L.L.C.	Delaware
118	JBG Associates, L.L.C.	Delaware
119	JBG Core Venture I, L.P.	Delaware
120	JBG SMITH Impact Manager, L.L.C.	Delaware
121	JBG SMITH PROPERTIES	Maryland
122	JBG SMITH PROPERTIES LP	Delaware
123	JBG Urban, L.L.C.	Delaware
124	JBG/151 Q Street Services, L.L.C.	Delaware
125	JBG/1233 20th Street, L.L.C.	Delaware
126	JBG/1247 20th St. Lessee, L.L.C.	Delaware
127	JBG/1250 First Member, L.L.C.	Delaware
128	JBG/12511 Parklawn, L.L.C.	Delaware
129	JBG/1253 20th Street, L.L.C.	Delaware
130	JBG/1300 First Street, L.L.C.	Delaware
131	JBG/1600 K Member, L.L.C.	Delaware
132	JBG/1600 K, L.L.C.	District of Columbia
133	JBG/1831 Wiehle, L.L.C.	Delaware
134	JBG/1861 Wiehle Lessee, L.L.C.	Delaware
135	JBG/19th & N Holdings, L.L.C.	Delaware
136	JBG/55 New York Avenue, L.L.C.	Delaware
137	JBG/6th Street Associates, L.L.C.	Delaware
138	JBG/7200 Wisconsin Mezz, L.L.C.	Delaware
139	JBG/7200 Wisconsin, L.L.C.	Maryland
140	JBG/75 New York Option, L.L.C.	Delaware
141	JBG/7900 Wisconsin Member, L.L.C.	Delaware
142	JBG/Asset Management, L.L.C.	Delaware
143	JBG/Atlantic Developer, L.L.C.	Delaware
144	JBG/Atlantic Fund, L.P.	Delaware
145	JBG/Atlantic GP, L.L.C.	Delaware
146	JBG/Atlantic Investor, L.L.C.	Delaware
147	JBG/Atlantic REIT, L.L.C.	Delaware
148	JBG/BC 5640, L.P.	Delaware
149	JBG/BC Chase Tower, L.P.	Delaware
150	JBG/BC Fishers I, L.P.	Delaware
151	JBG/BC Fishers II, L.P.	Delaware
152	JBG/BC Fishers III, L.P.	Delaware
153	JBG/BC GP, L.L.C.	Delaware

154	JBG/BC Investor, L.P.	Delaware

	Entity	State of Organization
155	JBG/BC Twinbrook, L.P.	Delaware
156	JBG/Bethesda Avenue, L.L.C.	Delaware
157	JBG/Commercial Management, L.L.C.	Delaware
158	JBG/Core I GP, L.L.C.	Delaware
159	JBG/Core I LP, L.L.C.	Delaware
160	JBG/Courthouse Metro, L.L.C.	Delaware
161	JBG/Development Group, L.L.C.	Delaware
162	JBG/Development Services, L.L.C.	Delaware
163	JBG/Fort Totten Member, L.L.C.	Delaware
164	JBG/Foundry Office REIT, L.L.C.	Delaware
165	JBG/Foundry Office, L.L.C.	Delaware
166	JBG/Foundry Office Services, L.L.C.	Delaware
167	JBG/Fund IX Transferred, L.L.C.	Delaware
168	JBG/Fund VI Transferred, L.L.C.	Delaware
169	JBG/Fund VII Transferred, L.L.C.	Delaware
170	JBG/Fund VIII Services, L.L.C.	Delaware
171	JBG/Fund VIII Transferred, L.L.C.	Delaware
172	JBG/Fund VIII Trust	Maryland
173	JBG/Hatton Retail, L.L.C.	Delaware
174	JBG/HQ Member, L.L.C.	Delaware
175	JBG/Landbay G Member, L.L.C.	Delaware
176	JBG/Landbay G, L.L.C.	Delaware
177	JBG/L’Enfant Plaza Member, L.L.C.	Delaware
178	JBG/L’Enfant Plaza Mezzanine, L.L.C.	Delaware
179	JBG/LEP Southeast, L.L.C.	Delaware
180	JBG/LEP Southeast Manager, L.L.C.	Delaware
181	JBG/Lionhead, L.L.C.	Delaware
182	JBG/N & Patterson Member, L.L.C.	Delaware
183	JBG/New York Avenue, L.L.C.	Delaware
184	JBG/Nicholson Lane East II, L.L.C.	Delaware
185	JBG/Nicholson Lane East, L.L.C.	Delaware
186	JBG/Nicholson Lane West, L.L.C.	Delaware
187	JBG/Nicholson Member, L.L.C.	Delaware
188	JBG/Pickett Office REIT, L.L.C.	Delaware
189	JBG/Pickett Office, L.L.C.	Delaware
190	JBG/Residential Management, L.L.C.	Delaware
191	JBG/Reston Executive Center, L.L.C.	Delaware
192	JBG/Retail Management, L.L.C.	Maryland
193	JBG/Rosslyn Gateway North, L.L.C.	Delaware
194	JBG/Rosslyn Gateway South, L.L.C.	Delaware
195	JBG/Shay Retail, L.L.C.	Delaware
196	JBG/Sherman Member, L.L.C.	Delaware
197	JBG/Summit Member, L.L.C.	Delaware
198	JBG/Summit, L.L.C.	Delaware
199	JBG/Tenant Services, L.L.C.	Delaware
200	JBG/Twinbrook Metro, L.L.C.	Maryland
201	JBG/UDM Transferred, L. L. C.	Delaware
202	JBG/Urban TRS, L.L.C.	Delaware
203	JBG/VNO Holdings, L.L.C.	Delaware
204	JBG/West Half Residential Member, L.L.C.	Delaware
205	JBG/Woodbridge REIT, L.L.C.	Delaware
206	JBG/Woodbridge Retail, L.L.C.	Delaware

207	JBG/Woodbridge Services, L.L.C.	Delaware

	Entity	State of Organization
208	JBG/Woodbridge, L.L.C.	Delaware
209	JBG/Woodmont II, L.L.C.	Delaware
210	JBGS/1235 South Clark, L.L.C.	Delaware
211	JBGS 1399 New York Avenue TIC Owner, L.L.C.	Delaware
212	JBGS Employee Company, L.L.C.	Delaware
213	JBGS Hotel Operator L.L.C.	Delaware
214	JBGS Warner GP, L.L.C.	Delaware
215	JBGS/1101 South Capitol, L.L.C.	Delaware
216	JBGS/1399 HOLDING, L.L.C.	Delaware
217	JBGS/1399 New York Avenue TIC Owner, L.L.C.	Delaware
218	JBGS/17th Street Holdings, L.P.	Delaware
219	JBGS/17th Street, L.L.C.	Delaware
220	JBGS/1900 N GP, L.L.C.	Delaware
221	JBGS/1900 N, L.L.C.	Delaware
222	JBGS/1900 N Member, L.P.	Delaware
223	JBGS/1900 N REIT, L.L.C.	Delaware
224	JBGS/Bowen GP, L.L.C.	Delaware
225	JBGS/Bowen II, L.L.C.	Delaware
226	JBGS/Bowen, L.L.C.	Delaware
227	JBGS/Capitol Point TDR Holdings, L.L.C.	Delaware
228	JBGS/CES Management, L.L.C.	Delaware
229	JBGS/CIM Wardman Owner Member, L.L.C.	Delaware
230	JBGS/Commercial Realty GEN-PAR, L.L.C.	Delaware
231	JBGS/Company Manager, L.L.C.	Delaware
232	JBGS/Courthouse I, L.L.C.	Delaware
233	JBGS/Courthouse II, L.L.C.	Delaware
234	JBGS/Crystal City TRS, Inc.	Delaware
235	JBGS/Fund VIII REIT Management Services, L.L.C.	Delaware
236	JBGS/Hotel Operator, L.L.C.	Delaware
237	JBGS/Hotel Owner, L.L.C.	Delaware
238	JBGS/HQ JV MEMBER, L.L.C.	Delaware
239	JBGS/IB Holdings, L.L.C.	Delaware
240	JBGS/KMS Holdings, L.L.C.	Delaware
241	JBGS/Management OP, L.P.	Virginia
242	JBGS/OP Management Services, L.L.C.	Delaware
243	JBGS/Pentagon Plaza, L.L.C.	Virginia
244	JBGS/Pickett Services, L.L.C.	Delaware
245	JBGS/Recap GP L.L.C.	Delaware
246	JBGS/Recap, L.L.C.	Delaware
247	JBGS/TRS, L.L.C.	Delaware
248	JBGS/Wardman Owner Member, L.L.C.	Delaware
249	JBGS/Warner Acquisition, L.L.C.	Delaware
250	JBGS/Warner GP, L.L.C.	Delaware
251	JBGS/Warner Holdings, L.P.	Delaware
252	JBGS/Warner, L.L.C.	Delaware
253	JBGS/Waterfront Holdings, L.L.C.	Delaware
254	Kaempfer Management Services, LLC	Delaware
255	Landbay G Corporate Member, L.L.C.	Delaware
256	Landbay G Declarant, L.L.C.	Virginia
257	Landbay H Lessee, L.L.C.	Delaware
258	LBG Parcel A, L.L.C.	Delaware
259	LBG Parcel B, L.L.C.	Delaware

260	LBG Parcel C, L.L.C.	Delaware

	Entity	State of Organization
261	LBG Parcel D, L.L.C.	Delaware
262	LBG Parcel E, L.L.C.	Delaware
263	LBG Parcel F, L.L.C.	Delaware
264	LBG Parcel G, L.L.C.	Delaware
265	LBG Parcel H, L.L.C.	Delaware
266	Market Square Fairfax MM LLC	Delaware
267	New Kaempfer 1501 LLC	Delaware
268	New Kaempfer IB LLC	Delaware
269	New Kaempfer Waterfront LLC	Delaware
271	North Glebe Office, L.L.C.	Delaware
272	Operating Partners Legacy, L.L.C.	Delaware
273	Palisades 1399 New York Avenue Tic Owner LLC	Delaware
274	Park One Member L.L.C.	Delaware
275	Potomac Creek Associates, L.L.C.	Delaware
276	Potomac House Member, L.L.C.	Delaware
277	Potomac House Residential, L.L.C.	Delaware
278	PY RR Land, L.L.C.	Delaware
279	Rosslyn Gateway Hotel, L.L.C.	Delaware
280	Sherman Avenue, L.L.C.	District of Columbia
281	SINEWAVE VENTURES FUND I, L.P.	Delaware
282	SMB Tenant Services, LLC	Delaware
283	South Capitol L.L.C.	Delaware
284	The Commerce Metro Association of Co-Owners	Virginia
285	Third Crystal Park Associates Limited Partnership	Virginia
286	Twinbrook Commons Office, L.L.C.	Delaware
287	Twinbrook Commons Residential 1B, L.L.C.	Delaware
288	Twinbrook Commons Residential North, L.L.C.	Delaware
289	Twinbrook Commons Residential South, L.L.C.	Delaware
290	Twinbrook Commons Residential West, L.L.C.	Delaware
291	Twinbrook Commons, L.L.C.	Delaware
292	UBI Management LLC	Delaware
293	Universal Bldg., North, Inc.	District of Columbia
294	Universal Building, Inc.	District of Columbia
295	V0012 LLC	Delaware
296	Vornado Warner Acquisition LLC	Delaware
297	Wardman Hotel Owner, L.L.C.	Delaware
298	Warner Investments, L.P.	Delaware
299	Washington CESC TRS, L.L.C.	Delaware
300	Washington CT Fund GP LLC	Delaware
301	WASHINGTON HOUSING INITIATIVE IMPACT POOL, L.L.C.	Delaware
302	Washington Mart TRS, L.L.C.	Delaware
303	WATERFRONT 375 M STREET, LLC	Delaware
304	WATERFRONT 425 M STREET, LLC	Delaware
305	West Half Residential II, L.L.C.	Delaware

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Section 4: EX-23.1 (EXHIBIT 23.1)

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement No. 333-220507 on Form S-8 and Registration Statement No. 333-226023 on Form S-3 of our reports dated February 26, 2019, relating to the consolidated financial statements and financial statement schedules of JBG SMITH Properties (which report expresses an unqualified opinion and includes an explanatory paragraph relating to the historical financial results including certain corporate costs allocated by Vornado Realty Trust), and the effectiveness of JBG SMITH Properties' internal control over financial reporting, appearing in this Annual Report on Form 10-K of JBG SMITH Properties for the year ended December 31, 2018.

/s/ Deloitte & Touche LLP
McLean, Virginia
February 26, 2019

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Section 5: EX-31.1 (EXHIBIT 31.1)

Exhibit 31.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER

I, W. Matthew Kelly, certify that:

1. I have reviewed this annual report on Form 10-K of JBG SMITH Properties;

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

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

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

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

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

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

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

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

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

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

February 26, 2019	/s/ W. Matthew Kelly
	W. Matthew Kelly
	Chief Executive Officer
	(Principal Executive Officer)

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Section 6: EX-31.2 (EXHIBIT 31.2)

Exhibit 31.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER

I, Stephen W. Theriot, certify that:

1. I have reviewed this annual report on Form 10-K of JBG SMITH Properties;

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

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

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

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

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

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

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

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial

reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

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

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

February 26, 2019	/s/ Stephen W. Theriot
	Stephen W. Theriot
	Chief Financial Officer
	(Principal Financial and Accounting Officer)

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Section 7: EX-32.1 (EXHIBIT 32.1)

Exhibit 32.1

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of JBG SMITH Properties (the "Company") on Form 10-K for the period ended December 31, 2018 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, W. Matthew Kelly, Chief Executive Officer of the Company, and I, Stephen W. Theriot, Chief Financial Officer of the Company, certify, to our knowledge, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

February 26, 2019	/s/ W. Matthew Kelly
	W. Matthew Kelly
	Chief Executive Officer

February 26, 2019	/s/ Stephen W. Theriot
	Stephen W. Theriot
	Chief Financial Officer

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Section 1: 10-Q (10-Q)

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the quarterly period ended September 30, 2018

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 001-37994

JBG SMITH

JBG SMITH PROPERTIES

(Exact name of Registrant as specified in its charter)

Maryland	**81-4307010**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
4445 Willard Avenue, Suite 400 **Chevy Chase, MD**	**20815**
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: **(240) 333-3600**

____

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. Yes ☒ No ☐

Indicate by check mark whether the Registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulations S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

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

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act) Yes ☐ No ☒

As of November 1, 2018, JBG SMITH Properties had 120,917,269 common shares outstanding.

JBG SMITH PROPERTIES
QUARTERLY REPORT ON FORM 10-Q
QUARTER ENDED SEPTEMBER 30, 2018

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PART I - FINANCIAL INFORMATION

ITEM 1. Financial Statements

JBG SMITH PROPERTIES
Condensed Consolidated Balance Sheets
(Unaudited)
(In thousands, except par value amounts)

	September 30, 2018	December 31, 2017
ASSETS		
Real estate, at cost:		
Land and improvements	$ 1,366,154	$ 1,368,294
Buildings and improvements	3,678,335	3,670,268
Construction in progress, including land	649,056	978,942
	5,693,545	6,017,504
Less accumulated depreciation	(1,020,596)	(1,011,330)
Real estate, net	4,672,949	5,006,174
Cash and cash equivalents	253,148	316,676
Restricted cash	127,061	21,881
Tenant and other receivables, net	40,409	46,734
Deferred rent receivable, net	137,200	146,315
Investments in and advances to unconsolidated real estate ventures	361,014	261,811
Other assets, net	281,958	263,923
Assets held for sale	137,455	8,293
TOTAL ASSETS	$ 6,011,194	$ 6,071,807
LIABILITIES, REDEEMABLE NONCONTROLLING INTERESTS AND EQUITY		
Liabilities:		
Mortgages payable, net	$ 1,769,938	$ 2,025,692
Revolving credit facility	—	115,751
Unsecured term loans, net	296,981	46,537
Accounts payable and accrued expenses	147,211	138,607
Other liabilities, net	119,552	161,277
Liabilities related to assets held for sale	45,657	—
Total liabilities	2,379,339	2,487,864
Commitments and contingencies		
Redeemable noncontrolling interests	562,318	609,129
Shareholders' equity:		
Preferred shares, $0.01 par value - 200,000 shares authorized, none issued	—	—
Common shares, $0.01 par value - 500,000 shares authorized; 120,917 and 117,955 shares issued and outstanding as of September 30, 2018 and December 31, 2017	1,210	1,180
Additional paid-in capital	3,150,899	3,063,625
Accumulated deficit	(110,219)	(95,809)
Accumulated other comprehensive income	24,132	1,612
Total shareholders' equity of JBG SMITH Properties	3,066,022	2,970,608
Noncontrolling interests in consolidated subsidiaries	3,515	4,206
Total equity	3,069,537	2,974,814
TOTAL LIABILITIES, REDEEMABLE NONCONTROLLING INTERESTS AND EQUITY	$ 6,011,194	$ 6,071,807

See accompanying notes to the condensed consolidated and combined financial statements (unaudited).

JBG SMITH PROPERTIES
Condensed Consolidated and Combined Statements of Operations
(Unaudited)
(In thousands, except per share data)

	Three Months Ended September 30, 2018	Three Months Ended September 30, 2017	Nine Months Ended September 30, 2018	Nine Months Ended September 30, 2017
REVENUE				
Property rentals	$ 123,203	$ 116,458	$ 375,094	$ 316,899
Tenant reimbursements	9,744	9,593	28,651	27,161
Third-party real estate services, including reimbursements	23,788	25,141	72,278	38,881
Other income	1,708	1,158	4,904	3,701
Total revenue	158,443	152,350	480,927	386,642
EXPENSES				
Depreciation and amortization	46,603	43,951	143,880	109,726
Property operating	34,167	29,634	95,462	77,341
Real estate taxes	16,905	17,194	54,024	47,978
General and administrative:				
Corporate and other	12,415	10,593	37,759	35,536
Third-party real estate services	20,754	21,178	64,552	30,362
Share-based compensation related to Formation Transaction	8,387	14,445	26,912	14,445
Transaction and other costs	4,126	104,095	12,134	115,173
Total operating expenses	143,357	241,090	434,723	430,561
OPERATING INCOME (LOSS)	15,086	(88,740)	46,204	(43,919)
Income (loss) from unconsolidated real estate ventures, net	13,484	(1,679)	15,418	(1,365)
Interest and other income (loss), net	4,091	(379)	5,177	1,366
Interest expense	(18,979)	(15,309)	(56,263)	(43,813)
Gain on sale of real estate	11,938	—	45,789	—
Loss on extinguishment of debt	(79)	(689)	(4,536)	(689)
Gain (reduction of gain) on bargain purchase	—	27,771	(7,606)	27,771
INCOME (LOSS) BEFORE INCOME TAX BENEFIT	25,541	(79,025)	44,183	(60,649)
Income tax benefit	841	1,034	1,436	317
NET INCOME (LOSS)	26,382	(77,991)	45,619	(60,332)
Net (income) loss attributable to redeemable noncontrolling interests	(3,552)	8,160	(6,532)	2,481
Net loss attributable to noncontrolling interests	—	—	127	—
NET INCOME (LOSS) ATTRIBUTABLE TO COMMON SHAREHOLDERS	$ 22,830	$ (69,831)	$ 39,214	$ (57,851)
EARNINGS (LOSS) PER COMMON SHARE:				
Basic	$ 0.19	$ (0.61)	$ 0.33	$ (0.55)
Diluted	$ 0.19	$ (0.61)	$ 0.33	$ (0.55)
WEIGHTED AVERAGE NUMBER OF COMMON SHARES OUTSTANDING:				
Basic	119,835	114,744	118,588	105,347
Diluted	119,835	114,744	118,588	105,347

See accompanying notes to the condensed consolidated and combined financial statements (unaudited).

JBG SMITH PROPERTIES
Condensed Consolidated and Combined Statements of Comprehensive Income (Loss)
(Unaudited)
(In thousands)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	**2017**	**2018**	**2017**
NET INCOME (LOSS)	$ 26,382	$ (77,991)	$ 45,619	$ (60,332)
OTHER COMPREHENSIVE INCOME:				
Change in fair value of derivative financial instruments	5,142	—	24,453	—
Reclassification of net loss on derivative financial instruments from accumulated other comprehensive income into interest expense	24	—	1,473	—
Other comprehensive income	5,166	—	25,926	—
COMPREHENSIVE INCOME (LOSS)	31,548	(77,991)	71,545	(60,332)
Net (income) loss attributable to redeemable noncontrolling interests	(3,552)	8,160	(6,532)	2,481
Other comprehensive income attributable to redeemable noncontrolling interests	(696)	—	(3,406)	—
Net loss attributable to noncontrolling interests	—	—	127	—
COMPREHENSIVE INCOME (LOSS) ATTRIBUTABLE TO JBG SMITH PROPERTIES	$ 27,300	$ (69,831)	$ 61,734	$ (57,851)

See accompanying notes to the condensed consolidated and combined financial statements (unaudited).

JBG SMITH PROPERTIES
Condensed Consolidated and Combined Statements of Equity
(Unaudited)
(In thousands)

	Common Shares		Additional Paid-In Capital	Accumulated Deficit	Accumulated Other Comprehensive Income	Former Parent Equity	Noncontrolling Interests in Consolidated Subsidiaries	Total Equity
	Shares	Amount						
BALANCE AS OF JANUARY 1, 2018	117,955	$ 1,180	$ 3,063,625	$ (95,809)	$ 1,612	$ —	$ 4,206	$ 2,974,814
Net income (loss) attributable to common shareholders and noncontrolling interests	—	—	—	39,214	—	—	(127)	39,087
Conversion of common limited partnership units to common shares	2,962	30	109,092	—	—	—	—	109,122
Dividends declared on common shares ($0.45 per common share)	—	—	—	(53,624)	—	—	—	(53,624)
Distributions to noncontrolling interests	—	—	—	—	—	—	(814)	(814)
Contributions from noncontrolling interests	—	—	—	—	—	—	250	250
Redeemable noncontrolling interests redemption value adjustment and other comprehensive income allocation	—	—	(21,346)	—	(3,406)	—	—	(24,752)
Other comprehensive income	—	—	—	—	25,926	—	—	25,926
Other	—	—	(472)	—	—	—	—	(472)
BALANCE AS OF SEPTEMBER 30, 2018	120,917	$ 1,210	$ 3,150,899	$ (110,219)	$ 24,132	$ —	$ 3,515	$ 3,069,537
BALANCE AS OF JANUARY 1, 2017	—	$ —	$ —	$ —	$ —	$ 2,121,689	$ 295	$ 2,121,984
Net loss attributable to common shareholders	—	—	—	(28,827)	—	(29,024)	—	(57,851)
Deferred compensation shares and options, net	—	—	—	—	—	1,526	—	1,526
Contributions from former parent, net	—	—	—	—	—	334,843	—	334,843
Issuance of common limited partnership units at the Separation	—	—	—	—	—	(96,632)	—	(96,632)
Issuance of common shares at the Separation	94,736	947	2,331,455	—	—	(2,332,402)	—	—
Issuance of common shares in connection with the Combination	23,221	233	864,685	—	—	—	—	864,918
Noncontrolling interests acquired in connection with the Combination	—	—	—	—	—	—	3,987	3,987
Distributions to noncontrolling interests	—	—	—	—	—	—	(14)	(14)
Contributions from noncontrolling interests	—	—	—	—	—	—	134	134
Redeemable noncontrolling interests redemption value adjustment and other comprehensive income allocation	—	—	(97,084)	—	—	—	—	(97,084)
BALANCE AS OF SEPTEMBER 30, 2017	117,957	$ 1,180	$ 3,099,056	$ (28,827)	$ —	$ —	$ 4,402	$ 3,075,811

See accompanying notes to the condensed consolidated and combined financial statements (unaudited).

JBG SMITH PROPERTIES
Condensed Consolidated and Combined Statements of Cash Flows
(Unaudited)
(In thousands)

	Nine Months Ended September 30, 2018	Nine Months Ended September 30, 2017
OPERATING ACTIVITIES:		
Net income (loss)	$ 45,619	$ (60,332)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:		
Share-based compensation expense	39,690	17,164
Depreciation and amortization, including amortization of debt issuance costs	146,958	111,684
Deferred rent	(7,880)	(9,249)
(Income) loss from unconsolidated real estate ventures, net	(15,418)	1,365
Amortization of above- and below-market lease intangibles, net	(58)	(872)
Amortization of lease incentives	3,646	2,492
Return on capital from unconsolidated real estate ventures	6,820	1,149
Reduction of gain (gain) on bargain purchase	7,606	(27,771)
Loss on extinguishment of debt	4,536	689
Gain on sale of real estate	(45,789)	—
Unrealized gain on interest rate swaps and caps	(1,264)	(467)
Bad debt expense	2,591	1,808
Other non-cash items	1,499	3,974
Changes in operating assets and liabilities:		
Tenant and other receivables	2,167	(3,617)
Other assets, net	(18,637)	(32,884)
Accounts payable and accrued expenses	(23,875)	19,077
Other liabilities, net	(11,550)	(817)
Net cash provided by operating activities	136,661	23,393
INVESTING ACTIVITIES:		
Development costs, construction in progress and real estate additions	(260,396)	(115,922)
Cash and restricted cash received in connection with the Combination, net	—	97,402
Proceeds from sale of real estate	346,149	—
Acquisition of interests in unconsolidated real estate ventures, net of cash acquired	(386)	—
Distributions of capital from unconsolidated real estate ventures	2,240	—
Distribution of capital from sale of interest in an unconsolidated real estate venture	24,602	—
Investments in and advances to unconsolidated real estate ventures	(22,663)	(1,441)
Repayment of notes receivable	—	50,934
Other investments	(665)	(3,531)
Proceeds from repayment of receivable from former parent	—	75,000
Net cash provided by investing activities	88,881	102,442
FINANCING ACTIVITIES:		
Contributions from former parent, net	—	160,203
Acquisition of interest in consolidated real estate venture	(548)	—
Repayment of borrowings from former parent	—	(115,630)
Proceeds from borrowings from former parent	—	4,000
Capital lease payments	(82)	(17,776)
Borrowings under mortgages payable	43,823	242,018
Borrowings under revolving credit facility	35,000	115,751
Borrowings under unsecured term loans	250,000	50,000
Repayments of mortgages payable	(267,285)	(192,681)
Repayments of revolving credit facility	(150,751)	—
Debt issuance costs	(372)	(18,686)
Dividends paid to common shareholders	(80,166)	—

Distributions to redeemable noncontrolling interests	(13,320)	—
Contributions from noncontrolling interests	250	134
Distributions to noncontrolling interests	(439)	(14)
Net cash (used in) provided by financing activities	(183,890)	227,319
Net increase in cash and cash equivalents and restricted cash	41,652	353,154
Cash and cash equivalents and restricted cash as of the beginning of the period	338,557	32,263
Cash and cash equivalents and restricted cash as of the end of the period	$ 380,209	$ 385,417

JBG SMITH PROPERTIES
Consolidated and Combined Statements of Cash Flows
(Unaudited)
(In thousands)

	Nine Months Ended September 30,	
	2018	**2017**
CASH AND CASH EQUIVALENTS AND RESTRICTED CASH AS OF END OF THE PERIOD:		
Cash and cash equivalents	$ 253,148	$ 367,896
Restricted cash	127,061	17,521
Cash and cash equivalents and restricted cash	$ 380,209	$ 385,417
SUPPLEMENTAL DISCLOSURE OF CASH FLOW AND NON-CASH INFORMATION:		
Cash paid for interest (net of capitalized interest of $14,863 and $2,285 in 2018 and 2017)	$ 48,835	$ 45,354
Accrued capital expenditures included in accounts payable and accrued expenses	78,910	17,633
Write-off of fully depreciated assets	23,049	24,909
Deferred interest on mortgages payable	3,216	—
Cash receipts from (payments for) income taxes	114	(3,681)
Deconsolidation of 1900 N Street	95,923	—
Conversion of common limited partnership units to common shares	109,208	—
Non-cash transactions related to the Formation Transaction:		
Issuance of common limited partnership units at the Separation	—	96,632
Issuance of common shares at the Separation	—	2,332,402
Issuance of common shares in connection with the Combination	—	864,918
Issuance of common limited partnership units in connection with the Combination	—	359,967
Contribution from former parent in connection with the Separation	—	174,639

See accompanying notes to the condensed consolidated and combined financial statements (unaudited).

1. Organization and Basis of Presentation

Organization

JBG SMITH Properties ("JBG SMITH") was organized by Vornado Realty Trust ("Vornado" or "former parent") as a Maryland real estate investment trust ("REIT") on October 27, 2016 (capitalized on November 22, 2016). JBG SMITH was formed for the purpose of receiving, via the spin-off on July 17, 2017 (the "Separation"), substantially all of the assets and liabilities of Vornado's Washington, D.C. segment, which operated as Vornado / Charles E. Smith, (the "Vornado Included Assets"). On July 18, 2017, JBG SMITH acquired the management business and certain assets and liabilities (the "JBG Assets") of The JBG Companies ("JBG") (the "Combination"). The Separation and the Combination are collectively referred to as the "Formation Transaction." Unless the context otherwise requires, all references to "we," "us," and "our," refer to the Vornado Included Assets (our predecessor and accounting acquirer) for periods prior to the Separation and to JBG SMITH for periods after the Separation. References to "our share" refers to our ownership percentage of consolidated and unconsolidated assets in real estate ventures. Substantially all of our assets are held by, and our operations are conducted through, JBG SMITH Properties LP ("JBG SMITH LP"), our operating partnership. As of September 30, 2018, we, as its sole general partner, controlled JBG SMITH LP and owned 87.8% of its common limited partnership units ("OP Units").

Prior to the Separation from Vornado, JBG SMITH was a wholly owned subsidiary of Vornado and had no material assets or operations. Our operations are presented as if the transfer of the Vornado Included Assets had been consummated prior to all historical periods presented in the accompanying consolidated and combined financial statements at the carrying amounts of such assets and liabilities reflected in Vornado's books and records. The assets and liabilities of the JBG Assets and subsequent results of operations and cash flows are reflected in our consolidated and combined financial statements beginning on the date of the Combination.

We own and operate a portfolio of high-quality office and multifamily assets, many of which are amenitized with ancillary retail. Our portfolio reflects our longstanding strategy of owning and operating assets within Metro-served submarkets in the Washington, D.C. metropolitan area that have high barriers to entry and key urban amenities, including being within walking distance of a Metro station.

As of September 30, 2018, our Operating Portfolio consists of 65 operating assets comprising 46 office assets totaling approximately 13.0 million square feet (11.5 million square feet at our share), 15 multifamily assets totaling 6,307 units (4,523 units at our share) and four other assets totaling approximately 806,000 square feet (352,000 square feet at our share). Additionally, we have (i) seven assets under construction comprising three office assets totaling approximately 778,000 square feet (546,000 square feet at our share) and four multifamily assets totaling 1,476 units (1,284 units at our share); and (ii) 43 future development assets totaling approximately 22.4 million square feet (19.0 million square feet at our share) of estimated potential development density.

Our revenues are derived primarily from leases with office and multifamily tenants, including fixed rents and reimbursements from tenants for certain expenses such as real estate taxes, property operating expenses, and repairs and maintenance. In addition, we have a third-party real estate services business that provides fee-based real estate services to the legacy funds (the "JBG Legacy Funds") formerly organized by JBG and other third parties.

Basis of Presentation

The accompanying unaudited condensed consolidated and combined financial statements and notes are prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP") for interim financial information and with the instructions of Form 10-Q and Article 10 of Regulation S-X. Accordingly, these unaudited condensed consolidated and
combined financial statements do not contain certain information required in annual financial statements and notes as required under GAAP. In our opinion, all adjustments considered necessary for a fair presentation have been included, and all such adjustments are of a normal recurring nature. All intercompany transactions and balances have been eliminated. The results of operations for the three and nine months ended September 30, 2018 and 2017 are not necessarily indicative of the results that may be expected for a full year. These condensed consolidated and combined financial statements should be read in conjunction with our Annual Report on Form 10-K for the year ended December 31, 2017, filed with the Securities and Exchange Commission.

The accompanying condensed consolidated and combined financial statements include the accounts of JBG SMITH and our wholly owned subsidiaries and those other entities, including JBG SMITH LP, in which we have a controlling financial interest, including where we have been determined to be the primary beneficiary of a variable interest entity ("VIE"). See Note 5 for additional information on our VIEs. The portions of the equity and net income of consolidated subsidiaries that are not attributable to JBG SMITH are presented separately as amounts attributable to noncontrolling interests in our condensed consolidated and combined financial statements.

References to the financial statements refer to our condensed consolidated and combined financial statements as of September 30, 2018 and December 31, 2017, and for the three and nine months ended September 30, 2018 and 2017. References to the balance sheets refer to our condensed consolidated balance sheets as of September 30, 2018 and December 31, 2017. References to the statements of operations refer to our condensed consolidated and combined statements of operations for the three and nine months ended September 30, 2018 and 2017. References to the statements of cash flows refer to our condensed consolidated and combined statements of cash flows for the nine months ended September 30, 2018 and 2017.

Formation Transaction

JBG SMITH and the Vornado Included Assets were under common control of Vornado for all periods prior to the Separation. The transfer of the Vornado Included Assets from Vornado to JBG SMITH was completed prior to the Separation, at net book values (historical carrying amounts) carved out from Vornado's books and records. For purposes of the formation of JBG SMITH, the Vornado Included Assets were designated as the predecessor and the accounting acquirer of the JBG Assets. Consequently, the financial statements of JBG SMITH, as set forth herein, represent a continuation of the financial information of the Vornado Included Assets as the predecessor and accounting acquirer such that the historical financial information included herein as of any date or for any periods on or prior to the completion of the Combination represents the pre-Combination financial information of the Vornado Included Assets. The financial statements reflect the common shares as of the date of the Separation as outstanding for all periods prior to July 17, 2017. The acquisition of the JBG Assets completed subsequently by JBG SMITH was accounted for as a business combination using the acquisition method whereby identifiable assets acquired and liabilities assumed are recorded at acquisition-date fair values and income and cash flows from the operations were consolidated into the financial statements of JBG SMITH commencing July 18, 2017. Consequently, the financial statements for the periods before and after the Formation Transaction are not directly comparable.

The accompanying financial statements as of September 30, 2018 and December 31, 2017 and for the three and nine months ended September 30, 2018 include our consolidated accounts. The results of operations for the three and nine months ended September 30, 2017 reflect the aggregate operations and changes in cash flows and equity on a combined basis for all periods prior to July 17, 2017 and on a consolidated basis for all periods subsequent to July 17, 2017. Therefore, our results of operations, cash flows and financial condition set forth in this report for the three and nine months ended September 30, 2017 are not necessarily indicative of our future results of operations, cash flows or financial condition as an independent, publicly traded company.

The historical financial results for the Vornado Included Assets reflect charges for certain corporate costs allocated by the former parent, which were based on either actual costs incurred or a proportion of costs estimated to be applicable, to the Vornado Included Assets based on an analysis of key metrics, including total revenues. Such costs do not necessarily reflect what the actual costs would have been if JBG SMITH had been operating as a separate standalone public company. See Note 16 for additional information.

The following pro forma information for the three and nine months ended September 30, 2017 is presented as if the Formation Transaction had occurred on January 1, 2016. This pro forma information is based upon historical financial statements, adjusted for certain factually supported items directly related to the Formation Transaction. This pro forma information does not purport to represent what the actual results of our operations would have been, nor does it purport to predict the results of operations of future periods. The pro forma information was adjusted to exclude transaction and other costs of $104.1 million and $115.2 million for the three and nine months ended September 30, 2017.

	Three Months Ended	Nine Months Ended
	September 30, 2017	
	(In thousands)	
Pro forma information:		
Total revenue	$ 160,428	$ 481,314
Net income (loss) attributable to common shareholders	2,283	(13,741)

The total revenue of the JBG Assets for the three and nine months ended September 30, 2017 included in our statements of operations from the acquisition date was $34.9 million. The net loss from the JBG Assets for the three and nine months ended September 30, 2017 included in our statements of operations from the acquisition date was $7.8 million.

The Combination resulted in a gain on bargain purchase of $27.8 million for the three and nine months ended September 30, 2017 because the fair value of the identifiable net assets acquired exceeded the purchase consideration. During the fourth quarter of 2017, this gain was reduced by $3.4 million. As a result of finalizing our fair value estimates used in the purchase price allocation related to the Combination, during the three months ended June 30, 2018, we adjusted the fair value of certain assets acquired and liabilities assumed consisting of a decrease of $468,000 to investments in and advances to unconsolidated real estate ventures, an increase of $4.7 million to lease assumption liabilities and an increase of $2.4 million to other liabilities acquired, resulting in a reduction of the gain on bargain purchase of $7.6 million for the nine months ended September 30, 2018.

Income Taxes

We have elected to be taxed as a REIT under sections 856-860 of the Internal Revenue Code of 1986, as amended (the "Code"). Under those sections, a REIT which distributes at least 90% of its REIT taxable income as dividends 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. Prior to the Separation, Vornado operated as a REIT and distributed 100% of taxable income to its shareholders, accordingly, no provision for federal income taxes has been made in the accompanying financial statements for the periods prior to the Separation. We intend to adhere to these requirements and maintain our REIT status in future periods. We also participate in the activities conducted by subsidiary entities which have elected to be treated as taxable REIT subsidiaries under the Code. As such, we are subject to federal, state, and local taxes on the income from these activities.

2. Summary of Significant Accounting Policies

Significant Accounting Policies

There were no material changes to our significant accounting policies disclosed in our Annual Report on Form 10-K for the year ended December 31, 2017.

Use of Estimates

The preparation of the financial statements in conformity with GAAP requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. The most significant of these estimates include: (i) the underlying cash flows used to establish the fair values recorded in connection with the Combination and used in assessing impairment and (ii) the determination of useful lives for tangible and intangible assets. Actual results could differ from these estimates.

Recent Accounting Pronouncements

In connection with the adoption of Accounting Standards Update ("ASU") ASU 2016-18, Statement of Cash Flows (Topic 230): Restricted Cash, we revised the presentation of restricted cash in the statement of cash flows for the nine months ended September 30, 2017.

The following table provides a brief description of recent accounting pronouncements by the Financial Accounting Standards Board ("FASB") that could have a material effect on our financial statements:

Standard	Description	Date of Adoption	Effect on the Financial Statements or Other Significant Matters
Standard adopted			
ASU 2014-09, Revenue from Contracts with Customers (Topic 606), as clarified and amended by ASU 2016-08, ASU 2016-10 and ASU 2016-12	This standard 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. It requires an entity to recognize revenue when it transfers 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.	January 2018	We utilized the modified retrospective method of adoption. The standard excludes from its scope the areas of accounting that most significantly affect our revenue recognition, including accounting for leases and financial instruments. Our evaluation determined there were no required changes to our recognition of revenue related to our third-party real estate services, tenant reimbursements, property and asset management fees, or transactional/management fees for leasing, development and construction. Our evaluation also determined there were no required changes to our recognition of promote fees and dispositions of real estate properties as we did not have any deferred gains due to continuing involvement at the time of adoption. Therefore, the adoption of this standard did not have a material impact on our financial statements. We adopted the practical expedient of this standard to only assess the recognition of revenue for open contracts at the date of adoption and there was no adjustment to the opening balance of our accumulated deficit at January 1, 2018. The comparative information has not been restated and continues to be reported under the accounting standards in effect for that period.

Standard	Description	Date of Adoption	Effect on the Financial Statements or Other Significant Matters
Standards not yet adopted			
ASU 2016-02, Leases (Topic 842), as clarified and amended by ASU 2018-01, ASU 2018-10 and ASU 2018-11	This standard establishes 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 of 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 ASU also clarifies that an assessment of whether a land easement meets the definition of a lease under the new lease standard is required. The provisions of this standard are effective for fiscal years beginning after December 15, 2018 and should be applied through a modified retrospective transition, which includes optional practical expedients related to leases that commenced before the effective date and allows the new requirements to be applied on the date of adoption rather than the beginning of the earliest comparative period presented.	January 2019	We are currently evaluating the overall impact of the adoption of ASU 2016-02 on our financial statements. ASU 2016-02 will more significantly impact the accounting for leases in which we are the lessee. We have 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 upon adoption of this standard. As of September 30, 2018, future ground lease payments totaled $573.9 million to which we would apply a discount rate. We are in the process of determining an appropriate discount rate. 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 will no longer be able to capitalize internal leasing costs and instead will be required to expense these costs as incurred. Capitalized internal leasing costs were $1.5 million and $1.0 million for the three months ended September 30, 2018 and 2017, and $4.3 million and $1.8 million for the nine months ended September 30, 2018 and 2017. We will apply the modified retrospective approach of adoption and anticipate electing the package of practical expedients that allows an entity to not reassess (i) whether any expired or existing contracts are or contain leases, (ii) lease classifications for any expired or existing leases and (iii) initial direct costs for any expired or existing leases.
ASU 2018-09, Codification Improvements	These amendments provide clarifications and corrections to certain ASC subtopics including the following: 220-10 (Income Statement - Reporting Comprehensive Income - Overall), 470-50 (Debt - Modifications and Extinguishments), 480-10 (Distinguishing Liabilities from Equity - Overall), 718-740 (Compensation - Stock Compensation - Income Taxes), 805-740 (Business Combinations - Income Taxes), 815-10 (Derivatives and Hedging - Overall), and 820-10 (Fair Value Measurement - Overall).	January 2019	The updates related to Subtopics 470-50 and 820-10 were effective immediately and their adoption did not have an impact on our financial statements. We are currently evaluating the remaining guidance to determine the impact it may have on our financial statements.

3. Dispositions and Assets Held for Sale

Dispositions

The following is a summary of disposition activity for the nine months ended September 30, 2018:

Date Disposed	Assets	Segment	Location	Total Square Feet	Gross Sales Price	Cash Proceeds from Sale (1)	Gain on Sale
					(In thousands)		
February 13, 2018	Summit - MWAA	Other	Reston, Virginia	—	$ 2,154	$ 2,154	$ 455
April 3, 2018	Summit I and II / Summit Land (2)	Office	Reston, Virginia	284,118	95,000	35,240	6,189
May 1, 2018	Bowen Building (3)	Office	Washington, D.C.	231,402	140,000	136,488	27,207
September 21, 2018	Executive Tower (4)	Office	Washington, D.C.	129,831	121,445	113,267	11,938
Total				645,351	$ 358,599	$ 287,149	$ 45,789

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(1) Net of related mortgage loan payments.
(2) Total square feet included 700,000 square feet of estimated potential development density. In connection with the sale, we repaid the related $59.0 million mortgage loan.
(3) In connection with the sale, we repaid $115.0 million of the then outstanding balance on our revolving credit facility.
(4) Proceeds from the sale were held in escrow and classified as "Restricted cash" on our balance sheet as of September 30, 2018.

In August 2018, JP Morgan, our partner in the real estate venture that owned the Investment Building, a 401,000 square foot office building located in Washington, D.C., acquired our 5.0% interest in the venture. See Note 4 for additional information.

Assets Held for Sale

We have certain real estate properties that are expected to be sold to third parties within a one-year period that meet the criteria to be classified as held for sale as of September 30, 2018. The amounts included in "Assets held for sale" in our balance sheets primarily represent real estate investment balances. The amounts included in "Liabilities related to assets held for sale" in our balance sheets primarily represent mortgage payable balances for these properties. The following is a summary of assets held for sale as of September 30, 2018:

Assets	Segment	Location	Total Square Feet	Assets Held for Sale	Liabilities Related to Assets Held for Sale
				(In thousands)	
1233 20th Street (1)	Office	Washington, D.C.	149,684	$ 59,602	$ 43,802
Falkland Chase-North (2)	Multifamily	Downtown Silver Spring, Maryland	13,284	2,218	—
Commerce Executive (3)	Office / Other	Reston, Virginia	388,450	75,635	1,855
			551,418	$ 137,455	$ 45,657

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(1) Liabilities related to assets held for sale includes a mortgage loan of $42.0 million as of September 30, 2018. In October 2018, we sold 1233 20th Street for a gross sales price of $65.0 million. In connection with the sale, we repaid the related mortgage loan.
(2) In October 2018, we sold the out-of-service portion of Falkland Chase-North for a gross sales price of $3.8 million.
(3) In July 2018, the buyer's deposit related to the contract to sell Commerce Executive for $115.0 million became non-refundable. The sale is expected to close in early 2019.

4. Investments in and Advances to Unconsolidated Real Estate Ventures

The following is a summary of the composition of our investments in and advances to unconsolidated real estate ventures:

Real Estate Venture Partners	Ownership Interest [(1)]	September 30, 2018	December 31, 2017
		(In thousands)	
Canadian Pension Plan Investment Board ("CPPIB")	55.0% - 79.2%	$ 136,877	$ 36,317
Landmark	1.8% - 49.0%	86,561	95,368
CBREI Venture	5.0% - 64.0%	75,713	79,062
Berkshire Group	50.0%	38,124	27,761
Brandywine	30.0%	13,858	13,741
CIM Group ("CIM") and Pacific Life Insurance Company ("PacLife")	16.7%	9,664	—
JP Morgan	—%	—	9,296
Other		137	246
Total investments in unconsolidated real estate ventures		360,934	261,791
Advances to unconsolidated real estate ventures		80	20
Total investments in and advances to unconsolidated real estate ventures		$ 361,014	$ 261,811

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(1) Ownership interests as of September 30, 2018. We have multiple investments with certain venture partners with varying ownership interests.

In January 2018, we invested $10.1 million for a 16.67% interest in a real estate venture with CIM and PacLife, which purchased the 1,152-key Wardman Park hotel, located adjacent to the Woodley Park Metro Station in northwest Washington, D.C. Prior to the acquisition by this venture, the JBG Legacy Funds owned a 47.64% interest in the Wardman Park hotel. The JBG Legacy Funds did not receive any proceeds from the sale, as the net proceeds were used to satisfy the prior mortgage debt. A third-party asset manager oversees the hotel operations on behalf of the venture and our involvement will increase only to the extent the land development opportunity becomes the primary business plan for the asset.

In February 2018, we entered into a real estate venture with CPPIB to develop and own 1900 N Street, an under construction office asset in Washington, D.C. We contributed 1900 N Street, valued at $95.9 million, to the real estate venture, and CPPIB has committed to contribute approximately $101.0 million to the venture for a 45.0% interest, which will reduce our ownership interest from 100.0% at the real estate venture's formation to 55.0% as contributions are funded.

In June 2018, the real estate venture with CPPIB that owns 1101 17th Street, a 216,000 square foot office building located in Washington, D.C., in which we have a 55.0% ownership interest, refinanced a mortgage loan payable that was collateralized by the property. The terms of the new mortgage loan eliminated the principal guaranty provisions that had been included in the prior loan. Distributions and our share of the cumulative earnings of the venture exceeded our investment in the venture by $5.4 million, which resulted in a negative investment balance. After the elimination of the principal guaranty provisions in the prior mortgage loan, we no longer guarantee the obligations of the venture or provide further financial support to the venture. Accordingly, we recognized the $5.4 million negative investment balance as income within “Income from unconsolidated real estate ventures, net” in our statements of operations for the nine months ended September 30, 2018. We have also suspended the equity method accounting for this real estate venture. We will recognize as income any future distributions from the venture until our share of unrecorded earnings and contributions exceed the cumulative excess distributions previously recognized in income. For the three and nine months ended September 30, 2018, we recognized income of $890,000 related to a distribution from 1101 17th Street, which is included in “Income from unconsolidated real estate ventures, net” in our statement of operations.

In August 2018, JP Morgan, our partner in the real estate venture that owned the Investment Building, a 401,000 square foot office building located in Washington, D.C., acquired our 5.0% interest in the venture for $24.6 million, resulting in a gain of $15.5 million, which is included in "Income from unconsolidated real estate ventures, net” in our statements of operations for the three and nine months ended September 30, 2018.

The following is a summary of the debt of our unconsolidated real estate ventures:

	Weighted Average Effective Interest Rate (1)	September 30, 2018	December 31, 2017
		(In thousands)	
Variable rate (2)	4.96%	$ 536,950	$ 534,500
Fixed rate (3)	3.95%	852,674	657,701
Unconsolidated real estate ventures - mortgages payable		1,389,624	1,192,201
Unamortized deferred financing costs		(2,555)	(2,000)
Unconsolidated real estate ventures - mortgages payable, net (4)		$ 1,387,069	$ 1,190,201

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(1) Weighted average effective interest rate as of September 30, 2018.

(2) Includes variable rate mortgages payable with interest rate cap agreements.

(3) Includes variable rate mortgages payable with interest rates fixed by interest rate swap agreements.

(4) See Note 15 for additional information on guarantees of the debt of certain of our unconsolidated real estate ventures.

The following is a summary of the financial information for our unconsolidated real estate ventures:

	September 30, 2018	December 31, 2017
Combined balance sheet information:	(In thousands)	
Real estate, net	$ 2,425,633	$ 2,106,670
Other assets, net	307,105	264,731
Total assets	$ 2,732,738	$ 2,371,401
Mortgages payable, net	$ 1,387,069	$ 1,190,201
Other liabilities, net	100,104	76,416
Total liabilities	1,487,173	1,266,617
Total equity	1,245,565	1,104,784
Total liabilities and equity	$ 2,732,738	$ 2,371,401

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Combined income statement information:	(In thousands)			
Total revenue	$ 76,247	$ 46,830	$ 236,938	$ 83,387
Operating income	6,861	3,237	23,719	14,576
Net loss	(6,970)	(5,191)	(12,159)	(414)

5. Variable Interest Entities

We hold various interests in entities deemed to be VIEs, which we evaluate at acquisition, formation, after a change in the ownership agreement or a change in the real estate venture's economics to determine if the VIEs should be consolidated in our financial statements or should no longer be considered a VIE. Certain criteria we assess in determining whether the VIEs should be consolidated relate to our at-risk equity, our control over significant business activities, our voting rights, the noncontrolling interest kick-out rights and whether we are the primary beneficiary of the VIE.

Unconsolidated VIEs

As of September 30, 2018 and December 31, 2017, we have interests in entities deemed to be VIEs that are in the development stage and do not hold sufficient equity at risk or conduct substantially all their operations on behalf of an investor with disproportionately few voting rights. Although we are engaged to act as the managing partner in charge of day-to-day operations of these investees, we are not the primary beneficiary of these VIEs as we do not hold unilateral power over activities that, when taken together, most significantly impact the respective VIE's performance. We account for our investment in these entities under the equity method. As of September 30, 2018 and December 31, 2017, the net carrying amounts of our investment in these entities were $269.1 million and $163.5 million, which are included in "Investments in and advances to unconsolidated real estate ventures" in our balance sheets. Our equity in the income of unconsolidated VIEs is included in "Income from unconsolidated real estate ventures, net" in our statements of operations. Our maximum exposure to loss in these entities is limited to our investments, construction commitments and debt guarantees. See Note 15 for additional information.

Consolidated VIEs

JBG SMITH LP is our most significant consolidated VIE. We hold the majority membership interest in the operating partnership, act as the general partner and exercise full responsibility, discretion and control over its day-to-day management.

The noncontrolling interests of the operating partnership do not have substantive liquidation rights, substantive kick-out rights without cause, or substantive participating rights that could be exercised by a simple majority of noncontrolling interest members (including by such a member unilaterally). Because the noncontrolling interest holders do not have these rights, the operating partnership is a VIE. As general partner, we have the power to direct the core activities of the operating partnership that most significantly affect its performance, and through our majority interest in the operating partnership have both the right to receive benefits from and the obligation to absorb losses of the operating partnership. Accordingly, we are the primary beneficiary of the operating partnership and consolidate the operating partnership in our financial statements. As we conduct our business and hold our assets and liabilities through the operating partnership, the total assets and liabilities of the operating partnership comprise substantially all of our consolidated assets and liabilities.

We also consolidate certain VIEs in which we control the most significant business activities. These entities are VIEs because they are in the development stage and do not hold sufficient equity at risk. We are the primary beneficiaries of these VIEs because the noncontrolling interest holders do not have substantive kick-out or participating rights and we control all of the significant business activities. As of September 30, 2018, we consolidated two VIEs with total assets and liabilities, excluding the operating partnership, of $188.4 million and $22.8 million. As of December 31, 2017, we consolidated two VIEs with total assets and liabilities, excluding the operating partnership, of $111.0 million and $8.8 million.

6. Other Assets, Net

The following is a summary of other assets, net:

	September 30, 2018	December 31, 2017
	(In thousands)	
Deferred leasing costs	$ 189,959	$ 171,153
Accumulated amortization	(72,217)	(67,180)
Deferred leasing costs, net	117,742	103,973
Prepaid expenses	14,623	9,038
Identified intangible assets, net	94,221	126,467
Deferred financing costs on credit facility, net	5,292	6,654
Deposits	3,592	6,317
Derivative agreements, at fair value	28,356	2,141
Other	18,132	9,333
Total other assets, net	$ 281,958	$ 263,923

7. Debt

Mortgages Payable

The following is a summary of mortgages payable:

	Weighted Average Effective Interest Rate [(1)]	September 30, 2018	December 31, 2017
		(In thousands)	
Variable rate [(2)]	4.16%	$ 182,996	$ 498,253
Fixed rate [(3)] [(4)]	4.19%	1,590,983	1,537,706
Mortgages payable		1,773,979	2,035,959
Unamortized deferred financing costs and premium/ discount, net		(4,041)	(10,267)
Mortgages payable, net		$ 1,769,938	$ 2,025,692

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(1) Weighted average effective interest rate as of September 30, 2018.

(2) Includes variable rate mortgages payable with interest rate cap agreements.

(3) Includes variable rate mortgages payable with interest rates fixed by interest rate swap agreements.

(4) Excludes the mortgage payable of $42.0 million related to 1233 20th Street, which is included in "Liabilities related to assets held for sale" in our balance sheet as of September 30, 2018. This mortgage was repaid in October 2018 concurrent with the closing of the sale. See Note 3 for additional information.

As of September 30, 2018, the net carrying value of real estate collateralizing our mortgages payable, excluding assets held for sale, totaled $2.3 billion. Our mortgage loans contain covenants that limit our ability to incur additional indebtedness on these properties and in certain circumstances, require lender approval of tenant leases and/or yield maintenance upon repayment prior to maturity. Certain of our mortgage loans are recourse to us.

During the nine months ended September 30, 2018, aggregate borrowings related to construction draws under mortgages payable totaled $43.8 million. We repaid mortgages payable with an aggregate principal balance of $251.1 million and recognized losses on the extinguishment of debt in conjunction with these repayments of $79,000 and $4.5 million for the three and nine months ended September 30, 2018.

As of September 30, 2018 and December 31, 2017, we had various interest rate swap and cap agreements with an aggregate notional value of $1.3 billion and $1.4 billion on certain of our mortgages payable, which mature on various dates concurrent with the maturity of the related mortgages payable. During the nine months ended September 30, 2018, we entered into various interest rate swap and cap agreements on certain of our mortgages payable with an aggregate notional value of $381.3 million. See Note 13 for additional information.

Credit Facility

Our $1.4 billion credit facility, consists of a $1.0 billion revolving credit facility maturing in July 2021, with two six-month extension options, a delayed draw $200.0 million unsecured term loan ("Tranche A-1 Term Loan") maturing in January 2023, and a delayed draw $200.0 million unsecured term loan ("Tranche A-2 Term Loan") maturing in July 2024.

In January 2018, we drew $50.0 million under the Tranche A-1 Term Loan in accordance with the delayed draw provisions of the credit facility, bringing the outstanding borrowings under the term loan facility to $100.0 million. Concurrent with the draw, we entered into an interest rate swap agreement to convert the variable interest rate to a fixed interest rate. As of September 30, 2018 and December 31, 2017, we had interest rate swaps with an aggregate notional value of $100.0 million and $50.0 million to convert the variable interest rate applicable to our Tranche A-1 Term Loan to a fixed interest rate, providing weighted average base interest rates under the facility agreement of 2.12% and 1.97% per annum. The interest rate swaps mature in January 2023, concurrent with the maturity of our Tranche A-1 Term Loan.

In July 2018, we drew $200.0 million under the Tranche A-2 Term Loan, in accordance with the delayed draw provisions of the credit facility.

The following is a summary of amounts outstanding under the credit facility:

	Interest Rate (1)	September 30, 2018	December 31, 2017
		(In thousands)	
Revolving credit facility (2) (3) (4) (5)	3.36%	$ —	$ 115,751
Tranche A-1 Term Loan	3.32%	$ 100,000	$ 50,000
Tranche A-2 Term Loan	3.81%	200,000	—
Unsecured term loans		300,000	50,000
Unamortized deferred financing costs, net		(3,019)	(3,463)
Unsecured term loans, net		$ 296,981	$ 46,537

(1) Interest rate as of September 30, 2018.

(2) As of September 30, 2018 and December 31, 2017, letters of credit with an aggregate face amount of $5.7 million were provided under our revolving credit facility.

(3) As of September 30, 2018 and December 31, 2017, net deferred financing costs related to our revolving credit facility totaling $5.3 million and $6.7 million were included in "Other assets, net."

(4) In May 2018, in connection with the sale of the Bowen Building, we repaid $115.0 million of the then outstanding balance on our revolving credit facility. See Note 3 for additional information.

(5) The interest rate for the revolving credit facility excludes a 0.15% facility fee.

8. Other Liabilities, Net

The following is a summary of other liabilities, net:

	September 30, 2018	December 31, 2017
	(In thousands)	
Lease intangible liabilities	$ 40,179	$ 44,917
Accumulated amortization	(25,523)	(26,950)
Lease intangible liabilities, net	14,656	17,967
Prepaid rent	15,030	15,751
Lease assumption liabilities and accrued tenant incentives	49,510	50,866
Capital lease obligation	15,736	15,819
Security deposits	13,009	13,618
Ground lease deferred rent payable	3,498	3,730
Net deferred tax liability	6,446	8,202
Dividends payable (1)	—	31,097
Other	1,667	4,227
Total other liabilities, net	$ 119,552	$ 161,277

(1) Dividends declared in December 2017 were paid in January 2018.

9. Redeemable Noncontrolling Interests

JBG SMITH LP

In July 2017, JBG SMITH LP issued 19.8 million OP Units to persons other than JBG SMITH that became redeemable for cash or, at our election, our common shares beginning on August 1, 2018, subject to certain limitations. During the three and nine months ended September 30, 2018, unitholders redeemed 3.0 million OP units, which we elected to redeem for an equivalent number of our common shares. As of September 30, 2018, outstanding OP Units totaled 16.8 million, representing a 12.2% interest in JBG SMITH LP. On our balance sheets, our redeemable noncontrolling interests are presented at the higher of their redemption value at the end of each reporting period or their carrying value, with such adjustments recognized in "Additional paid-in capital." Redemption value is equivalent to the market value of one of our common shares at the end of the period multiplied by the number of vested OP units outstanding.

Consolidated Real Estate Venture

In November 2017, we became a partner in a real estate venture that owns an under construction multifamily asset located at 965 Florida Avenue in Washington, D.C. Pursuant to the terms of the 965 Florida Avenue real estate venture agreement, we will fund all capital contributions until our ownership interest reaches a maximum of 97.0%. Our partner can redeem its interest for cash two years after delivery, but no later than seven years subsequent to delivery. As of September 30, 2018, we held an 85.4% ownership interest.

Below is a summary of the activity of redeemable noncontrolling interests:

	Nine Months Ended September 30,					
	2018			2017		
	JBG SMITH LP	Consolidated Real Estate Venture	Total	JBG SMITH LP	Consolidated Real Estate Venture	Total
	(In thousands)					
Balance as of beginning of period	$ 603,717	$ 5,412	$ 609,129	$ —	$ —	$ —
Fair value of OP Unit redemptions	(109,208)	—	(109,208)	—	—	—
OP Units issued at the Separation	—	—	—	96,632	—	96,632
OP Units issued in connection with the Combination [1]	—	—	—	359,967	—	359,967
Net income (loss) attributable to redeemable noncontrolling interests	6,537	(5)	6,532	(2,481)	—	(2,481)
Other comprehensive income	3,406	—	3,406	—	—	—
Contributions (distributions)	(8,763)	500	(8,263)	—	—	—
Share-based compensation expense	39,376	—	39,376	15,799	—	15,799
Adjustment to redemption value	21,346	—	21,346	97,084	—	97,084
Balance as of end of period	$ 556,411	$ 5,907	$ 562,318	$ 567,001	$ —	$ 567,001

[1] Excludes certain OP Units issued as part of the Combination which had an estimated fair value of $110.6 million, the vesting of which is subject to post-combination employment.

10. Share-Based Payments

Time-Based LTIP Units

In February 2018, we granted 357,759 long-term incentive partnership units ("LTIP Units") with time-based vesting requirements ("Time-Based LTIP Units") to management and other employees with a grant-date fair value of $11.2 million or $31.38 per unit. The significant assumptions used to value the Time-Based LTIP Units included expected volatility (20.0%), risk-free interest rate (2.1%) and post-grant restriction periods (2 years). The Time-Based LTIP units vest in four equal installments in January of each year, subject to continued employment. Compensation expense is being recognized over a four-year period.

Performance-Based LTIP Units

In February 2018, we granted 553,489 LTIP Units with performance-based vesting requirements ("Performance-Based LTIP Units") to management and other employees with a grant-date fair value of $9.4 million or $17.04 per unit valued using Monte Carlo simulations. The significant assumptions used to value the Performance-Based LTIP Units included expected volatility (19.9%), dividend yield (2.7%) and risk-free interest rates (2.3%). Fifty percent of any Performance-Based LTIP Units that are earned vest at the end of the three-year performance period and the remaining 50% one year after the performance period ends, subject to continued employment. Compensation expense is being recognized over a four-year period.

LTIP Units

In May 2018, as part of their annual compensation, we granted a total of 25,770 fully vested LTIP Units to certain of our trustees with an aggregate grant-date fair value of $794,000.

Other Equity Awards

Certain executives have elected to receive all or a portion of any cash bonus that may be paid in 2019, related to 2018 service, in the form of fully vested LTIP Units.

Share-Based Compensation Expense

Share-based compensation expense is summarized as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
	(In thousands)			
Time-Based LTIP Units	$ 2,520	$ 885	$ 7,772	$ 885
Performance-Based LTIP Units	1,391	469	3,898	469
LTIP Units	—	—	794	—
Other equity awards	989	232	2,693	1,526
Share-based compensation expense - other	4,900	1,586	15,157	2,880
Formation Awards	1,375	3,963	4,192	3,963
LTIP and OP Units [1]	7,012	10,482	22,720	10,482
Share-based compensation related to Formation Transaction [2]	8,387	14,445	26,912	14,445
Total share-based compensation expense	13,287	16,031	42,069	17,325
Less amount capitalized	(873)	(161)	(2,379)	(161)
Share-based compensation expense	$ 12,414	$ 15,870	$ 39,690	$ 17,164

[1] Represents share-based compensation expense for LTIP Units and OP Units subject to post-Combination employment obligations.
[2] Included in "General and administrative expense: Share-based compensation related to Formation Transaction" in the accompanying statements of operations.

As of September 30, 2018, we had $107.2 million of total unrecognized compensation expense related to unvested share-based payment arrangements (unvested OP Units, Formation Awards, Time-Based LTIP Units and Performance-Based LTIP Units). This expense is expected to be recognized over a weighted average period of 2.6 years.

11. Interest Expense

The following is a summary of interest expense included in the statements of operations:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
	(In thousands)			
Interest expense	$ 23,465	$ 16,378	$ 69,024	$ 45,011
Amortization of deferred financing costs	1,043	739	3,501	1,527
Net loss (gain) on derivative financial instruments not designated as cash flow hedges:				
Net unrealized	287	(467)	(1,264)	(467)
Net realized	(135)	27	(135)	27
Capitalized interest	(5,681)	(1,368)	(14,863)	(2,285)
Interest expense	$ 18,979	$ 15,309	$ 56,263	$ 43,813

12. Earnings (Loss) Per Common Share

The following summarizes the calculation of basic and diluted earnings per common share and provides a reconciliation of the amounts of net income (loss) available to common shareholders used in calculating basic and diluted earnings per common share:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
	(In thousands, except per share amounts)			
Net income (loss)	$ 26,382	$ (77,991)	$ 45,619	$ (60,332)
Net (income) loss attributable to redeemable noncontrolling interests	(3,552)	8,160	(6,532)	2,481
Net loss attributable to noncontrolling interests	—	—	127	—
Net income (loss) attributable to common shareholders	22,830	(69,831)	39,214	(57,851)
Distributions to participating securities	(153)	—	(527)	—
Net income (loss) available to common shareholders — basic and diluted	$ 22,677	$ (69,831)	$ 38,687	$ (57,851)
Weighted average number of common shares outstanding — basic and diluted [(1)]	119,835	114,744	118,588	105,347
Earnings (loss) per common share:				
Basic	$ 0.19	$ (0.61)	$ 0.33	$ (0.55)
Diluted	$ 0.19	$ (0.61)	$ 0.33	$ (0.55)

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(1) For the three and nine months ended September 30, 2017, reflects the weighted average common shares attributable to the Vornado Included Assets at the date of the Separation.

The effect of the redemption of OP Units that were outstanding as of September 30, 2018 is excluded in the computation of basic and diluted earnings per common share, as the assumed exchange of such units for common shares on a one-for-one basis was antidilutive (the assumed redemption of these units would have no impact on the determination of diluted earnings per share). Since vested and outstanding OP Units, which are held by noncontrolling interests, are attributed gains and losses at an identical proportion to the common shareholders, the gains and losses attributable and their equivalent weighted average OP Unit impact are excluded from net income (loss) available to common shareholders and from the weighted average number of common shares outstanding in calculating basic and diluted earnings per common share. Performance-Based LTIP Units and Formation Awards, which totaled 3.9 million and 3.8 million for the three and nine months ended September 30, 2018 and 2.6 million and 900,000 for the three and nine months ended September 30, 2017, were excluded from the calculation of diluted earnings per common share as they were antidilutive, but potentially could be dilutive in the future.

13. Fair Value Measurements

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

To manage or hedge our exposure to interest rate risk, we follow established risk management policies and procedures, including the use of a variety of derivative financial instruments. We do not enter into derivative financial instruments for speculative purposes.

As of September 30, 2018, we had various derivative financial instruments consisting of interest rate swap and cap agreements that are measured at fair value on a recurring basis. The net unrealized gain on our derivative financial instruments designated as cash flow hedges was $27.8 million as of September 30, 2018 and was recorded in "Accumulated other comprehensive income" in the balance sheet, of which a portion was reclassified to "Redeemable noncontrolling interests." Within the next 12 months, we expect to reclassify $4.6 million as a decrease to interest expense. The net unrealized (loss) gain on our derivative financial instruments not designated as cash flow hedges was $(287,000) and $1.3 million for the three and nine months ended September 30, 2018 and is recorded in "Interest expense" in our statements of operations. The net unrealized gain on our interest rate swaps and caps was $467,000 for both the three and nine months ended September 30, 2017 and are included in "Interest expense" in our statements of operations.

ASC 820, Fair Value Measurement and Disclosures, 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 values of the derivative financial instruments are based on the estimated amounts we would receive or pay to terminate the contracts at the reporting date and are determined using interest rate pricing models and observable inputs. The derivative financial instruments are classified within Level 2 of the valuation hierarchy.

The following are assets and liabilities measured at fair value on a recurring basis:

	Fair Value Measurements			
	Total	**Level 1**	**Level 2**	**Level 3**
September 30, 2018	(In thousands)			
Derivative financial instruments designated as cash flow hedges:				
Classified as assets in "Other assets, net"	$ 21,119	$ —	$ 21,119	$ —
Classified as liabilities in "Other liabilities, net"	954	—	954	—
Derivative financial instruments not designated as cash flow hedges:				
Classified as assets in "Other assets, net"	7,237	—	7,237	—
December 31, 2017				
Derivative financial instruments designated as cash flow hedges:				
Classified as assets in "Other assets, net"	$ 1,506	$ —	$ 1,506	$ —
Classified as liabilities in "Other liabilities, net"	2,640	—	2,640	—
Derivative financial instruments not designated as cash flow hedges:				
Classified as assets in "Other assets, net"	635	—	635	—
Classified as liabilities in "Other liabilities, net"	22	—	22	—

The fair values of our derivative financial instruments were determined using widely accepted valuation techniques, including discounted cash flow analysis on the expected cash flows of the derivative financial instrument. This analysis reflected the contractual terms of the derivative, including the period to maturity, and used observable market-based inputs, including interest rate market data and implied volatilities in such interest rates. While it was determined that the majority of the inputs used to value the derivatives fall within Level 2 of the fair value hierarchy under authoritative accounting guidance, the credit valuation adjustments associated with the derivatives also utilized Level 3 inputs, such as estimates of current credit spreads to evaluate the likelihood of default. However, as of September 30, 2018, the significance of the impact of the credit valuation adjustments on the overall valuation of the derivative financial instruments was assessed and it was determined that these adjustments were not significant to the overall valuation of the derivative financial instruments. As a result, it was determined that the derivative financial instruments in their entirety should be classified in Level 2 of the fair value hierarchy. The net unrealized gain included in "Other comprehensive income" was primarily attributable to the net change in unrealized gains or losses related to the interest rate swaps that were outstanding as of September 30, 2018, none of which were reported in the statements of operations because they were documented and qualified as hedging instruments.

Financial Assets and Liabilities Not Measured at Fair Value

As of September 30, 2018 and December 31, 2017, all financial instruments and liabilities were reflected in our balance sheets at amounts which, in our estimation, reasonably approximated their fair values, except for the following:

	September 30, 2018		December 31, 2017	
	Carrying Amount [1]	Fair Value	Carrying Amount [1]	Fair Value
	(In thousands)			
Financial liabilities:				
Mortgages payable	$ 1,773,979	$ 1,785,978	$ 2,035,959	$ 2,060,899
Revolving credit facility	—	—	115,751	115,768
Unsecured term loans	300,000	300,307	50,000	50,029

(1) The carrying amount consists of principal only.

The fair value of our mortgages payable is estimated by discounting the future contractual cash flows of these instruments using current risk-adjusted rates available to borrowers with similar credit profiles based on market sources. The fair value of the mortgages payable was determined using Level 2 inputs of the fair value hierarchy.

The fair value of our revolving credit facility and unsecured term loans is calculated based on the net present value of payments over the term of the facilities using estimated market rates for similar notes and remaining terms. The fair value of the revolving credit facility and unsecured term loans was determined using Level 2 inputs of the fair value hierarchy.

14. Segment Information

We review operating and financial data for each property on an individual basis; therefore, each of our individual properties is a separate operating segment. Our reportable segments are aligned with our method of internal reporting and the way our Chief Executive Officer, who is also our Chief Operating Decision Maker ("CODM"), makes key operating decisions, evaluates financial results, allocates resources and manages our business. Accordingly, we aggregate our operating segments into three reportable segments (office, multifamily, and third-party real estate services) based on the economic characteristics and nature of our assets and services.

The CODM measures and evaluates the performance of our operating segments, with the exception of the third-party real estate services business, based on the net operating income ("NOI") of properties within each segment. NOI includes property rental revenues and tenant reimbursements and deducts property operating expenses and real estate taxes.

With respect to the third-party real estate services business, the CODM reviews revenues streams generated by this segment ("Third-party real estate services, including reimbursements"), as well as the expenses attributable to the segment ("General and administrative: third-party real estate services"), which are disclosed separately in the statements of operations. Management company assets primarily consist of management and leasing contracts with a net book value of $40.4 million and $45.7 million and classified in "Other assets, net" in the balance sheets as of September 30, 2018 and December 31, 2017. Consistent with internal reporting presented to our CODM and our definition of NOI, the third-party real estate services operating results are excluded from the NOI data below.

The following table reflects the reconciliation of net income (loss) attributable to common shareholders to consolidated NOI:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	**2017**	**2018**	**2017**
	(In thousands)			
Net income (loss) attributable to common shareholders	$ 22,830	$ (69,831)	$ 39,214	$ (57,851)
Add:				
Depreciation and amortization expense	46,603	43,951	143,880	109,726
General and administrative expense:				
Corporate and other	12,415	10,593	37,759	35,536
Third-party real estate services	20,754	21,178	64,552	30,362
Share-based compensation related to Formation Transaction	8,387	14,445	26,912	14,445
Transaction and other costs	4,126	104,095	12,134	115,173
Interest expense	18,979	15,309	56,263	43,813
Loss on extinguishment of debt	79	689	4,536	689
Reduction of gain (gain) on bargain purchase	—	(27,771)	7,606	(27,771)
Income tax benefit	(841)	(1,034)	(1,436)	(317)
Net (income) loss attributable to redeemable noncontrolling interests	3,552	(8,160)	6,532	(2,481)
Less:				
Third-party real estate services, including reimbursements	23,788	25,141	72,278	38,881
Other income	1,708	1,158	4,904	3,701
Income (loss) from unconsolidated real estate ventures, net	13,484	(1,679)	15,418	(1,365)
Interest and other income (loss), net	4,091	(379)	5,177	1,366
Gain on sale of real estate	11,938	—	45,789	—
Net loss attributable to noncontrolling interests	—	—	127	—
Consolidated NOI	**$ 81,875**	**$ 79,223**	**$ 254,259**	**$ 218,741**

Below is a summary of NOI by segment:

	Three Months Ended September 30, 2018				
	Office	**Multifamily**	**Other**	**Elimination of Intersegment Activity**	**Total**
			(In thousands)		
Rental revenue:					
Property rentals	$ 95,438	$ 26,167	$ 1,956	$ (358)	$ 123,203
Tenant reimbursements	8,036	1,563	145	—	9,744
Total rental revenue	103,474	27,730	2,101	(358)	132,947
Rental expense:				—	
Property operating	29,086	8,144	2,673	(5,736)	34,167
Real estate taxes	12,463	3,506	936	—	16,905
Total rental expense	41,549	11,650	3,609	(5,736)	51,072
Consolidated NOI	$ 61,925	$ 16,080	$ (1,508)	$ 5,378	$ 81,875

	Three Months Ended September 30, 2017				
	Office	Multifamily	Other	Elimination of Intersegment Activity	Total
			(In thousands)		
Rental revenue:					
Property rentals	$ 91,534	$ 23,397	$ 4,171	$ (2,644)	$ 116,458
Tenant reimbursements	7,917	1,548	128	—	9,593
Total rental revenue	99,451	24,945	4,299	(2,644)	126,051
Rental expense:					
Property operating	27,000	6,796	3,502	(7,664)	29,634
Real estate taxes	13,038	2,952	1,204	—	17,194
Total rental expense	40,038	9,748	4,706	(7,664)	46,828
Consolidated NOI	$ 59,413	$ 15,197	$ (407)	$ 5,020	$ 79,223

	Nine Months Ended September 30, 2018				
	Office	Multifamily	Other	Elimination of Intersegment Activity	Total
			(In thousands)		
Rental revenue:					
Property rentals	$ 294,238	$ 75,644	$ 6,068	$ (856)	$ 375,094
Tenant reimbursements	23,480	4,778	393	—	28,651
Total rental revenue	317,718	80,422	6,461	(856)	403,745
Rental expense:				—	
Property operating	83,666	22,844	5,416	(16,464)	95,462
Real estate taxes	39,429	10,561	4,034	—	54,024
Total rental expense	123,095	33,405	9,450	(16,464)	149,486
Consolidated NOI	$ 194,623	$ 47,017	$ (2,989)	$ 15,608	$ 254,259

	Nine Months Ended September 30, 2017				
	Office	Multifamily	Other	Elimination of Intersegment Activity	Total
			(In thousands)		
Rental revenue:					
Property rentals	$ 249,532	$ 62,050	$ 9,623	$ (4,306)	$ 316,899
Tenant reimbursements	22,738	3,772	651	—	27,161
Total rental revenue	272,270	65,822	10,274	(4,306)	344,060
Rental expense:				—	
Property operating	71,377	16,716	11,330	(22,082)	77,341
Real estate taxes	37,185	7,973	2,820	—	47,978
Total rental expense	108,562	24,689	14,150	(22,082)	125,319
Consolidated NOI	$ 163,708	$ 41,133	$ (3,876)	$ 17,776	$ 218,741

The following is a summary of certain balance sheet data by segment:

	Office		Multifamily		Other		Elimination of Intersegment Activity		Total
September 30, 2018					(In thousands)				
Real estate, at cost	$	3,420,068	$	1,599,912	$	673,565	$	—	$ 5,693,545
Investments in and advances to unconsolidated real estate ventures		211,301		105,028		44,685		—	361,014
Total assets [(1)]		3,488,847		1,475,233		1,211,537		(164,423)	6,011,194
December 31, 2017									
Real estate, at cost	$	3,953,314	$	1,476,423	$	587,767	$	—	$ 6,017,504
Investments in and advances to unconsolidated real estate ventures		124,659		98,835		38,317		—	261,811
Total assets [(1)]		3,542,977		1,434,999		1,299,085		(205,254)	6,071,807

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(1) Includes assets held for sale of $137.5 million ($130.8 million in our office segment, $2.2 million in our multifamily segment and $4.5 million in our other segment) as of September 30, 2018 and $8.3 million ($1.7 million in our office segment and $6.6 million in our other segment) as of December 31, 2017.

15. Commitments and Contingencies

Insurance

We maintain general liability insurance with limits of $200.0 million per occurrence and in the aggregate, and property and rental value insurance coverage with limits of $2.0 billion per occurrence, with sub-limits for certain perils such as floods and earthquakes on each of our properties. We also maintain coverage, through our wholly owned captive insurance subsidiary, for both terrorist acts and for nuclear, biological, chemical or radiological terrorism events with limits of $2.0 billion per occurrence. These policies are partially reinsured by third-party insurance providers.

We will continue to monitor the state of the insurance market and the scope and costs of coverage for acts of terrorism. 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 the insurance coverage, which could be material.

Our debt, consisting of mortgage loans secured by our properties, revolving credit facility and unsecured term loans contain customary covenants requiring adequate insurance coverage. Although we believe that we currently have adequate insurance coverage, we may not be able to obtain an equivalent amount of coverage at reasonable costs in the future. If lenders insist on greater coverage than we are able to obtain, it could adversely affect the ability to finance or refinance our properties.

Construction Commitments

As of September 30, 2018, we have construction in progress that will require an additional $396.2 million to complete ($310.8 million related to our consolidated entities and $85.4 million related to our unconsolidated real estate ventures at our share), based on our current plans and estimates, which we anticipate will be primarily expended over the next two to three years. These capital expenditures are generally due as the work is performed, and we expect to finance them with debt proceeds, proceeds from asset recapitalizations and sales, and available cash.

Environmental Matters

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 that we believe would have a material adverse effect on our overall business, financial condition or results of operations, or that have not been anticipated and remediated during site redevelopment as required by law. Nevertheless, 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 cost to us.

Other

There are various legal actions against us in the ordinary course of business. In our opinion, the outcome of such matters will not have a material adverse effect on our financial condition, results of operations or cash flows.

From time to time, we (or ventures in which we have an ownership interest) have agreed, and may in the future with respect to unconsolidated real estate ventures agree, to (1) guarantee portions of the principal, interest and other amounts in connection with their borrowings, (2) provide customary environmental indemnifications and nonrecourse carve-outs (e.g., guarantees against fraud, misrepresentation and bankruptcy) in connection with their borrowings and (3) provide guarantees to lenders and other third parties for the completion of development projects. We customarily have agreements with our outside partners whereby the partners agree to reimburse the real estate venture or us for their share of any payments made under certain of these guarantees. Amounts that may be required to be paid in future periods in relation to budget overruns or operating losses that are also included in some of our guarantees are not estimable. Guarantees (excluding environmental) terminate either upon the satisfaction of specified circumstances or repayment of the underlying debt. At times, we have agreements with our outside partners whereby we agree to reimburse our partner for their share of any payments made by them under certain guarantees. As of September 30, 2018, the aggregate amount of our principal payment guarantees was $69.6 million for our consolidated entities and there were no principal payment guarantees for our unconsolidated real estate ventures.

As of September 30, 2018, we expect to fund additional capital to certain of our unconsolidated investments totaling $48.6 million, which we anticipate will be primarily expended over the next two to three years.

In connection with the Formation Transaction, we entered into an agreement with Vornado regarding tax matters (the "Tax Matters Agreement") that provides special rules that allocate tax liabilities if the distribution of JBG SMITH shares by Vornado, together with certain related transactions, is not tax-free. Under the Tax Matters Agreement, we may be required to indemnify Vornado against any taxes and related amounts and costs resulting from a violation by us of the Tax Matters Agreement, or from the taking of certain restricted actions by us.

16. Transactions with Vornado and Related Parties

Transactions with Vornado

As described in Note 1, the accompanying financial statements present the operations of the Vornado Included Assets as carved-out from the financial statements of Vornado for all periods prior to July 17, 2017.

Certain centralized corporate costs borne by Vornado for management and other services including, but not limited to, accounting, reporting, legal, tax, information technology and human resources have been allocated to the assets in the financial statements based on either actual costs incurred or a proportion of costs estimated to be applicable to the Vornado Included Assets based on key metrics including total revenue. The total amounts allocated during the three and nine months ended September 30, 2017 were $873,000 and $13.0 million. These allocated amounts are included as a component of "General and administrative expense: Corporate and other" expenses on the statement of operations and do not necessarily reflect what actual costs would have been if the Vornado Included Assets were a separate standalone public company.

In connection with the Formation Transaction, we entered into an agreement with Vornado under which Vornado provides operational support for an initial period of up to two years. These services include information technology, financial reporting and payroll services. The charges for these services are based on an hourly or per transaction fee arrangement including reimbursement for overhead and out-of-pocket expenses. The total charges for the three and nine months ended September 30, 2018 were $931,000 and $3.2 million. The total charges for both the three and nine months ended September 30, 2017 were approximately $912,000. Pursuant to an agreement, we are providing Vornado with leasing and property management services for certain of its assets that were not part of the Separation. The total revenue related to these services for the three and nine months ended September 30, 2018 was $507,000 and $1.6 million. The total revenue related to these services for both the three and nine months ended September 30, 2017 was $68,000. We believe that the terms of both of these agreements are comparable to those that would have been negotiated based on market rates.

In connection with the Formation Transaction, we entered into a Tax Matters Agreement with Vornado. See Note 15 for additional information.

In August 2014, we completed a $185.0 million financing of the Universal buildings, a 687,000 square foot office complex located in Washington, D.C. In connection with this financing, pursuant to a note agreement dated August 12, 2014, we used a portion of the financing proceeds and made an $86.0 million loan to Vornado at LIBOR plus 2.9% due August 2019. At the Separation, Vornado repaid the outstanding balance of the loan and related accrued interest. We recognized interest income of $130,000 and $1.8 million during the three and nine months ended September 30, 2017.

In connection with the development of The Bartlett, prior to the Separation, we entered into various note agreements with Vornado whereby we could borrow up to a maximum of $170.0 million. Vornado contributed these note agreements along with accrued and unpaid interest to JBG SMITH at the Separation. We incurred interest expense of $365,000 and $4.1 million during the three and nine months ended September 30, 2017.

In June 2016, the $115.0 million mortgage loan (including $608,000 of accrued interest) secured by the Bowen Building, a 231,000 square foot office building located in Washington, D.C., was repaid with the proceeds of a $115.6 million draw on our former parent's revolving credit facility. We repaid our former parent with amounts drawn under our revolving credit facility at the Combination. We incurred interest expense of $120,000 and $1.3 million during the three and nine months ended September 30, 2017.

We have agreements that are terminable on the second anniversary of the Combination with Building Maintenance Services ("BMS"), a wholly owned subsidiary of Vornado, to supervise cleaning, engineering and security services at our properties. We paid BMS $5.4 million and $3.6 million during the three months ended September 30, 2018 and 2017, and $15.5 million and $9.9 million during the nine months ended September 30, 2018 and 2017, which are included in "Property operating expenses" in our statements of operations.

We entered into a consulting agreement with Mitchell Schear, a member of our Board of Trustees and formerly the president of Vornado’s Washington, D.C. segment. The consulting agreement expired on December 31, 2017 and provides for the payment of consulting fees and expenses at the rate of $169,400 per month for the 24 months following the Separation, including after the termination of the consulting agreement. The amount due under this consulting agreement of $4.1 million was expensed in connection with the Combination. As of September 30, 2018, the remaining liability is $1.4 million. Additionally, in March 2017, Vornado amended Mr. Schear’s employment agreement to provide for the payment of severance, bonus and post-employment services.

Transactions with Real Estate Ventures

We have a third-party real estate services business that provides fee-based real estate services to the JBG Legacy Funds and other third parties. We provide services for the benefit of the JBG Legacy Funds that own interests in the assets retained by the JBG Legacy Funds. In connection with the contribution of the JBG Assets to us, it was determined that the general partner and managing member interests in the JBG Legacy Funds that were held by former JBG executives (and who became members of our management team and/or Board of Trustees) would not be transferred to us and remain under the control of these individuals. In addition, certain members of our senior management and Board of Trustees have an ownership interest in the JBG Legacy Funds and own carried interests in each fund and in certain of our real estate ventures that entitles them to receive additional compensation if the fund or real estate venture achieves certain return thresholds. This third-party real estate services revenue, including reimbursements, from these JBG Legacy Funds for the three and nine months ended September 30, 2018 was $8.7 million and $25.6 million. As of September 30, 2018 and December 31, 2017, we had receivables from the JBG Legacy Funds totaling $3.1 million for both periods for third-party real estate services, including reimbursements.

We rent our corporate offices from an unconsolidated real estate venture and incurred expenses totaling $1.2 million and $3.6 million during the three and nine months ended September 30, 2018 and $792,000 during the three and nine months ended September 30, 2017, which is recorded in "General and administrative expense: Corporate and other" in our statements of operations.

17. Subsequent Events

In October 2018, we sold 1233 20th Street and the out-of-service portion of Falkland Chase-North. See Note 3 for additional information.

In November 2018, our Board of Trustees declared a quarterly dividend of $0.225 per common share, payable on November 26, 2018 to shareholders of record on November 13, 2018.

ITEM 2. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

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 Quarterly Report on Form 10-Q. 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 "Risk Factors" in Item 1A of our 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, which speak only as of the date of this Quarterly Report on Form 10-Q. All subsequent written and oral forward-looking statements attributable to us or any person acting on our behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this section. We do not undertake any obligation to release publicly any revisions to our forward-looking statements to reflect events or circumstances occurring after the date of this Quarterly Report on Form 10-Q.

Organization and Basis of Presentation

JBG SMITH Properties ("JBG SMITH") was organized by Vornado Realty Trust ("Vornado" or "former parent") as a Maryland real estate investment trust ("REIT") on October 27, 2016 (capitalized on November 22, 2016). JBG SMITH was formed for the purpose of receiving, via the spin-off on July 17, 2017 (the "Separation"), substantially all of the assets and liabilities of Vornado’s Washington, D.C. segment, which operated as Vornado / Charles E. Smith, (the "Vornado Included Assets"). On July 18, 2017, JBG SMITH acquired the management business and certain assets and liabilities (the "JBG Assets") of The JBG Companies ("JBG") (the "Combination"). The Separation and the Combination are collectively referred to as the "Formation Transaction." Substantially all of our assets are held by, and our operations are conducted through, JBG SMITH Properties LP ("JBG SMITH LP"), our operating partnership.

Prior to the Separation from Vornado, JBG SMITH was a wholly owned subsidiary of Vornado and had no material assets or operations. Our operations are presented as if the transfer of the Vornado Included Assets had been consummated prior to all historical periods presented in the accompanying consolidated and combined financial statements at the carrying amounts of such assets and liabilities reflected in Vornado’s books and records. The assets and liabilities of the JBG Assets and subsequent results of operations and cash flows are reflected in our consolidated and combined financial statements beginning on the date of the Combination.

The following is a discussion of the historical results of operations and liquidity and capital resources of JBG SMITH as of September 30, 2018 and December 31, 2017, and for the three and nine months ended September 30, 2018 and 2017, which includes results prior to the consummation of the Formation Transaction. The historical results presented prior to the consummation of the Formation Transaction include the Vornado Included Assets, all of which were under common control of Vornado until July 17, 2017. Unless otherwise specified, the discussion of the historical results prior to July 18, 2017 does not include the results of the JBG Assets. Consequently, our results for the periods before and after the Formation Transaction are not directly comparable. The following discussion should be read with our condensed consolidated and combined interim financial statements and notes thereto appearing in "Item 1. Financial Statements."

References to the financial statements refer to our condensed consolidated and combined financial statements as of September 30, 2018 and December 31, 2017, and for the three and nine months ended September 30, 2018 and 2017. References to the balance sheets refer to our condensed consolidated balance sheets as of September 30, 2018 and December 31, 2017. References to the statements of operations refer to our condensed consolidated and combined statements of operations for the three and nine months ended September 30, 2018 and 2017. References to the statements of cash flows refer to our condensed consolidated and combined statements of cash flows for the nine months ended September 30, 2018 and 2017.

The accompanying financial statements are prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP"). GAAP requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the financial statements and the reported amounts of revenue and expenses during the reporting periods. Actual results could differ from these estimates. The historical financial results for the Vornado Included Assets reflect charges for certain corporate costs allocated by the former parent which were based on either actual costs incurred or a proportion of costs estimated to be applicable to the Vornado Included Assets based on an analysis of key metrics, including total revenues. Such costs do not necessarily reflect what the actual costs would have been if JBG SMITH had been operating as a separate standalone public company. These charges are discussed further in Note 16 to the financial statements included herein.

We have elected to be taxed as a REIT under sections 856-860 of the Internal Revenue Code of 1986, as amended (the "Code"). Under those sections, a REIT which distributes at least 90% of its REIT taxable income as dividends 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. Prior to the Separation, Vornado operated as a REIT and distributed 100% of taxable income to its shareholders, accordingly, no provision for federal income taxes has been made in the accompanying financial statements for the periods prior to the Separation. We intend to adhere to these requirements and maintain our REIT status in future periods. We also participate in the activities conducted by subsidiary entities which have elected to be treated as taxable REIT subsidiaries under the Code. As such, we are subject to federal, state, and local taxes on the income from these activities.

We aggregate our operating segments into three reportable segments (office, multifamily, and third-party real estate services) based on the economic characteristics and nature of our assets and services.

Our revenues and expenses are, to some extent, subject to seasonality during the year, which impacts quarterly net earnings, cash flows and funds from operations that affects the sequential comparison of our results in individual quarters over time. We have historically experienced higher utility costs in the first and third quarters of the year.

We compete with a large number of property owners and developers. Our success depends upon, among other factors, trends affecting national and local economies, the financial condition and operating results of current and prospective tenants, the availability and cost of capital, interest rates, construction and renovation costs, taxes, governmental regulations and legislation, population trends, zoning laws, and our ability to lease, sublease or sell our assets at profitable levels. Our success is also subject to our ability to refinance existing debt on acceptable terms as it comes due.

Overview

We own and operate a portfolio of high-quality office and multifamily assets, many of which are amenitized with ancillary retail. Our portfolio reflects our longstanding strategy of owning and operating assets within Metro-served submarkets in the Washington, D.C. metropolitan area that have high barriers to entry and key urban amenities, including being within walking distance of a Metro station.

As of September 30, 2018, our Operating Portfolio consists of 65 operating assets comprising 46 office assets totaling approximately 13.0 million square feet (11.5 million square feet at our share), 15 multifamily assets totaling 6,307 units (4,523 units at our share) and four other assets totaling approximately 806,000 square feet (352,000 square feet at our share). Additionally, we have (i) seven assets under construction comprising three office assets totaling approximately 778,000 square feet (546,000 square feet at our share) and four multifamily assets totaling 1,476 units (1,284 units at our share); and (ii) 43 future development assets totaling approximately 22.4 million square feet (19 million square feet at our share) of estimated potential development density.

Key highlights of operating results for the three and nine months ended September 30, 2018 included:

- net income attributable to common shareholders of $22.8 million, or $0.19 per diluted common share, for the three months ended September 30, 2018 as compared to a net loss of $69.8 million, or $0.61 per diluted common share, for the three months ended September 30, 2017. Net income attributable to common shareholders of $39.2 million, or $0.33 per diluted common share, for the nine months ended September 30, 2018 as compared to a net loss of $57.9 million, or $0.55 per diluted common share, for the nine months ended September 30, 2017. Net income attributable to common shareholders for the three and nine months ended September 30, 2018 included gains on the sale of real estate of $11.9 million and $45.8 million. Net loss attributable to common shareholders for the three and nine months ended September 30, 2017 included transaction and other costs of $104.1 million and $115.2 million and a gain on bargain purchase of $27.8 million for both periods;
- operating office portfolio leased and occupied percentages at our share of 87.1% and 85.4% as of September 30, 2018 compared to 87.4% and 86.0% as of June 30, 2018 and 88.0% and 87.2% as of December 31, 2017;
- operating multifamily portfolio leased and occupied percentages at our share of 96.1% and 94.3% as of September 30, 2018 compared to 95.9% and 92.6% as of June 30, 2018 and 95.6% and 93.8% as of December 31, 2017;
- the leasing of approximately 449,000 square feet, or 378,000 square feet at our share, at an initial rent (1) of $42.89 per square foot and a GAAP-basis weighted average rent per square foot (2) of $40.76 for the three months ended September 30, 2018, and the leasing of approximately 1.2 million square feet, or 1.0 million square feet at our share, at an initial rent (1) of $47.78 per square foot and a GAAP-basis weighted average rent per square foot (2) of $47.99 for the nine months ended September 30, 2018; and

- the decrease in same store [3] net operating income of 0.7% to $70.0 million for the three months ended September 30, 2018 as compared to $70.5 million for the three months ended September 30, 2017, and an increase in same store [3] net operating income of 4.6% to $203.1 million for the nine months ended September 30, 2018 as compared to $194.2 million for the nine months ended September 30, 2017.

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[1] Represents the cash basis weighted average starting rent per square foot, which excludes free rent and fixed escalations.

[2] Represents the weighted average rent per square foot that is recognized over the term of the respective leases, including the effect of free rent and fixed escalations.

[3] Includes the results of the properties that are owned, operated and in service for the entirety of both periods being compared except for properties for which significant redevelopment, renovation or repositioning occurred during either of the periods being compared. Excludes the JBG Assets acquired in the Combination.

Additionally, investing and financing activity during the nine months ended September 30, 2018 included:

- the sale of three office assets located in Washington D.C. and Reston, Virginia, and the sale of a future development asset located in Reston, Virginia, for an aggregate gross sales price of $358.6 million, resulting in gains on sale of real estate of $45.8 million. See Note 3 to the financial statements for additional information;
- the closing of a real estate venture with Canadian Pension Plan Investment Board ("CPPIB") to develop and own 1900 N Street, an under construction office asset in Washington, D.C. We contributed 1900 N Street, valued at $95.9 million, to the real estate venture, and CPPIB has committed to contribute approximately $101.0 million to the venture for a 45.0% interest, which will reduce our ownership interest from 100.0% at the real estate venture's formation to 55.0% as contributions are funded;
- the investment of $10.1 million for a 16.67% interest in a real estate venture with CIM Group and Pacific Life Insurance Company, which purchased the 1,152-key Wardman Park hotel, located adjacent to the Woodley Park Metro Station in northwest Washington, D.C.;
- the acquisition by our partner in the real estate venture that owned the Investment Building, a 401,000 square foot office building located in Washington, D.C., of our 5.0% interest in the venture for $24.6 million, resulting in a gain of $15.5 million;
- a $50.0 million draw under our unsecured term loan maturing in January 2023 ("Tranche A-1 Term Loan"), in accordance with the delayed draw provisions of the credit facility, bringing the outstanding borrowings under the term loan facility to $100.0 million. Concurrent with the draw, we entered into an interest rate swap agreement to convert the variable interest rate to a fixed interest rate;
- a $200.0 million draw under our unsecured term loan maturing in July 2024 ("Tranche A-2 Term Loan"), in accordance with the delayed draw provisions of the credit facility. We also repaid all outstanding revolving credit facility balances;
- the aggregate borrowings related to construction draws under mortgages payable of $43.8 million;
- the prepayment of mortgages payable with an aggregate principal balance of $251.1 million and recognized losses on the extinguishment of debt in conjunction with these repayments of $4.5 million;
- the payment of dividends totaling $0.675 per common share that were declared in December 2017, May 2018 and August 2018; and
- the investment of $260.4 million in development costs, construction in progress and real estate additions.

Activity subsequent to September 30, 2018 included:

- the sale of 1233 20th Street, an office building located in Washington, D.C. for a gross sales price of $65.0 million. In connection with the sale, we repaid the related $41.9 million mortgage loan;
- the sale of the out-of-service portion of Falkland Chase-North, a multifamily building located in Downtown Silver Spring, Maryland for a gross sales price of $3.8 million; and
- the declaration of a quarterly dividend of $0.225 per common share, payable on November 26, 2018, to shareholders of record on November 13, 2018.

Critical Accounting Policies and Estimates

Our Annual Report on Form 10-K for the year ended December 31, 2017 contains a description of our critical accounting policies, including business combinations, real estate, investments in and advances to real estate ventures, revenue recognition and share-based compensation. There have been no significant changes to our policies during 2018.

Recent Accounting Pronouncements

See Note 2 to the financial statements for a description of the potential impact of the adoption of any new accounting pronouncements.

Results of Operations

Comparison of the Three Months Ended September 30, 2018 to September 30, 2017

The following summarizes certain line items from our statements of operations that we believe are important in understanding our operations and/or those items which significantly changed in the three months ended September 30, 2018 as compared to the same period in 2017:

	Three Months Ended September 30,		
	2018	2017	% Change
	(In thousands)		
Property rentals revenue	$ 123,203	$ 116,458	5.8 %
Tenant reimbursements revenue	9,744	9,593	1.6 %
Third-party real estate services revenue, including reimbursements	23,788	25,141	(5.4)%
Depreciation and amortization expense	46,603	43,951	6.0 %
Property operating expense	34,167	29,634	15.3 %
Real estate taxes expense	16,905	17,194	(1.7)%
General and administrative expense:			
Corporate and other	12,415	10,593	17.2 %
Third-party real estate services	20,754	21,178	(2.0)%
Share-based compensation related to Formation Transaction	8,387	14,445	(41.9)%
Transaction and other costs	4,126	104,095	(96.0)%
Income (loss) from unconsolidated real estate ventures, net	13,484	(1,679)	*
Interest expense	18,979	15,309	24.0 %
Gain on sale of real estate	11,938	—	*
Gain on bargain purchase	—	27,771	*

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* Not meaningful.

Property rentals revenue increased by approximately $6.7 million, or 5.8%, to $123.2 million in 2018 from $116.5 million in 2017. The increase was primarily due to $8.8 million of revenue associated with placing CEB Tower at Central Place and 1221 Van Street into service, higher rent from rent commencements and the additional 17 days of revenue associated with the assets acquired in the Combination. These increases were partially offset by lower revenue of $4.2 million primarily due to the sale of the Bowen Building and Summit I and II in the second quarter of 2018.

Tenant reimbursements revenue increased by approximately $151,000, or 1.6%, to $9.7 million in 2018 from $9.6 million in 2017. The increase was primarily due to an increase associated with the assets acquired in the Combination, partially offset by a decrease in tax recoveries related to lower tax assessments and the sale of the Bowen Building.

Third-party real estate services revenue, including reimbursements, decreased by approximately $1.4 million, or 5.4%, to $23.8 million in 2018 from $25.1 million in 2017. The decrease was primarily due to lower asset management fee revenue as a result of asset sales within JBG Legacy Funds.

Depreciation and amortization expense increased by approximately $2.7 million, or 6.0%, to $46.6 million for 2018 from $44.0 million in 2017. The increase was primarily due to depreciation and amortization expense associated with placing CEB Tower at Central Place and 1221 Van Street into service and the additional 17 days of depreciation and amortization expense associated with the assets acquired in the Combination. These increases were partially offset by lower depreciation and amortization expense due to the sale of the Bowen Building and Summit I and II.

Property operating expense increased by approximately $4.5 million, or 15.3%, to $34.2 million in 2018 from $29.6 million in 2017. The increase was primarily due to property operating expense associated with placing CEB Tower at Central Place and 1221 Van Street into service and the additional 17 days of operating expense associated with the assets acquired in the Combination. These increases were partially offset by lower operating expense due to the sale of the Bowen Building and Summit I and II.

Real estate tax expense decreased by approximately $289,000, or 1.7%, to $16.9 million in 2018 from $17.2 million in 2017. The decrease was primarily due to lower tax assessments and the sale of the Bowen Building and Summit I and II, partially offset by real estate tax expense associated with placing CEB Tower at Central Place and 1221 Van Street into service and the additional 17 days of real estate tax expense associated with the assets acquired in the Combination.

General and administrative expense: corporate and other increased by approximately $1.8 million, or 17.2%, to $12.4 million for 2018 from $10.6 million in 2017. The increase was due to an increase in general and administrative expense associated with the operations acquired in the Combination.

General and administrative expense: third-party real estate services decreased by approximately $424,000, or 2.0%, to $20.8 million in 2018 from $21.2 million in 2017 primarily due to lower allocated expenses.

General and administrative expense: share-based compensation related to Formation Transaction of $8.4 million in 2018 and $14.4 million in 2017 consists of expenses related to share-based compensation issued in connection with the Formation Transaction.

Transaction and other costs of $4.1 million in 2018 consist primarily of fees and expenses incurred in connection with the Formation Transaction, including amounts incurred for transition services provided by our former parent, integration costs and severance costs. Transaction and other costs of $104.1 million in 2017 consist primarily of fees and expenses incurred in connection with the Formation Transaction, including severance and transaction bonus expense, investment banking fees, legal fees and accounting fees.

Income from unconsolidated real estate ventures, net increased by approximately $15.2 million to $13.5 million for 2018 from a $1.7 million loss in 2017. The increase was primarily due the sale of our 5.0% interest in a real estate venture that owned the Investment Building, a 401,000 square foot office building located in Washington, D.C., for $24.6 million, resulting in a gain of $15.5 million.

Interest expense increased by approximately $3.7 million, or 24.0%, to $19.0 million for 2018 from $15.3 million in 2017. The increase was primarily due to higher interest rates and interest expense associated with placing CEB Tower at Central Place into service as the interest expense incurred while the property was under development was capitalized.

Gain on the sale of real estate of $11.9 million is related to the sale of Executive Tower in September 2018. See Note 3 to the financial statements for additional information.

The gain on bargain purchase of $27.8 million in 2017 represents the fair value of the identifiable net assets acquired in excess of the purchase consideration in the Combination. See Note 1 to the financial statements for additional information.

Comparison of the Nine Months Ended September 30, 2018 to September 30, 2017

The following summarizes certain line items from our statements of operations that we believe are important in understanding our operations and/or those items which significantly changed in the nine months ended September 30, 2018 as compared to the same period in 2017:

	Nine Months Ended September 30,		
	2018	2017	% Change
	(In thousands)		
Property rentals revenue	$ 375,094	$ 316,899	18.4 %
Tenant reimbursements revenue	28,651	27,161	5.5 %
Third-party real estate services revenue, including reimbursements	72,278	38,881	85.9 %
Depreciation and amortization expense	143,880	109,726	31.1 %
Property operating expense	95,462	77,341	23.4 %
Real estate taxes expense	54,024	47,978	12.6 %
General and administrative expense:			
Corporate and other	37,759	35,536	6.3 %
Third-party real estate services	64,552	30,362	112.6 %
Share-based compensation related to Formation Transaction	26,912	14,445	86.3 %
Transaction and other costs	12,134	115,173	(89.5)%
Income (loss) from unconsolidated real estate ventures, net	15,418	(1,365)	*
Interest expense	56,263	43,813	28.4 %
Gain on sale of real estate	45,789	—	*
Loss on extinguishment of debt	4,536	689	558.3 %
Gain (reduction of gain) on bargain purchase	(7,606)	27,771	*

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* Not meaningful.

Property rentals revenue increased by approximately $58.2 million, or 18.4%, to $375.1 million in 2018 from $316.9 million in 2017. The increase was primarily due to $59.8 million of revenue associated with the assets acquired in the Combination, including $23.3 million of revenue associated with placing CEB Tower at Central Place and 1221 Van Street into service, partially offset by a decrease of $1.6 million in revenue associated with the Vornado Included Assets, primarily due to the sale of the Bowen building.

Tenant reimbursements revenue increased by approximately $1.5 million, or 5.5%, to $28.7 million in 2018 from $27.2 million in 2017. The increase was primarily due to an increase of $4.8 million associated with the assets acquired in the Combination, partially offset by a decrease of $3.3 million associated with the Vornado Included Assets primarily due to lower tax assessments and the sale of the Bowen building.

Third-party real estate services revenue, including reimbursements, increased by approximately $33.4 million, or 85.9%, to $72.3 million in 2018 from $38.9 million in 2017. The increase was primarily due to the real estate services business acquired in the Combination, partially offset by lower payroll reimbursements related to third-party arrangements that were terminated during 2017 and early 2018.

Depreciation and amortization expense increased by approximately $34.2 million, or 31.1%, to $143.9 million for 2018 from $109.7 million in 2017. The increase was primarily due to depreciation and amortization expense associated with the assets acquired in the Combination, including $8.2 million of depreciation and amortization expense associated with placing CEB Tower at Central Place and 1221 Van Street into service.

Property operating expense increased by approximately $18.1 million, or 23.4%, to $95.5 million in 2018 from $77.3 million in 2017. The increase was primarily due to property operating expense of $14.1 million associated with the assets acquired in the Combination, including $5.1 million of operating expense associated with placing CEB Tower at Central Place and 1221 Van Street into service and an increase of $4.0 million associated with the Vornado Included Assets primarily due to higher ground rent and other operating expense, partially offset by the sale of the Bowen Building.

Real estate tax expense increased by approximately $6.0 million, or 12.6%, to $54.0 million in 2018 from $48.0 million in 2017. The increase was primarily due to real estate tax expense of $8.2 million associated with the assets acquired in the Combination, including $2.0 million associated with placing CEB Tower at Central Place and 1221 Van Street into service, partially offset by a $2.1 million decrease associated with the Vornado Included Assets due to lower tax assessments and the sale of the Bowen Building.

General and administrative expense: corporate and other increased by approximately $2.2 million, or 6.3%, to $37.8 million for 2018 from $35.5 million in 2017. The increase was due to an increase in general and administrative expenses associated with the operations acquired in the Combination, partially offset by lower corporate overhead costs in the 2018 period compared to the amount allocated and recorded in the 2017 period.

General and administrative expense: third-party real estate services increased by approximately $34.2 million, or 112.6%, to $64.6 million in 2018 from $30.4 million in 2017 primarily due to the real estate services business acquired in the Combination.

General and administrative expense: share-based compensation related to Formation Transaction of $26.9 million in 2018 and $14.4 million in 2017 consists of expenses related to share-based compensation issued in connection with the Formation Transaction.

Transaction and other costs of $12.1 million in 2018 consist primarily of fees and expenses incurred in connection with the Formation Transaction, including amounts incurred for transition services provided by our former parent, integration costs and severance costs. Transaction and other costs of $115.2 million in 2017 consist primarily of fees and expenses incurred in connection with the Formation Transaction, including severance and transaction bonus expense of $34.3 million, investment banking fees of $33.6 million, legal fees of $13.1 million and accounting fees of $8.1 million.

Income from unconsolidated real estate ventures, net increased by approximately $16.8 million to $15.4 million in 2018 from a $1.4 million loss in 2017. The increase was primarily due to the sale of our 5.0% interest in a real estate venture that owned the Investment Building, a 401,000 square foot office building located in Washington, D.C., for $24.6 million, resulting in a gain of $15.5 million.

Interest expense increased by approximately $12.5 million, or 28.4%, to $56.3 million for 2018 from $43.8 million in 2017. The increase was primarily due to interest expense associated with the assets acquired in the Combination, additional term loan borrowings and higher interest rates, partially offset by the repayment of mortgages.

Gain on the sale of real estate of $45.8 million is primarily related to the sale of Summit I and II, the Bowen Building and Executive Tower during 2018. See Note 3 to the financial statements for additional information.

Loss on extinguishment of debt of $4.5 million in 2018 and $689,000 in 2017 is related to our repayment of various mortgages payable during the period.

The gain on bargain purchase of $27.8 million in 2017 represents the fair value of the identifiable net assets acquired in excess of the purchase consideration in the Combination. During the fourth quarter of 2017, this gain was reduced by $3.4 million. The reduction of the gain on bargain purchase of $7.6 million in 2018 is the result of finalizing our fair value estimates used in the purchase price allocation related to the Combination.

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

We utilize NOI, which is a non-GAAP financial measure, to assess a segment's performance. The most directly comparable GAAP measure is net income (loss) attributable to common shareholders. We use NOI internally as a performance measure and believe NOI provides useful information to investors regarding our financial condition and results of operations because it reflects only property related revenue (which includes base rent, tenant reimbursements and other operating revenue) less operating expense, before deferred rent and related party management fees. Management uses NOI as a supplemental performance measure for our assets and believes it provides useful information to investors because it reflects only those revenue and expense items that are incurred at the asset level, excluding non-cash items. In addition, NOI is considered by many in the real estate industry to be a useful starting point for determining the value of a real estate asset or group of assets. However, because NOI excludes depreciation and amortization and captures neither the changes in the value of our assets that result from use or market conditions, nor the level of capital expenditures and capitalized leasing commissions necessary to maintain the operating performance of our assets, all of which have real economic effect and could materially impact the financial performance of our assets, the utility of NOI as a measure of the operating performance of our assets is limited. NOI presented by us may not be comparable to NOI reported by other REITs that define these measures differently. We believe that to facilitate a clear understanding of our operating results, NOI should be examined in conjunction with net income (loss) attributable to common shareholders as presented in our financial statements. NOI should not be considered as an alternative to net income (loss) attributable to common shareholders as an indication of our performance or to cash flows as a measure of liquidity or our ability to make distributions.

We also provide certain information on a "same store" basis. Information provided on a same store basis includes the results of properties that are owned, operated and in service for the entirety of both periods being compared except for properties for which significant redevelopment, renovation or repositioning occurred during either of the periods being compared. While there is judgment surrounding changes in designations, a property is removed from the same store pool when the property is considered to be under construction because it is undergoing significant redevelopment or renovation pursuant to a formal plan or is being repositioned in the market and such renovation or repositioning is expected to have a significant impact on property operating income. A development property or property under construction is moved to the same store pool once a substantial portion of the growth expected from the development or redevelopment is reflected in both the current and comparable prior year period. Acquisitions are moved into the same store pool once we have owned the property for the entirety of the comparable periods and the property is not under significant development or redevelopment.

For the three and nine months ended September 30, 2018, all of the JBG Assets and two Vornado Included Assets (The Bartlett and 1800 South Bell Street) were not included in the same store comparison as they were not in service during portions of the periods being compared. Additionally, the Bowen Building, Executive Tower and the Investment Building were excluded because these assets were sold during the period.

Same store NOI decreased by $507,000, or 0.7%, and increased by $8.9 million, or 4.6%, for the three and nine months ended September 30, 2018 as compared to the three and nine months ended September 30, 2017. The decrease in same store NOI for the three months ended September 30, 2018 was largely attributable to the conversion of unused tenant incentive allowances to free rent, rental abatement and anticipated tenant move-outs. The increase in same store NOI for the nine months ended September 30, 2018, was mainly driven by the burn off of rent abatements, partially offset by rent abatements given to tenants in 2018.

The following table reflects the reconciliation of net income (loss) attributable to common shareholders to NOI and same store NOI for the periods presented:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
	(In thousands)			
Net income (loss) attributable to common shareholders	$ 22,830	$ (69,831)	$ 39,214	$ (57,851)
Add:				
Depreciation and amortization expense	46,603	43,951	143,880	109,726
General and administrative expense:				
Corporate and other	12,415	10,593	37,759	35,536
Third-party real estate services	20,754	21,178	64,552	30,362
Share-based compensation related to Formation Transaction	8,387	14,445	26,912	14,445
Transaction and other costs	4,126	104,095	12,134	115,173
Interest expense	18,979	15,309	56,263	43,813
Loss on extinguishment of debt	79	689	4,536	689
Reduction of gain (gain) on bargain purchase	—	(27,771)	7,606	(27,771)
Income tax benefit	(841)	(1,034)	(1,436)	(317)
Net (income) loss attributable to redeemable noncontrolling interests	3,552	(8,160)	6,532	(2,481)
Less:				
Third-party real estate services, including reimbursements	23,788	25,141	72,278	38,881
Other income	1,708	1,158	4,904	3,701
Income (loss) from unconsolidated real estate ventures, net	13,484	(1,679)	15,418	(1,365)
Interest and other income (loss), net	4,091	(379)	5,177	1,366
Gain on sale of real estate	11,938	—	45,789	—
Net loss attributable to noncontrolling interests	—	—	127	—
Consolidated NOI	81,875	79,223	254,259	218,741
NOI attributable to consolidated JBG Assets [1]	—	2,136	—	24,670
Proportionate NOI attributable to unconsolidated JBG Assets [1]	—	792	—	8,648
Proportionate NOI attributable to unconsolidated real estate ventures	9,722	7,505	27,949	12,965
Non-cash rent adjustments [2]	(1,369)	(1,575)	(3,659)	(7,508)
Other adjustments [3]	701	1,493	3,434	1,318
Total adjustments	9,054	10,351	27,724	40,093
NOI	90,929	89,574	281,983	258,834
Non-same store NOI [4]	20,910	19,048	78,862	64,643
Same store NOI [5]	**$ 70,019**	**$ 70,526**	**$ 203,121**	**$ 194,191**
Growth in same store NOI	(0.7)%		4.6%	
Number of properties in same store pool	34		33	

(1) Includes financial information for the JBG Assets as if the Combination had been completed as of the beginning of the period presented.

(2) Adjustment to exclude straight-line rent, above/below market lease amortization and lease incentive amortization.

(3) Adjustment to include other income and payments associated with assumed lease liabilities related to operating properties, and exclude incidental income generated by development assets and commercial lease termination revenue.

(4) Includes the results for properties that were not owned, operated and in service for the entirety of both periods being compared and properties for which significant redevelopment, renovation or repositioning occurred during either of the periods being compared.

(5) Includes the results of the properties that are owned, operated and in service for the entirety of both periods being compared except for properties for which significant redevelopment, renovation or repositioning occurred during either of the periods being compared.

Reportable Segments

We review operating and financial data for each property on an individual basis; therefore, each of our individual properties is a separate operating segment. Our reportable segments are aligned with our method of internal reporting and the way our Chief

Executive Officer, who is also our Chief Operating Decision Maker ("CODM"), makes key operating decisions, evaluates financial results, allocates resources and manages our business. Accordingly, we aggregate our operating segments into three reportable segments (office, multifamily and third-party real estate services) based on the economic characteristics and nature of our assets and services.

The CODM measures and evaluates the performance of our operating segments, with the exception of the third-party real estate services business, based on the NOI of properties within each segment. NOI includes property rental revenues and tenant reimbursements and deducts property operating expenses and real estate taxes.

With respect to the third-party real estate services business, the CODM reviews revenues streams generated by this segment ("Third-party real estate services, including reimbursements"), as well as the expenses attributable to the segment ("General and administrative: third-party real estate services"), which are disclosed separately in the statements of operations and discussed in the preceding pages under "Results of Operations." The following presents a reconciliation of revenue from our third-party asset management and real estate services business, excluding reimbursements and service revenue, to "Third-party real estate services revenue, including reimbursements":

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
	(In thousands)			
Property management fees	$ 6,355	$ 5,671	$ 18,773	$ 9,892
Asset management fees	3,720	6,007	11,288	6,007
Leasing fees	1,455	1,580	4,753	2,183
Development fees	2,259	1,813	6,490	2,000
Construction management fees	590	903	2,076	1,367
Other service revenue	185	230	1,883	365
Third-party real estate services revenue, excluding reimbursements and service revenue	14,564	16,204	45,263	21,814
Reimbursements and service revenue	9,224	8,937	27,015	17,067
Third-party real estate services revenue, including reimbursements	$ 23,788	$ 25,141	$ 72,278	$ 38,881

Consistent with internal reporting presented to our CODM and our definition of NOI, the third-party real estate services operating results are excluded from the NOI data below.

Rental revenue is calculated as property rentals plus tenant reimbursements. Rental expense is calculated as property operating expenses plus real estate taxes. NOI is calculated as rental revenue less rental expense. See Note 14 to the financial statements for the reconciliation of net income (loss) attributable to common shareholders to consolidated NOI for the three and nine months ended September 30, 2018 and 2017.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
	(In thousands)			
Rental revenue:				
Office	$ 103,474	$ 99,451	$ 317,718	$ 272,270
Multifamily	27,730	24,945	80,422	65,822
Other	2,101	4,299	6,461	10,274
Eliminations of intersegment activity	(358)	(2,644)	(856)	(4,306)
Total rental revenue	132,947	126,051	403,745	344,060
Rental expense:				
Office	41,549	40,038	123,095	108,562
Multifamily	11,650	9,748	33,405	24,689
Other	3,609	4,706	9,450	14,150
Eliminations of intersegment activity	(5,736)	(7,664)	(16,464)	(22,082)
Total rental expense	51,072	46,828	149,486	125,319
Consolidated NOI:				
Office	61,925	59,413	194,623	163,708
Multifamily	16,080	15,197	47,017	41,133
Other	(1,508)	(407)	(2,989)	(3,876)
Eliminations of intersegment activity	5,378	5,020	15,608	17,776
Consolidated NOI	$ 81,875	$ 79,223	$ 254,259	$ 218,741

Comparison of the Three Months Ended September 30, 2018 to September 30, 2017

Office: Rental revenue increased by $4.0 million, or 4.0%, to $103.5 million in 2018 from $99.5 million in 2017. Consolidated NOI increased by $2.5 million, or 4.2%, to $61.9 million in 2018 from $59.4 million in 2017. The increase in rental revenue and consolidated NOI is primarily due to revenue associated with placing CEB Tower at Central Place into service and the additional 17 days of revenue associated with the assets acquired in the Combination, partially offset by the sale of the Bowen Building and Summit I and II and a decrease in occupancy at 2345 Crystal Drive.

Multifamily: Rental revenue increased by $2.8 million, or 11.2%, to $27.7 million in 2018 from $24.9 million in 2017. Consolidated NOI increased by $883,000, or 5.8%, to $16.1 million in 2018 from $15.2 million in 2017. The increase in rental revenue and consolidated NOI is primarily due to placing 1221 Van Street into service and an increase in occupancy and associated rentals at The Bartlett.

Other: Rental revenue decreased by $2.2 million, or 51.1%, to $2.1 million in 2018 from $4.3 million in 2017. Consolidated NOI decreased by $1.1 million to a loss of $1.5 million in 2018 from a loss of $407,000 in 2017 due to expenses associated with land assets acquired in the Combination and 501 15th Street being taken out of service.

Comparison of the Nine Months Ended September 30, 2018 to September 30, 2017

Office: Rental revenue increased by $45.4 million, or 16.7%, to $317.7 million in 2018 from $272.3 million in 2017. Consolidated NOI increased by $30.9 million, or 18.9%, to $194.6 million in 2018 from $163.7 million in 2017. The increase in rental revenue and consolidated NOI is primarily due to revenue associated with assets acquired in the Combination, including placing CEB Tower at Central Place into service, and higher rents due to rent commencements, partially offset by the sale of the Bowen Building and Summit I and II, and a decrease in occupancy at 2345 Crystal Drive and 7200 Wisconsin Avenue.

Multifamily: Rental revenue increased by $14.6 million, or 22.2%, to $80.4 million in 2018 from $65.8 million in 2017. Consolidated NOI increased by $5.9 million, or 14.3%, to $47.0 million in 2018 from $41.1 million in 2017. The increase in rental revenue and consolidated NOI is primarily due to the assets acquired in the Combination, including placing 1221 Van Street into service, and an increase in occupancy and associated rentals at The Bartlett.

Other: Rental revenue decreased by $3.8 million, or 37.1%, to $6.5 million in 2018 from $10.3 million in 2017. Consolidated NOI decreased by $0.9 million to a loss of $3.0 million in 2018 from a loss of $3.9 million in 2017 due to expenses associated with land assets acquired in the Combination and 501 15th Street being taken out of service.

Liquidity and Capital Resources

Property rental income is our primary source of operating cash flow and is dependent on a number of factors including occupancy levels and rental rates, as well as our tenants' ability to pay rent. In addition, we have a third-party real estate services business that provides fee-based real estate services to the legacy funds formerly organized by JBG and other third parties. Our assets provide a relatively consistent level of cash flow that enables us to pay operating expenses, debt service, recurring capital expenditures, dividends to shareholders and distributions to holders of OP Units. Other sources of liquidity to fund cash requirements include proceeds from financings, the issuance of equity securities and asset sales. We anticipate that cash flows from continuing operations and proceeds from financings, recapitalizations and asset sales, together with existing cash balances, will be adequate to fund our business operations, debt amortization, capital expenditures, dividends to shareholders and distributions to holders of OP Units over the next 12 months.

Financing Activities

The following is a summary of mortgages payable:

	Weighted Average Effective Interest Rate [1]	September 30, 2018	December 31, 2017
		(In thousands)	
Variable rate [2]	4.16%	$ 182,996	$ 498,253
Fixed rate [3] [4]	4.19%	1,590,983	1,537,706
Mortgages payable		1,773,979	2,035,959
Unamortized deferred financing costs and premium/ discount, net		(4,041)	(10,267)
Mortgages payable, net		$ 1,769,938	$ 2,025,692

(1) Weighted average effective interest rate as of September 30, 2018.

(2) Includes variable rate mortgages payable with interest rate cap agreements.

(3) Includes variable rate mortgages payable with interest rates fixed by interest rate swap agreements.

(4) Excludes the mortgage payable of $42.0 million related to 1233 20th Street, which is included in "Liabilities related to assets held for sale" in our balance sheet as of September 30, 2018. This mortgage was repaid in October 2018 concurrent with the closing of the sale. See Note 3 to the financial statements for additional information.

As of September 30, 2018, the net carrying value of real estate collateralizing our mortgages payable, excluding assets held for sale, totaled $2.3 billion. Our mortgage loans contain covenants that limit our ability to incur additional indebtedness on these properties and in certain circumstances, require lender approval of tenant leases and/or yield maintenance upon repayment prior to maturity. Certain of our mortgage loans are recourse to us.

During the nine months ended September 30, 2018, aggregate borrowings related to construction draws under mortgages payable totaled $43.8 million. We repaid mortgages payable with an aggregate principal balance of $251.1 million and recognized losses on the extinguishment of debt in conjunction with these repayments of $79,000 and $4.5 million for the three and nine months ended September 30, 2018.

As of September 30, 2018 and December 31, 2017, we had various interest rate swap and cap agreements with an aggregate notional value of $1.3 billion and $1.4 billion on certain of our mortgages payable, which mature on various dates concurrent with the maturity of the related mortgages payable. During the nine months ended September 30, 2018, we entered into various interest rate swap and cap agreements on certain of our mortgages payable with an aggregate notional value of $381.3 million.

Our $1.4 billion credit facility, consists of a $1.0 billion revolving credit facility maturing in July 2021, with two six-month extension options, a Tranche A-1 Term Loan, a delayed draw $200.0 million unsecured term loan maturing in January 2023, and a Tranche A-2 Term Loan, a delayed draw $200.0 million unsecured term loan maturing in July 2024.

In January 2018, we drew $50.0 million under the Tranche A-1 Term Loan in accordance with the delayed draw provisions of the credit facility, bringing the outstanding borrowings under the term loan facility to $100.0 million. Concurrent with the draw, we entered into an interest rate swap agreement to convert the variable interest rate to a fixed interest rate. As of September 30, 2018 and December 31, 2017, we had interest rate swaps with an aggregate notional value of $100.0 million and $50.0 million to convert the variable interest rate applicable to our Tranche A-1 Term Loan to a fixed interest rate, providing weighted average base interest rates under the facility agreement of 2.12% and 1.97% per annum. The interest rate swaps mature in January 2023, concurrent with the maturity of our Tranche A-1 Term Loan.

In July 2018, we drew $200.0 million under the Tranche A-2 Term Loan, in accordance with the delayed draw provisions of the credit facility.

The following is a summary of amounts outstanding under the credit facility:

	Interest Rate (1)	September 30, 2018	December 31, 2017
		(In thousands)	
Revolving credit facility (2) (3) (4) (5)	3.36%	$ —	$ 115,751
Tranche A-1 Term Loan	3.32%	$ 100,000	$ 50,000
Tranche A-2 Term Loan	3.81%	200,000	—
Unsecured term loans		300,000	50,000
Unamortized deferred financing costs, net		(3,019)	(3,463)
Unsecured term loans, net		$ 296,981	$ 46,537

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(1) Interest rate as of September 30, 2018.

(2) As of September 30, 2018 and December 31, 2017, letters of credit with an aggregate face amount of $5.7 million for both periods were provided under our revolving credit facility.

(3) As of September 30, 2018 and December 31, 2017, net deferred financing costs related to our revolving credit facility totaling $5.3 million and $6.7 million were included in "Other assets, net."

(4) In May 2018, in connection with the sale of the Bowen Building, we repaid $115.0 million of the then outstanding balance on our revolving credit facility. See Note 3 to the financial statements for additional information.

(5) The interest rate for the revolving credit facility excludes a 0.15% facility fee.

In July 2018, we entered into an equity distribution agreement with various financial institutions relating to the issuance of up to $200.0 million of our common shares from time to time. We may use net proceeds from the issuance of common shares under this program for general corporate purposes, which may include paying down our indebtedness and funding our under construction assets and future development opportunities.

In July 2018, we commenced a dividend reinvestment program, whereby shareholders may use their dividends and optional cash payments to purchase common shares. The common shares sold under this program may either be common shares issued by us or common shares purchased in the open market.

Long-term Liquidity Requirements

Our long-term capital requirements consist primarily of maturities under our credit facility and mortgage loans, construction commitments for development and redevelopment projects and costs related to growing our business, including acquisitions. We intend to fund these requirements through a combination of sources including available cash, debt proceeds, proceeds from asset recapitalizations and sales and other financing sources, including issuances of equity.

Contractual Obligations and Commitments

During the nine months ended September 30, 2018, there were no material changes to the contractual obligation information presented in Item 7 of Part II of our Annual Report on Form 10-K for the year ended December 31, 2017. The only significant change was a $85.8 million decrease in outstanding debt primarily from repayments of mortgages payable and our revolving credit facility, partially offset by draws of $50.0 million under the Tranche A-1 Term Loan and $200.0 million under the Tranche A-2 Term Loan, in accordance with the delayed draw provisions of the credit facility.

As of September 30, 2018, we expect to fund additional capital to certain of our unconsolidated investments totaling approximately $48.6 million, which we anticipate will be primarily expended over the next two to three years.

In November 2018, our Board of Trustees declared a quarterly dividend of $0.225 per common share.

Summary of Cash Flows

The following summary discussion of our cash flows is based on the statements of cash flows and is not meant to be an all-inclusive discussion of the changes in our cash flows:

	Nine Months Ended September 30,		
	2018	**2017**	**Change**
		(In thousands)	
Net cash provided by operating activities	$ 136,661	$ 23,393	$ 113,268
Net cash provided by investing activities	88,881	102,442	(13,561)
Net cash (used in) provided by financing activities	(183,890)	227,319	(411,209)

Cash Flows for the Nine Months Ended September 30, 2018

Cash and cash equivalents and restricted cash increased $41.7 million to $380.2 million as of September 30, 2018 compared to $338.6 million as of December 31, 2017. This increase resulted from $136.7 million of net cash provided by operating activities and $88.9 million of net cash provided by investing activities, partially offset by $183.9 million of net cash used in financing activities. Our outstanding debt, including mortgages payable classified as "Liabilities related to assets held for sale", was $2.1 billion as of September 30, 2018 compared to $2.2 billion as of December 31, 2017. The $85.8 million decrease in outstanding debt is primarily from repayments of mortgages payable and our revolving credit facility, partially offset by draws under the Tranche A-1 and Tranche A-2 Term Loans.

Net cash provided by operating activities of $136.7 million primarily comprised: (i) $181.7 million of net income (before $181.9 million of non-cash items and a $45.8 million gain on sale of real estate) and (ii) $6.8 million of return on capital from unconsolidated real estate ventures, partially offset by $51.9 million of net change in operating assets and liabilities. Non-cash income adjustments of $181.9 million primarily include depreciation and amortization, share-based compensation expense, reduction of gain on bargain purchase and deferred rent.

Net cash provided by investing activities of $88.9 million primarily comprised: (i) $346.1 million of proceeds from sale of real estate and (ii) $24.6 million distribution of capital from sale of interest in an unconsolidated real estate venture, partially offset by (iii) $260.4 million of development costs, construction in progress and real estate additions and (iv) $22.7 million of investments in and advances to unconsolidated real estate ventures.

Net cash used in financing activities of $183.9 million primarily comprised: (i) $267.3 million of repayment of mortgages payable, (ii) $150.8 million repayment of our revolving credit facility, (iii) $80.2 million of dividends paid to common shareholders and (iv) $13.3 million of distributions to redeemable noncontrolling interests, partially offset by (v) $250.0 million of proceeds from borrowings under our unsecured term loans, (vi) $43.8 million of aggregate proceeds from borrowings under mortgages payable and (vii) $35.0 million of borrowings under our revolving credit facility.

Cash Flows for the Nine Months Ended September 30, 2017

Cash and cash equivalents and restricted cash were $385.4 million as of September 30, 2017 compared to $32.3 million as of December 31, 2016, an increase of $353.2 million. This increase resulted from $227.3 million of net cash provided by financing activities, $102.4 million of net cash provided by investing activities and $23.4 million of net cash provided by operating activities.

Net cash provided by operating activities of $23.4 million primarily comprised: (i) $40.5 million of net income (before $100.8 million of non-cash items) and (ii) $1.1 million of return on capital from unconsolidated real estate ventures, partially offset by (iii) $18.2 million of net change in operating assets and liabilities. Non-cash income adjustments of $100.8 million primarily include depreciation and amortization, gain on bargain purchase, share-based compensation expense, deferred rent, amortization of lease incentives and other non-cash items.

Net cash provided by investing activities of $102.4 million primarily comprised: (i) $97.4 million net cash and restricted cash consideration received in connection with the Combination, (ii) $75.0 million of proceeds from repayment of a receivable by our former parent and (iii) $50.9 million repayment of notes receivable, partially offset by (iv) $115.9 million of development costs, construction in progress and real estate additions and (v) $3.5 million of other investments.

Net cash provided by financing activities of $227.3 million primarily comprised: (i) $242.0 million of proceeds from borrowings under mortgages payable, (ii) $160.2 million of net contributions from our former parent, (iii) $115.8 million of borrowings under our revolving credit facility, (iv) $50.0 million of proceeds from borrowings under our unsecured term loan and (v) $4.0 million of proceeds from borrowings from our former parent, partially offset by (vi) $192.7 million repayment of mortgages payable, (vii) $115.6 million repayment of borrowings from former parent, (viii) $18.7 million of debt issuance costs and (ix) $17.8 million of capital lease payments.

Off-Balance Sheet Arrangements

Unconsolidated Real Estate Ventures

We consolidate entities in which we have a controlling interest or are the primary beneficiary in a variable interest entity. From time to time, we may have off-balance-sheet unconsolidated real estate ventures and other unconsolidated arrangements with varying structures.

As of September 30, 2018, we have investments in and advances to unconsolidated real estate ventures totaling $361.0 million. For the majority of these investments, we exercise significant influence over, but do not control these entities and therefore account for these investments using the equity method of accounting. For a more complete description of our real estate ventures, see Note 4 to the financial statements.

From time to time, we (or ventures in which we have an ownership interest) have agreed, and may in the future agree with respect to unconsolidated real estate ventures, to (1) guarantee portions of the principal, interest and other amounts in connection with their borrowings, (2) provide customary environmental indemnifications and nonrecourse carve-outs (e.g., guarantees against fraud, misrepresentation and bankruptcy) in connection with their borrowings and (3) provide guarantees to lenders and other third parties for the completion of development projects. We customarily have agreements with our outside partners whereby the partners agree to reimburse the real estate venture or us for their share of any payments made under certain of these guarantees. Amounts that may be required to be paid in future periods in relation to budget overruns or operating losses that are also included in some of our guarantees are not estimable. Guarantees (excluding environmental) terminate either upon the satisfaction of specified circumstances or repayment of the underlying debt. At times, we have agreements with our outside partners whereby we agree to reimburse our partner for their share of any payments made by them under certain guarantees. As of September 30, 2018, there were no principal payment guarantees for our unconsolidated real estate ventures.

As of September 30, 2018, we expect to fund additional capital to certain of our unconsolidated investments totaling approximately $48.6 million, which we anticipate will be primarily expended over the next two to three years.

Reconsideration events could cause us to consolidate these unconsolidated real estate ventures and partnerships in the future or deconsolidate a consolidated entity. We evaluate reconsideration events as we become aware of them. Some triggers to be considered are additional contributions required by each partner and each partners' ability to make those contributions. Under certain of these circumstances, we may purchase our partner's interest. Our unconsolidated real estate ventures are held in entities which appear sufficiently stable to meet their capital requirements; however, if market conditions worsen and our partners are unable to meet their commitments, there is a possibility we may have to consolidate these entities.

Commitments and Contingencies

Insurance

We maintain general liability insurance with limits of $200.0 million per occurrence and in the aggregate, and property and rental value insurance coverage with limits of $2.0 billion per occurrence, with sub-limits for certain perils such as floods and earthquakes on each of our properties. We also maintain coverage, through our wholly owned captive insurance subsidiary, for both terrorist acts and for nuclear, biological, chemical or radiological terrorism events with limits of $2.0 billion per occurrence. These policies are partially reinsured by third-party insurance providers.

We will continue to monitor the state of the insurance market and the scope and costs of coverage for acts of terrorism. 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 the insurance coverage, which could be material.

Our debt, consisting of mortgage loans secured by our properties, revolving credit facility and unsecured term loans contain customary covenants requiring adequate insurance coverage. Although we believe that we currently have adequate insurance coverage, we may not be able to obtain an equivalent amount of coverage at reasonable costs in the future. If lenders insist on greater coverage than we are able to obtain, it could adversely affect the ability to finance or refinance our properties.

Construction Commitments

As of September 30, 2018, we have construction in progress that will require an additional $396.2 million to complete ($310.8 million related to our consolidated entities and $85.4 million related to our unconsolidated real estate ventures at our share), based on our current plans and estimates, which we anticipate will be primarily expended over the next two to three years. These capital expenditures are generally due as the work is performed, and we expect to finance them with debt proceeds, proceeds from asset recapitalizations and sales, and available cash.

Other

There are various legal actions against us in the ordinary course of business. In our opinion, the outcome of such matters will not have a material adverse effect on our financial condition, results of operations or cash flows.

In connection with the Formation Transaction, we entered into an agreement with Vornado regarding tax matters (the "Tax Matters Agreement") that provides special rules that allocate tax liabilities if the distribution of JBG SMITH shares by Vornado, together with certain related transactions, is not tax-free. Under the Tax Matters Agreement, we may be required to indemnify Vornado against any taxes and related amounts and costs resulting from a violation by us of the Tax Matters Agreement, or from the taking of certain restricted actions by us.

Environmental Matters

Under various federal, state and local laws, ordinances and regulations, an owner of real estate is liable for the costs of removal or remediation of certain hazardous or toxic substances on such real estate. These laws often impose such liability without regard to whether the owner knew of, or was responsible for, the presence of such hazardous or toxic substances. The costs of remediation or removal of such substances may be substantial and the presence of such substances, or the failure to promptly remediate such substances, may adversely affect the owner’s ability to sell such real estate or to borrow using such real estate as collateral. In connection with the ownership and operation of our assets, we may be potentially liable for such costs. The operations of current and former tenants at our assets have involved, or may have involved, the use of hazardous materials or generated hazardous wastes. The release of such hazardous materials and wastes could result in us incurring liabilities to remediate any resulting contamination if the responsible party is unable or unwilling to do so. In addition, our assets are exposed to the risk of contamination originating from other sources. While a property owner may not be responsible for remediating contamination that has migrated onsite from an identifiable and viable offsite source, the contaminant’s presence can have adverse effects on operations and the redevelopment of our assets.

Most of our assets have been subject, at some point, to environmental assessments that are intended to evaluate the environmental condition of the subject and surrounding assets. These environmental assessments generally have included a historical review, a public records review, a visual inspection of the site and surrounding assets, visual or historical evidence of underground storage tanks, and the preparation and issuance of a written report. Soil and/or groundwater subsurface testing is conducted at our assets, when necessary, to further investigate any issues raised by the initial assessment that could reasonably be expected to pose a material concern to the property or result in us incurring material environmental liabilities as a result of redevelopment. They may not, however, have included extensive sampling or subsurface investigations. In each case where the environmental assessments have identified conditions requiring remedial actions required by law, we have initiated appropriate actions.

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 that we believe would have a material adverse effect on our overall business, financial condition or results of operations, or that have not been anticipated and remediated during site redevelopment as required by law. Nevertheless, 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 cost to us.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Interest Rate Risk

We have exposure to fluctuations in interest rates, which are sensitive to many factors that are beyond our control. Our exposure to a change in interest rates is summarized in the table below.

	September 30, 2018			December 31, 2017	
	Balance	Weighted Average Effective Interest Rate	Effect of 1% Change in Base Rates	Balance	Weighted Average Effective Interest Rate
Debt (contractual balances):			(Dollars in thousands)		
Mortgages payable					
Variable rate [1]	$ 182,996	4.16%	$ 1,855	$ 498,253	3.62%
Fixed rate [2] [3]	1,590,983	4.19%	—	1,537,706	4.25%
	$ 1,773,979		$ 1,855	$ 2,035,959	
Credit facility (variable rate):					
Revolving credit facility	$ —	3.36%	$ —	$ 115,751	2.66%
Tranche A-1 Term Loan [4]	100,000	3.32%	—	50,000	3.17%
Tranche A-2 Term Loan	200,000	3.81%	2,028	—	—
Pro rata share of debt of unconsolidated entities (contractual balances):					
Variable rate [1]	$ 151,668	5.66%	$ 1,538	$ 158,154	4.40%
Fixed rate [2]	292,222	4.08%	—	238,138	3.79%
	$ 443,890		$ 1,538	$ 396,292	

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(1) Includes variable rate mortgages payable with interest rate cap agreements.

(2) Includes variable rate mortgages payable with interest rates fixed by interest rate swap agreements.

(3) Excludes the mortgage payable of $42.0 million related to 1233 20th Street, which is included in "Liabilities related to assets held for sale" in our balance sheet as of September 30, 2018. This mortgage was repaid in October 2018 concurrent with the closing of the sale. See Note 3 to the financial statements for additional information.

(4) As of September 30, 2018 and December 31, 2017, the outstanding balance was fixed by interest rate swap agreements.

The fair value of our mortgages payable is estimated by discounting the future contractual cash flows of these instruments using current risk-adjusted rates available to borrowers with similar credit profiles based on market sources. The fair value of our revolving credit facility and unsecured term loans is calculated based on the net present value of payments over the term of the facilities using estimated market rates for similar notes and remaining terms. As of September 30, 2018 and December 31, 2017, the estimated fair value of our consolidated debt, excluding debt included in "Liabilities related to assets held for sale", was $2.1 billion and $2.2 billion. These estimates of fair value, which are made at the end of the reporting period, may be different from the amounts that may ultimately be realized upon the disposition of our financial instruments.

Hedging Activities

To manage, or hedge, our exposure to interest rate risk, we follow established risk management policies and procedures, including the use of a variety of derivative financial instruments. We do not enter into derivative financial instruments for speculative purposes.

Derivative Financial Instruments Designated as Cash Flow Hedges

Certain derivative financial instruments, consisting of interest rate swap and cap agreements, are designated as cash flow hedges, and are carried at their estimated fair value on a recurring basis. We assess the effectiveness of our cash flow hedges both at inception and on an ongoing basis. If the hedges are deemed to be effective, the fair value is recorded in accumulated other comprehensive income and is subsequently reclassified into "Interest expense" in the period that the hedged forecasted transactions affect earnings. Our cash flow hedges become less than perfectly effective if the critical terms of the hedging instrument and the forecasted transactions do not perfectly match such as notional amounts, settlement dates, reset dates, calculation period and interest rates. In addition, we evaluate the default risk of the counterparty by monitoring the credit worthiness of the counterparty. While management believes its judgments are reasonable, a change in a derivative's effectiveness as a hedge could materially affect expenses, net income and equity.

As of September 30, 2018, we had interest rate swap and cap agreements with an aggregate notional value of $738.9 million, which were designated as cash flow hedges. As of September 30, 2018, the fair value of our interest rate swaps and caps designated as cash flow hedges consisted of assets totaling $21.1 million included in "Other assets, net" in our balance sheet, and liabilities totaling $1.0 million included in "Other liabilities, net" in our balance sheet.

Derivative Financial Instruments Not Designated as Hedges

Certain derivative financial instruments, consisting of interest rate swap and cap agreements, are considered economic hedges, but not designated as accounting hedges, and are carried at their estimated fair value on a recurring basis. Realized and unrealized gains are recorded in "Interest expense" in the statements of operations in the period in which the change occurs. As of September 30, 2018, we had various interest rate swap and cap agreements with an aggregate notional value of $646.0 million, which were not designated as cash flow hedges. As of September 30, 2018, the fair value of our interest rate swaps and caps not designated as hedges consisted of assets totaling $7.2 million included in "Other assets, net" in our balance sheet.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

As required by Rule 13a-15(b) under the Securities Exchange Act of 1934, as amended, we carried out an evaluation, under the supervision and with the participation of management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that as of September 30, 2018, our disclosure controls and procedures were effective.

Changes in Internal Control over Financial Reporting

There have been no changes in our internal control over financial reporting during the quarter ended September 30, 2018 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II – OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

We are, from time to time, involved in legal actions arising in the ordinary course of business. In our opinion, 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 1A. RISK FACTORS

There have been no material changes to the risk factors previously disclosed in our Annual Report for the year ended December 31, 2017, filed with the SEC on March 12, 2018.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

(a) Not applicable.

(b) Not applicable.

(c) Not applicable.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

(a) Exhibit Index

Exhibits	Description
3.1	Declaration of Trust of JBG SMITH Properties, as amended and restated (incorporated by reference to Exhibit 3.1 to our Current Report on Form 8-K, filed on July 21, 2017).
3.2	Articles Supplementary to Declaration of Trust of JBG SMITH Properties (incorporated by reference to Exhibit 3.1 to our Current Report on Form 8-K, filed on March 6, 2018).
3.3	Articles of Amendment to Declaration of Trust of JBG SMITH Properties (incorporated by reference to Exhibit 3.1 to our current report on Form 8-K, filed on May 3, 2018).
3.4	Amended and Restated Bylaws of JBG SMITH Properties (incorporated by reference to Exhibit 3.3 to our Annual Report on Form 10-K, filed on March 12, 2018).
10.1**	Side Letter to Tax Matters Agreement, dated as of August 13, 2018, by and between Vornado Realty Trust and JBG SMITH Properties.
31.1**	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934, as amended and Section 302 of the Sarbanes-Oxley Act of 2002.
31.2**	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934, as amended and Section 302 of the Sarbanes-Oxley Act of 2002.
32.1**	Certification of Chief Executive Officer and Chief Financial Officer pursuant to Rule 13a-14(b) under the Securities Exchange Act of 1934, as amended and 18 U.S.C 1350, as created by Section 906 of the Sarbanes- Oxley Act of 2002.
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema
101.CAL	XBRL Extension Calculation Linkbase
101.LAB	XBRL Extension Labels Linkbase
101.PRE	XBRL Taxonomy Extension Presentation Linkbase
101.DEF	XBRL Taxonomy Extension Definition Linkbase

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** Filed herewith.

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.

JBG SMITH Properties

Date: November 7, 2018

/s/ Stephen W. Theriot
Stephen W. Theriot

Chief Financial Officer
(Principal Financial and Accounting Officer)

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Section 2: EX-10.1 (EXHIBIT 10.1)

Exhibit 10.1

Vornado Realty Trust
888 Seventh Avenue
New York, New York 10019

August 13, 2018

JBG SMITH Properties
4445 Willard Avenue, Suite 400
Chevy Chase, Maryland 20815
Attention: Chief Legal Officer
E-mail: smuseles@jbg.com

Re: Letter Agreement ("*Letter Agreement*") regarding certain provisions of the Tax Matters Agreement

Reference is hereby made to that certain Tax Matters Agreement, dated as of July 17, 2017 (as amended, the "*Agreement*"), by and between Vornado Realty Trust, a Maryland real estate investment trust ("*Vornado*"), and JBG SMITH Properties (f/k/a Vornado DC Spinco), a Maryland real estate investment trust ("*Newco*", and, together with Vornado, the "*Parties*"). Capitalized terms used but not otherwise defined herein shall have the meanings set forth in the Agreement.

WHEREAS, Newco has filed a Registration Statement (No. 333-226023) on Form S-3 under the Securities Act of 1933, as amended (the "*1933 Act*"), with the Securities and Exchange Commission on July 2, 2018 (the "*Shelf*");

WHEREAS, Newco has filed a Prospectus Supplement, dated July 2, 2018, to the Shelf pursuant to Rule 424(b)(3) with the Securities and Exchange Commission that describes Newco's dividend reinvestment and share purchase program, which can be effected through open market share purchases by an agent on behalf of the participating shareholders in the program and/or direct issuances of common shares by Newco (the "*DRIP*") and registers 2,000,000 common shares of Newco for direct issuance in the event Newco were to determine to implement the DRIP through direct issuances, rather than open market purchases;

WHEREAS, Newco has filed a Prospectus Supplement, dated July 2, 2018, to the Shelf pursuant to Rule 424(b)(5) with the Securities and Exchange Commission that describes the offering of up to $200,000,000 of common shares of Newco in transactions, including transactions that are deemed to be "at the market" offerings as defined in Rule 415 under the 1933 Act by means of ordinary brokers' transactions at market prices prevailing at the time of sale, including sales made directly on the New York Stock Exchange, sales made to or through a market maker and sales made through other securities exchanges or electronic communications networks ("*ATM Program*");

WHEREAS, Newco is desirous of shortening the notice period set forth in Section 7.6(e) of the Agreement to facilitate the conduct of the ATM Program and other potential transactions contemplated by this Letter Agreement;

WHEREAS, Vornado is desirous of accommodating Newco's interest, consistent with the requirements of Section 355 of the Code and the mutual rights and obligations set forth in the Agreement; and

WHEREAS, Newco unconditionally withdraws all previous communication to Vornado that purported to provide notice under Section 7.6(e) of the Agreement.

NOW, THEREFORE, in consideration of the mutual covenants contained in this Letter Agreement, the Parties hereby agree as follows:

1. Definitions. For purposes of this Letter Agreement, the following terms have the following meanings:

"Agreed Model" has the meaning set forth in Schedule A hereto.

"Assumed 355(e) Percentage" means the aggregate of the percentage changes that are, in accordance with the Agreed Model, Assumed Relevant. For this purpose, a change of ownership in the Equity Interests of Newco and/or Subsidiaries of Newco is "Assumed Relevant" if it is, in accordance with the Agreed Model, treated as relevant for purposes of Section 355(e) of the Code.

"Schedule A Acquisition" means a Specified Acquisition that is taken into account in the Agreed Model and set forth in Schedule A.

"Specified Acquisition" has the meaning set forth in Schedule A hereto.

2. No Prior Notice for Certain Acquisitions. Vornado agrees that it hereby waives any notice requirement under Section 7.6(e) of the Agreement for an Acquisition Transaction Requiring Notice in respect of a Schedule A Acquisition (that is, an acquisition already taken into account in the Agreed Model set forth on Schedule A), provided that:

a. such Schedule A Acquisition will not cause the Assumed 355(e) Percentage to be greater than 46%, and
b. Newco provides Vornado written notice of such acquisition no later than five (5) days after such acquisition is effectuated.

3. Shortened Notice for Certain Acquisitions.

a. Vornado agrees to modify the notice period set forth in Section 7.6(e) of the Agreement for an Acquisition Transactions Requiring Notice in respect of any Specified Acquisition that is not a Schedule A Acquisition, provided that:

    i. such acquisition will not cause the Assumed 355(e) Percentage to be greater than 46%, and

    ii. at least one (1) business day before such acquisition is effectuated, Newco provides Vornado written notice (setting forth the type of acquisition and the estimated number of Newco shares to be issued in such acquisition); provided, that Newco will endeavor in good faith to provide Vornado with further advance notice of any such acquisition as promptly as practicable after Newco determines that it is likely to pursue a transaction that would result in such acquisition. In the case of a proposed offering of common shares, the notice shall be substantially in the form of the notice attached hereto as Exhibit A.

b. It is agreed and understood that Newco shall not be treated as being in breach of Section 3(a)(ii) of this Letter Agreement if, in respect of an acquisition pursuant to a prospectus supplement to the Shelf (other than pursuant to Prospectus Supplements dated July 2, 2018 in respect of the ATM Program or the DRIP), Newco, having provided notice otherwise required setting forth the number of shares proposed to be issued ("*Original Number*"), issues a greater number of shares than the Original Number pursuant to a customary "upsizing" of such offering so long as the total number of shares actually issued in the acquisition will not cause the Assumed 355(e) Percentage to be greater than 46%.

4. Modifications of Agreed Model.

a. After the expiry of one (1) business day after written notice of a Specified Acquisition is provided pursuant to and in accordance with Section 3 of this Letter Agreement, the Parties shall cause such acquisitions, subsequently, to be treated as Schedule A Acquisitions in the Agreed Model, with such adjustments as needed to reflect accurately the actual number of shares issued in the Specified Acquisition (so long as, for the avoidance of doubt, such acquisitions will not cause the Assumed 355(e) Percentage to be greater than 46%) for purposes of Section 2 of this Letter Agreement.

b. The Parties shall cooperate in good faith to modify the Agreed Model to account for stock splits, reverse stock splits, pro rata stock dividends, recapitalizations or like transactions.

c. Newco shall consult with Vornado in good faith to determine the desirability of requesting a private letter ruling from the IRS regarding the treatment, for purposes of Section 355(e) of the Code, of the Specified Acquisitions, and the Parties shall modify the Agreed Model to reflect any such ruling.

d. No later than October 31, 2018, January 31, 2019, April 30, 2019, and June 30, 2019, Newco shall deliver to Vornado an updated draft version of the Agreed Model, consult with Vornado in good faith regarding such draft, and incorporate in good faith any comments made by Vornado with respect to such draft.

5. Scope of Letter Agreement. The Parties agree and acknowledge that (i) the Agreed Model is for the sole purpose of specifying an agreed notification schedule in respect of Specified Acquisitions and although the numbers reflected therein represent each Party's current understanding of the relevant facts, neither is representing the accuracy thereof to the other, and (ii) this Letter Agreement does not otherwise affect any Party's rights or obligations under the Agreement (except insofar as expressly set forth in Sections 2 and 3 of this Letter Agreement with respect to periods for notice with respect to any Acquisition Transaction Requiring Notice set forth in Section 7.6(e) of the Agreement). For the avoidance of doubt, Newco remains liable for transactions that result in violations of its obligations under Section 7.1 or Section 7.2 of the Agreement, even if such transactions do not cause the Assumed 355(e) Percentage to exceed 46% in the Agreed Model; moreover, nothing in this Letter Agreement is intended to prohibit Newco from undertaking any transaction otherwise permissible under the Agreement (subject to any notice requirements or other restrictions set forth in the Agreement).

6. Counterparts. This Letter Agreement may be executed in two or more counterparts, each of which shall be deemed an original but all of which together shall constitute one and the same instrument. Delivery of an executed counterpart of a signature page to this Letter Agreement by facsimile, portable document format (.pdf) or other electronic means shall be effective as delivery of a mutually executed counterpart to this Letter Agreement.

7. Governing Law. This Letter Agreement, and all claims or causes of actions (whether at Law, in contract or in tort) that may be based upon, arise out of or related to this Letter Agreement or the negotiation, execution or performance of this Letter Agreement, shall be governed by, and construed in accordance with, the Laws of the State of New York without giving effect to conflicts of laws principles (whether of the State of New York or any other jurisdiction that would cause the application of the Laws of any jurisdiction other than the State of New York).

[The remainder of this page is intentionally left blank.]

Please confirm your agreement and consent with the foregoing by signing and returning one copy of this Letter Agreement to the undersigned, whereupon this Letter Agreement shall become a binding agreement among the Parties.

Sincerely,

VORNADO REALTY TRUST

By: /s/ Joseph Macknow
Name: Joseph Macnow
Title: Executive Vice President-Chief Financial and Chief Administrative Officer

Agreed to, acknowledged and accepted as of the date first written above:

JBG SMITH PROPERTIES

By: /s/ Stephen Theriot
Name: Stephen Theriot
Title: Chief Financial Office

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Section 3: EX-31.1 (EXHIBIT 31.1)

Exhibit 31.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER

I, W. Matthew Kelly, certify that:

1. I have reviewed this quarterly report on Form 10-Q of JBG SMITH Properties;

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

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

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

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

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

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

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

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

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

November 7, 2018

/s/ W. Matthew Kelly

W. Matthew Kelly
Chief Executive Officer
(Principal Executive Officer)

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Section 4: EX-31.2 (EXHIBIT 31.2)

Exhibit 31.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER

I, Stephen W. Theriot, certify that:

1. I have reviewed this quarterly report on Form 10-Q of JBG SMITH Properties;

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

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

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

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

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

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

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

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

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

November 7, 2018

/s/ Stephen W. Theriot

Stephen W. Theriot
Chief Financial Officer
(Principal Financial and Accounting Officer)

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Section 5: EX-32.1 (EXHIBIT 32.1)

Exhibit 32.1

**CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED
PURSUANT TO SECTION 906 OF THE
SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report of JBG SMITH Properties (the “Company”) on Form 10-Q for the period ended September 30, 2018 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, W. Matthew Kelly, Chief Executive Officer of the Company, and I, Stephen W. Theriot, Chief Financial Officer of the Company, certify, to our knowledge, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

November 7, 2018	/s/ W. Matthew Kelly
	W. Matthew Kelly
	Chief Executive Officer

November 7, 2018	/s/ Stephen W. Theriot
	Stephen W. Theriot
	Chief Financial Officer

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D. Appendix D— Debarment Forms

JBG SMITH

CERTIFICATION REGARDING DEBARMENT
PRIMARY COVERED TRANSACTIONS
(To be completed by a Prime Consultant)
Vol. II

Project: Crystal City Metrorail Station East Entrance

1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

   a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency.

   b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; and have not been convicted of any violations of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification, or destruction of records, making false statements, or receiving stolen property;

   c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 1) b) of this certification; and

   d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the offeror for contracts to be let by the Commonwealth Transportation Board.

[signature]	5/15/18	Assistant Secretary
Signature	Date	Title

CESC Square LLC
Name of Firm

VHB

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS
(To be completed by a Sub-consultant)
Vol. II

Project: Crystal City Metrorail Station East Entrance

1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the offeror for contracts to be let by the Commonwealth Transportation Board.

[signature]	April 5, 2019	Vice-President
Signature	Date	Title

Vanasse Hangen Brustlin, Inc.
Name of Firm

Clark

CERTIFICATION REGARDING DEBARMENT

LOWER TIER COVERED TRANSACTIONS

(To be completed by a Sub-consultant)

Vol. II

Project: Crystal City Metrorail Station East Entrance

1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the offeror for contracts to be let by the Commonwealth Transportation Board.

[signature]	4/1/19	Division President and CEO
Signature	Date	Title

Clark Construction Group, LLC

Name of Firm

KGP

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS
(To be completed by a Sub-consultant)
Vol. II

Project: Crystal City Metrorail Station East Entrance

1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the offeror for contracts to be let by the Commonwealth Transportation Board.

Signature	March 29, 2019 Date	Member Title

KGP Design Studio LLC
Name of Firm

AECOM

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS
(To be completed by a Sub-consultant)
Vol. II

Project: Crystal City Metrorail Station East Entrance

1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the offeror for contracts to be let by the Commonwealth Transportation Board.

Sam Ramm	4/4/2019	Associate Vice President
Signature	Date	Title

AECOM Technical Services, Inc.
Name of Firm

JBG SMITH