UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

x **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

o **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 001-16441

CROWN CASTLE INTERNATIONAL CORP.
(Exact name of registrant as specified in its charter)

Delaware	**76-0470458**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**

1220 Augusta Drive, Suite 600, Houston Texas 77057-2261
(Address of principal executive offices) (Zip Code)
(713) 570-3000
(Registrant's telephone number, including area code)

Securities Registered Pursuant to Section 12(b) of the Act	Name of Each Exchange on Which Registered
Common Stock, $0.01 par value	New York Stock Exchange
6.875% Mandatory Convertible Preferred Stock, Series A, $0.01 par value	New York Stock Exchange

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 x No o

Indicated by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes o No x

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 x No o

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. o

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

Large accelerated filer x Accelerated filer o Non-accelerated filer o Smaller reporting company o Emerging growth company o

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes o No x

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant was approximately $44.6 billion as of June 30, 2018, the last business day of the registrant's most recently completed second fiscal quarter, based on the New York Stock Exchange closing price on that day of $107.82 per share.

Applicable Only to Corporate Registrants

As of February 22, 2019, there were 415,568,382 shares of common stock outstanding.

Documents Incorporated by Reference

The information required to be furnished pursuant to Part III of this Form 10-K will be set forth in, and incorporated by reference from, the registrant's definitive proxy statement for the annual meeting of stockholders ("2019 Proxy Statement"), which will be filed with the Securities and Exchange Commission not later than 120 days after the end of the fiscal year ended December 31, 2018.

CROWN CASTLE INTERNATIONAL CORP.

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Cautionary Language Regarding Forward-Looking Statements

This Annual Report on Form 10-K contains forward-looking statements that are based on our management's expectations as of the filing date of this report with the Securities and Exchange Commission ("SEC"). Statements that are not historical facts are hereby identified as forward-looking statements. In addition, words such as "estimate," "anticipate," "project," "plan," "intend," "believe," "expect," "likely," "predicted," "positioned," "continue," "target," and any variations of these words and similar expressions are intended to identify forward-looking statements. Such statements include plans, projections and estimates contained in *"Item 1. Business," "Item 3. Legal Proceedings," "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations"* ("MD&A"), and *"Item 7A. Quantitative and Qualitative Disclosures About Market Risk"* herein. Such forward-looking statements include (1) expectations regarding anticipated growth in the wireless industry, carriers' investments in their networks, tenant additions, and demand for data and our communications infrastructure (as defined below), (2) expectations regarding non-renewals of tenant contracts, (3) expectations regarding our communications infrastructure and the potential benefits that may be derived therefrom, (4) the strength of the U.S. market for shared communications infrastructure, (5) availability and adequacy of cash flows and liquidity for, or plans regarding, future discretionary investments, including capital expenditures, (6) potential benefits of our discretionary investments, including acquisitions, (7) our full year 2019 outlook and the anticipated growth in our financial results, including future revenues and operating cash flows, (8) expectations regarding construction of small cells and fiber, (9) expectations regarding our capital structure and the credit markets, our availability and cost of capital, our leverage ratio and interest coverage targets, and our ability to service our debt and comply with debt covenants and the plans for and the benefits of any future refinancings, (10) expectations related to remaining qualified as a real estate investment trust ("REIT"), and the advantages, benefits or impact of, or opportunities created by, our REIT status, (11) the utilization of our net operating loss carryforwards ("NOLs"), (12) expectations related to the impact of tenant consolidation or ownership changes, including the potential combination of T-Mobile and Sprint and (13) our dividend policy, and the timing, amount, growth or tax characterization of any dividends. All future dividends are subject to declaration by our board of directors.

Such forward-looking statements should, therefore, be considered in light of various risks, uncertainties and assumptions, including prevailing market conditions, risk factors described under *"Item 1A. Risk Factors"* herein and other factors. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those expected.

Interpretation

As used herein, the term "including," and any variation thereof, means "including without limitation." The use of the word "or" herein is not exclusive. Unless this Form 10-K indicates otherwise or the context otherwise requires, the terms, "we," "our," "our company," "the company" or "us" as used in this Form 10-K refer to Crown Castle International Corp. and its predecessor (organized in 1995), as applicable, each a Delaware corporation (together, "CCIC"), and their subsidiaries. Additionally, unless the context suggests otherwise, references to "U.S." are to the United States of America and Puerto Rico, collectively.

We have changed our presentation from thousands to millions and, as a result, any necessary rounding adjustments have been made to prior year disclosed amounts.

PART I

Item 1. *Business*

Overview

We own, operate and lease shared communications infrastructure that is geographically dispersed throughout the U.S., including (1) approximately 40,000 towers and other structures, such as rooftops (collectively, "towers"), and (2) approximately 65,000 route miles of fiber primarily supporting small cell networks ("small cells") and fiber solutions. Our towers, fiber and small cells assets are collectively referred to herein as "communications infrastructure," and our customers on our communications infrastructure are referred to herein as "tenants." Our core business is providing access, including space or capacity, to our shared communications infrastructure via long-term contracts in various forms, including lease, license, sublease and service agreements (collectively, "contracts"). We seek to increase our site rental revenues by adding more tenants on our shared communications infrastructure, which we expect to result in significant incremental cash flows due to our low incremental operating costs.

Below is certain information concerning our business:

- Over the last two decades, we have assembled a leading portfolio of towers predominately through acquisitions from large wireless carriers or their predecessors. More recently, through both acquisitions (see note 3 to our consolidated financial statements) and new construction of small cells and fiber, we have extended our communications infrastructure presence by investing significantly in our Fiber segment. Through our product offerings of towers and small cells, we seek to provide a comprehensive solution to enable our wireless tenants to expand coverage and capacity for wireless networks. Furthermore, within our Fiber segment, we are able to generate cash flow growth and stockholder return by deploying our fiber for both small cells' and fiber solutions' tenants.
- Below is certain information regarding our Towers segment:
    - Approximately 56% and 71% of our towers are located in the 50 and 100 largest U.S. basic trading areas ("BTAs"), respectively. Our towers have a significant presence in each of the top 100 BTAs.
    - We derive approximately 40% of our Towers site rental gross margin from towers residing on land and other property interests (collectively, "land") that we own, including fee interests and perpetual easements, and we derive approximately 60% of our Towers site rental gross margin from towers residing on land that we lease, sublease, manage or license.
    - The contracts for the land under our towers have an average total remaining life of approximately 35 years (including all renewal terms at our option), weighted based on Towers site rental gross margin.
- Below is certain information regarding our Fiber segment:
    - The majority of our small cells and fiber are located in major metropolitan areas, including a presence within every major U.S. market.
    - The vast majority of our fiber assets are located on public rights-of-way.
    - We operate as a REIT for U.S. federal income tax purposes. See *"Item 1. Business—2018 Industry Highlights and Company Developments—REIT Status"* and note 10 to our consolidated financial statements.

Certain information concerning our tenant and site rental contracts is as follows:

- Our largest tenants include AT&T, T-Mobile, Verizon Wireless and Sprint, which collectively accounted for 73% of our 2018 site rental revenues.
- Site rental revenues represented 87% of our 2018 consolidated net revenues, of which approximately 66% and 34% were from our Towers segment and our Fiber segment, respectively.
- The vast majority of our site rental revenues are of a recurring nature and are subject to long-term contracts with our tenants.
- Our site rental revenues derived from wireless tenants typically result from long-term contracts with (1) initial terms of five to 15 years, (2) multiple renewal periods at the option of the tenant of five to 10 years each, (3) limited termination rights for our tenants, and (4) contractual escalations of the rental price and, in some cases, an additional upfront payment.
- Our site rental revenues derived from our fiber solutions tenants (including from organizations with high-bandwidth and multi-location demands), typically result from contracts with (1) initial terms that generally vary between three to 20 years and (2) a fixed monthly recurring fee and, in some cases, an additional upfront payment.
- Exclusive of renewals at the tenants' option, our tenant contracts have a weighted-average remaining life of approximately five years and represent $23 billion of expected future cash inflows.

As part of our effort to provide comprehensive communications infrastructure solutions, we also offer certain services primarily relating to our towers and small cells, predominately consisting of (1) site development services relating to existing or new tenant equipment installations, including: site acquisition, architectural and engineering, or zoning and permitting (collectively, "site development services") and (2) tenant equipment installation or subsequent augmentations (collectively, "installation services"). The large majority of our services revenues relate to our Towers segment.

Strategy

As a leading provider of shared communications infrastructure in the U.S., our strategy is to create long-term stockholder value via a combination of (1) growing cash flows generated from our existing portfolio of communications infrastructure, (2) returning a meaningful portion of our cash provided by operating activities to our common stockholders in the form of dividends and (3) investing capital efficiently to grow cash flows and long-term dividends per share. Our U.S. focused strategy is based, in part, on our belief that the U.S. is the most attractive market for shared communications infrastructure investment with the greatest long-term growth potential. We measure our efforts to create "long-term stockholder value" by the combined payment of dividends to stockholders and growth in our per share results. The key elements of our strategy are to:

- *Grow cash flows from our existing communications infrastructure.* We seek to maximize our site rental cash flows by working with our tenants to provide them quick access to our existing communications infrastructure and entering into long-term contracts. Tenant additions or modifications of existing tenant equipment (collectively, "tenant additions") enable our tenants to expand coverage and capacity in order to meet increasing demand for data, while generating high incremental returns for our business. We believe our product offerings of towers and small cells provide a comprehensive solution to our wireless tenants' growing network needs through our shared communications infrastructure model, which is an efficient and cost-effective way to serve our tenants. Additionally, we believe our ability to share our fiber assets across multiple tenants to deploy both small cells and offer fiber solutions allows us to generate cash flows and increase stockholder return. We also believe that there will be considerable future demand for our communications infrastructure based on the location of our assets and the rapid growth in demand for data.

- *Return cash provided by operating activities to common stockholders in the form of dividends*. We believe that distributing a meaningful portion of our cash provided by operating activities appropriately provides common stockholders with increased certainty for a portion of expected long-term stockholder value while still retaining sufficient flexibility to invest in our business and deliver growth. We believe this decision reflects the translation of the high-quality, long-term contractual cash flows of our business into stable capital returns to common stockholders.

- *Invest capital efficiently to grow cash flows and long-term dividends per share.* In addition to adding tenants to existing communications infrastructure, we seek to invest our available capital, including the net cash provided by our operating activities and external financing sources, in a manner that will increase long-term stockholder value on a risk-adjusted basis. These investments include constructing and acquiring new communications infrastructure that we expect will generate future cash flow growth and attractive long-term returns by adding tenants to those assets over time. Our historical investments have included the following (in no particular order):

    - construction of towers, fiber and small cells;
    - acquisitions of towers, fiber and small cells;
    - acquisitions of land interests (which primarily relate to land assets under towers);
    - improvements and structural enhancements to our existing communications infrastructure;
    - purchases of shares of our common stock from time to time; and
    - purchases, repayments or redemptions of our debt.

Our strategy to create long-term stockholder value is based on our belief that additional demand for our communications infrastructure will be created by the expected continued growth in the demand for data. We believe that such demand for our communications infrastructure will continue, will result in growth of our cash flows due to tenant additions on our existing communications infrastructure, and will create other growth opportunities for us, such as demand for newly-constructed or acquired communications infrastructure, as described above.

Company Developments, REIT Status and Industry Updates

Company Developments. See *"Item 1. Business—Overview," "Item 1. Business—The Company," "Item 7. MD&A"* and our consolidated financial statements for a discussion of certain recent developments, activities, and results, including the increase in our quarterly common stock dividend and our recent debt and equity financing activities.

REIT Status. We commenced operating as a REIT for U.S. federal income tax purposes effective January 1, 2014. As a REIT, we are generally entitled to a deduction for dividends that we pay and therefore are not subject to U.S. federal corporate income tax on our net taxable income that is currently distributed to our stockholders. We may also be subject to certain federal, state, local, and foreign taxes on our income or assets, including (1) taxes on any undistributed income, (2) taxes related to our taxable REIT subsidiaries ("TRSs"), (3) franchise taxes, (4) property taxes and (5) transfer taxes. In addition, we could, in certain circumstances, be required to pay an excise or penalty tax, which could be significant in amount, in order to utilize one or more relief provisions under the Internal Revenue Code of 1986, as amended ("Code"), to maintain qualification for taxation as a REIT.

The Tax Cuts and Jobs Act, enacted in 2018 ("Tax Reform Act"), made substantial changes to the Code. Among the many changes impacting corporations are a significant reduction in the corporate income tax rate, the repeal of the corporate alternative minimum tax for years beginning in 2018 and limitations on the deductibility of interest expense. In addition, under the Tax Reform Act, qualified REIT dividends (within the meaning of Section 199A(e)(3) of the Code) constitute a part of a non-corporate taxpayer's "qualified business income amount" and thus our non-corporate U.S. stockholders may be eligible to take a qualified business income deduction in an amount equal to 20% of such dividends received from us. Without further legislative action, the 20% deduction applicable to qualified REIT dividends will expire on January 1, 2026. The Tax Reform Act has not had a material impact on the Company.

The vast majority of our assets and revenues are in the REIT. See note 10 to our consolidated financial statements. Additionally, we have included in TRSs certain other assets and operations. Those TRS assets and operations will continue to be subject, as applicable, to federal and state corporate income taxes or to foreign taxes in the jurisdictions in which such assets and operations are located.

Our foreign assets and operations (including our tower operations in Puerto Rico) most likely will be subject to foreign income taxes in the jurisdictions in which such assets and operations are located, regardless of whether they are included in a TRS.

To remain qualified and be taxed as a REIT, we will generally be required to annually distribute to our stockholders at least 90% of our REIT taxable income, after the utilization of our NOLs (determined without regard to the dividends paid deduction and excluding net capital gain) (see notes 2 and 10 to our consolidated financial statements). Our quarterly common stock dividend will delay the utilization of our NOLs and may cause certain of the NOLs to expire without utilization.

Industry Update. Consumer demand for data continues to grow due to increases in data consumption and increased penetration of bandwidth-intensive devices. This increase in data consumption is driven by growth in factors such as (1) mobile entertainment (such as mobile video, mobile applications, and social networking), (2) mobile internet usage (such as email and web browsing), (3) machine-to-machine applications or the "Internet of Things" (such as smart city technologies), and (4) the adoption of other bandwidth-intensive applications (such as cloud services and video communications). As a result, consumer wireless devices are trending toward bandwidth-intensive devices, including smartphones, laptops, tablets and other emerging devices, and, during the next several years, U.S. wireless carriers are expected to be among the first carriers in the world to offer commercial 5th Generation ("5G") mobile cellular communications services to further support such growth.

We expect the following anticipated factors to contribute to potential demand for our communications infrastructure:

- Consumers' growing wireless data consumption likely resulting in major wireless carriers continuing to upgrade and enhance their networks, including through the use of both towers and small cells, in an effort to improve network quality and capacity and tenant retention or satisfaction;
- Prior and future potential spectrum auctioned, licensed or made available by the Federal Communications Commission ("FCC") enabling additional wireless carrier network development;
- Next generation technologies and new uses for wireless communications may potentially result in new entrants or increased demand in the wireless industry, which may include companies involved in the continued evolution and deployment of the Internet of Things (such as connected cars, smart cities and virtual reality); and
- The continued adoption of bandwidth-intensive applications could result in demand for high-capacity, multi-location, fiber-based network solutions.

The Company

Virtually all of our operations are located in the U.S. Our operating segments consists of Towers and Fiber. For more information about our operating segments, see *"Item 7. MD&A—General Overview"* and note 15 to our consolidated financial statements. Our core business is providing access, including space or capacity, to our shared communications infrastructure in the U.S. We believe our communications infrastructure is integral to our tenants' networks and organizations. See *"Item 1. Business—Strategy."*

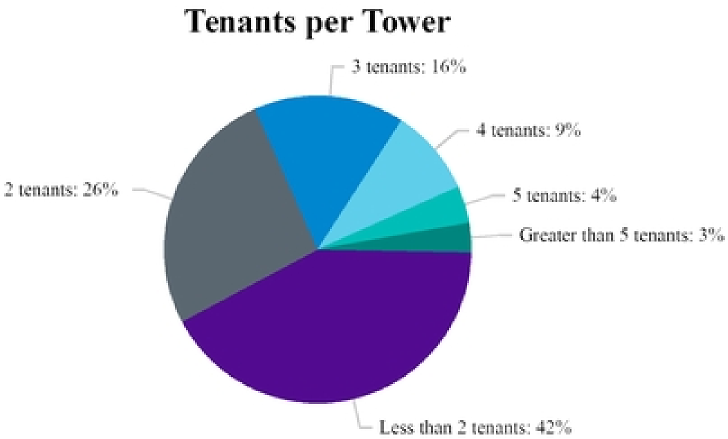
Towers Segment. We believe towers are the most efficient and cost-effective solution for providing coverage and capacity for wireless carrier network deployments. We acquired ownership interests or exclusive rights to the majority of our towers directly or indirectly from the four largest wireless carriers (or their predecessors) through transactions consummated since 1999, including transactions with (1) AT&T in 2013 ("AT&T Acquisition"), (2) T-Mobile in 2012 ("T-Mobile Acquisition"), (3) Global Signal Inc. in 2007 ("Global Signal Acquisition"), which had originally acquired the majority of its towers from Sprint, (4) companies now part of Verizon Wireless during 1999 and 2000 and (5) companies now part of AT&T during 1999 and 2000.

We generally receive monthly rental payments from our Towers tenants, payable under long-term contracts. We generally negotiate initial contract terms of five to 15 years, with multiple renewal periods of five to 10 years each at the option of the tenant, and our contracts typically include fixed escalations (which generally exceed expected non-renewals, as discussed below) and, in some cases, an additional upfront payment. We continue to endeavor to negotiate with our existing tenant base for longer contractual terms, which often contain fixed escalation rates.

Our Towers tenant contracts have historically had a high renewal rate. With limited exceptions, our Towers tenant contracts may not be terminated prior to the end of their current term, and non-renewals have averaged approximately 2.5% of site rental revenues over the last five years (inclusive of non-renewals as a result of the decommissioning of the former Leap Wireless, MetroPCS and Clearwire networks ("Acquired Networks")). In general, each tenant contract which is renewable will automatically renew at the end of its term unless the tenant provides prior notice of its intent not to renew. See note 4 to our consolidated financial statements for a tabular presentation of the minimum rental cash payments due to us by tenants pursuant to lease agreements without consideration of tenant renewal options.

The average monthly rental payment from a new tenant added to towers can vary based on (1) aggregate tenant volume, (2) the different regions in the U.S., or (3) the physical size, weight and shape of the antenna installation or related equipment. When possible, we seek to receive rental payment increases in connection with contract amendments, pursuant to which our tenants add additional antennas or other equipment to our towers on which they already have equipment pursuant to preexisting contracts.

As of December 31, 2018, the average number of tenants (calculated as a unique license together with any related amendments thereto) per tower is approximately 2.2. The following chart sets forth the number of existing tenants per tower as of December 31, 2018 (see *"Item 7. MD&A—Accounting and Reporting Matters—Critical Accounting Policies and Estimates"* for a discussion of our impairment evaluation and our towers with no tenants).



Fiber Segment. Our Fiber segment includes both small cells and fiber solutions.

- We offer certain fiber solutions to organizations with high-bandwidth and multi-location demands, such as enterprise, government, education, healthcare, wholesale, financial, legal, media and entertainment, content distribution, and energy and utilities tenants. Our fiber solutions provide essential connectivity resources needed to create integrated networks and support organizations.

- Our small cells offload data traffic from towers and bolster capacity in the areas of wireless networks where data demand is the greatest. Our small cells are typically attached to public right-of-way infrastructure, including utility poles and street lights.

Our fiber assets include those acquired from: (1) NextG Networks, Inc. in 2012 ("NextG Acquisition"), (2) Quanta Fiber Networks, Inc. in 2015 ("Sunesys Acquisition"), (3) FPL FiberNet Holdings, LLC and certain other subsidiaries of NextEra Energy, Inc. in 2017 ("FiberNet Acquisition"), (4) Wilcon Holdings LLC in 2017 ("Wilcon Acquisition") and (5) LTS Group Holdings LLC in 2017 ("Lightower Acquisition"). The FiberNet Acquisition, Wilcon Acquisition, and Lightower Acquisition are collectively referred to herein as the "2017 Acquisitions."

We generally receive monthly recurring payments from our Fiber tenants and, in some cases, receive upfront payments, payable pursuant to contracts. The amount of the monthly payments can also be influenced by the amount or cost of (1) construction for initial and subsequent tenants, (2) fiber strand requirements and supply, (3) equipment at the site and (4) any upfront payment received.

Additional site rental information. For both of our Towers and Fiber segments, we have existing master agreements with our largest tenants, including AT&T, T-Mobile, Verizon Wireless and Sprint; such agreements provide certain terms (including economic terms) that govern our tenants' right to utilize our communications infrastructure entered into by such carriers during the term of their master agreements.

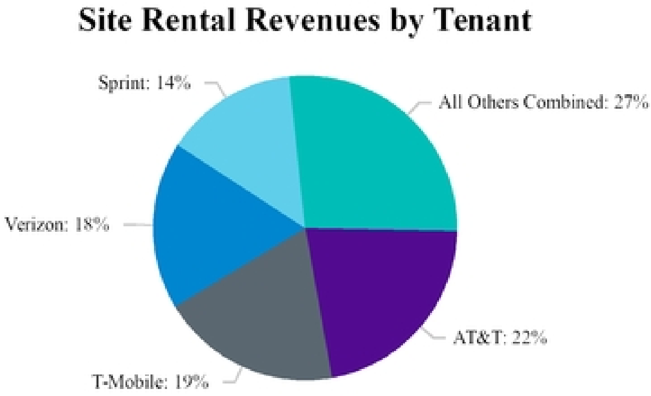
Approximately half of our site rental cost of operations consists of Towers ground lease expenses, and the remainder includes fiber access expenses (primarily leases of fiber assets and other access agreements to facilitate our communications infrastructure), property taxes, repairs and maintenance, employee compensation or related benefit costs, and utilities. Assuming current leasing activity levels, our cash operating expenses generally tend to escalate at approximately the rate of inflation. The addition of new tenants to existing communications infrastructure assets is achieved at a low incremental operating cost, delivering high incremental returns to our business. Once constructed, our communications infrastructure portfolio requires minimal sustaining capital expenditures, including maintenance or other non-discretionary capital expenditures, which are typically approximately 2% of net revenues. See note 14 to our consolidated financial statements for a tabular presentation of the rental cash payments owed by us to landlords pursuant to our contractual agreements.

Services. As part of our effort to provide comprehensive communications infrastructure solutions, we also offer certain services primarily relating to our towers and small cells, predominately consisting of (1) site development services and (2) installation services. The large majority of our service revenues relate to our Towers segment. For 2018, approximately 60% of our services and other revenues related to installation services, and the remainder predominately related to site development services. We seek to grow our service revenues by capitalizing on increased volumes that may result from carrier network upgrades, promoting site development services, expanding the scope of our services, and focusing on tenant service and deployment speed. We have the capability and expertise to install, with the assistance of our network of subcontractors, equipment or antenna systems for our tenants. We do not always provide the installation services or site development services for our tenants on our communications infrastructure as third parties also provide these services (see also *"—Competition"* below). These activities are typically non-recurring and highly competitive, with a number of local competitors in most markets. Typically, our installation services are billed on a cost-plus profit basis and site development services are billed on a fixed fee basis.

Customers. Our Towers customers are primarily comprised of large wireless carriers that operate national networks.

Our Fiber customers are generally large wireless carriers and organizations with high-bandwidth and multi-location demands, such as enterprise, government, education, healthcare, wholesale, financial, legal, media and entertainment, content distribution, and energy and utilities customers.

Our four largest tenants are AT&T, T-Mobile, Verizon Wireless and Sprint. Collectively, these four tenants accounted for 73% of our 2018 site rental revenues. Also see *"Item 1A. Risk Factors"* and note 15 to our consolidated financial statements. For 2018, our site rental revenues by tenant were as follows:



Sales and Marketing. Our sales organization markets our communications infrastructure with the objective of contracting access with tenants to existing communications infrastructure or to new communications infrastructure prior to construction. We seek to become the critical partner and preferred independent communications infrastructure provider for our tenants and increase tenant satisfaction relative to our peers by leveraging our (1) existing unique communications infrastructure footprint, (2) tenant relationships, (3) process-centric approach, (4) technological tools and (5) construction capabilities and expertise.

Our sales team is organized based on a variety of factors, including tenant type (such as wireless carriers and organizations) and geography. A team of national account directors maintains our relationships with our largest tenants. These directors work to develop communications infrastructure contracts, as well as to ensure that tenants' communications infrastructure needs are efficiently translated into new contracts on our communications infrastructure. Sales personnel in our local offices develop and maintain relationships with our tenants that are expanding their networks, entering new markets, seeking new or additional communication infrastructure offerings, bringing new technologies to market or requiring maintenance or add-on business. In addition to our full-time sales or marketing staff, a number of senior-level employees spend a significant portion of their time on sales and marketing activities and call on existing or prospective tenants.

Competition. We face competition for site rental tenants from various sources, including (1) other independent communications infrastructure owners or operators, including competitors that own, operate, or manage towers, rooftops, broadcast towers, utility poles, fiber (including non-traditional competitors such as cable providers) or small cells, (2) tenants who elect to self-perform or (3) new alternative deployment methods for communications infrastructure.

Some of the larger companies with which we compete for Towers segment business opportunities include American Tower Corporation and SBA Communications Corporation. Our Fiber segment business competitors can vary significantly based on geography. Some of the larger companies with which we compete for Fiber segment business opportunities include other owners of fiber, as well as recent and potential entrants into small cells and fiber solutions. We believe that location, existing communications infrastructure footprint, deployment speed, quality of service, expertise, reputation, capacity and price have been and will continue to be the most significant competitive factors affecting our businesses. See *"Item 1A. Risk Factors."*

Competitors to our services offering include site acquisition consultants, zoning consultants, real estate firms, right-of-way consulting firms, construction companies, tower owners or managers, radio frequency engineering consultants, telecommunications equipment vendors who can provide turnkey site development services through multiple subcontractors or our tenants' internal staff. We believe that our tenants base their decisions on the outsourcing of services on criteria such as a company's experience, record of accomplishment, reputation, price and time for completion of a project.

Employees

At January 31, 2019, we employed approximately 5,000 people. We are not a party to any collective bargaining agreements. We have not experienced any strikes or work stoppages, and management believes that our employee relations are satisfactory.

Regulatory and Environmental Matters

We are required to comply with a variety of federal, state, and local regulations and laws in the U.S., including FCC and Federal Aviation Administration ("FAA") regulations and those discussed under *"—Environmental"* below. To date, we have not incurred any material fines or penalties or experienced any material adverse effects to our business as a result of any domestic or international regulations. The summary below is based on regulations currently in effect, and such regulations are subject to review or modification by the applicable governmental authority from time to time. If we fail to comply with applicable laws and regulations, we may be fined or even lose our rights to conduct some of our business.

Federal Regulations. Both the FCC and the FAA regulate towers used for wireless communications, radio, or television broadcasting. Such regulations control the siting, lighting, or marking of towers and may, depending on the characteristics of particular towers, require the registration of tower facilities with the FCC and the issuance of determinations confirming no hazard to air traffic. Wireless communications devices operating on towers are separately regulated and independently licensed based upon the particular frequency used. In addition, the FCC and the FAA have developed standards to consider proposals for new or modified tower or antenna structures based upon the height or location, including proximity to airports. Proposals to construct or to modify existing tower or antenna structures above certain heights are reviewed by the FAA to ensure the structure will not present a hazard to aviation, which determination may be conditioned upon compliance with lighting or marking requirements. The FCC requires its licensees to operate communications devices only on towers that comply with FAA rules and are registered with the FCC, if required by its regulations. Where tower lighting is required by FAA regulation, tower owners bear the responsibility of notifying the FAA of any tower lighting outage and ensuring the timely restoration of such outages. Failure to comply with the applicable requirements may lead to civil penalties.

Local Regulations. The U.S. Telecommunications Act of 1996 amended the Communications Act of 1934 to preserve state and local zoning authorities' jurisdiction over the siting of communications towers and small cells. The law, however, limits local zoning authority by prohibiting actions by local authorities that discriminate between different service providers of wireless communications or ban altogether the provision of wireless communications. Additionally, the law prohibits state and local restrictions based on the environmental effects of radio frequency emissions to the extent the facilities comply with FCC regulations.

Local regulations include city and other local ordinances (including subdivision and zoning ordinances), approvals for construction, modification and removal of towers and small cells, and restrictive covenants imposed by community developers. These regulations vary greatly, but typically require us to obtain approval from local officials prior to tower construction. Local zoning authorities may render decisions that prevent the construction or modification of towers or place conditions on such construction or modifications that are responsive to community residents' concerns regarding the height, visibility, or other characteristics of the towers. Over the last several years, there have been several developments related to FCC regulations and legislation that assist in expediting and streamlining the deployment of wireless networks, including establishing timeframes for reviews by local and state governments. Notwithstanding such legislative and FCC actions, decisions of local zoning authorities may also adversely affect the timing or cost of communications infrastructure construction or modification.

Certain of our Fiber related subsidiaries hold authorizations to provide intrastate telecommunication services as competitive local exchange carriers ("CLEC") in numerous states and to provide domestic interstate telecommunication services as authorized by the FCC. These Fiber subsidiaries are primarily regulated by state public service commissions. CLEC status, in certain cases, helps promote access to public rights-of-way, which is beneficial to the deployment of our small cells on a timely basis. Status as a CLEC often allows us to deploy our small cells in locations where zoning restrictions might otherwise delay, restrict, or prevent building or expanding traditional wireless tower sites or traditional wireless rooftop sites. See *"Item 1A. Risk Factors."*

Environmental. We are required to comply with a variety of federal, state, and local environmental laws and regulations protecting environmental quality, including air and water quality and wildlife protection. To date, we have not incurred any material fines or penalties or experienced any material adverse effects to our business as a result of any domestic or international environmental regulations or matters. See *"Item 1A. Risk Factors."*

The construction of new towers and small cells or, in some cases, the modification of existing towers in the U.S. may be subject to environmental review under the National Environmental Policy Act of 1969, as amended ("NEPA"), which requires federal agencies to evaluate the environmental impact of major federal actions. The FCC has promulgated regulations implementing NEPA, which require applicants to investigate the potential environmental impact of the proposed tower or small cells construction. Should the proposed tower or small cells construction present a significant environmental impact, the FCC must prepare an environmental impact statement, subject to public comment. If the proposed construction or modification of a tower poses a significant impact on the environment, the FCC's approval of the construction or modification could be significantly delayed.

Our operations are subject to federal, state, and local laws and regulations relating to the management, use, storage, disposal, emission, or remediation of, or exposure to, hazardous or non-hazardous substances, materials, or wastes. As an owner, lessee, or operator of real property, we are subject to certain environmental laws that impose strict, joint-and-several liability for the cleanup of on-site or off-site contamination relating to existing or historical operations; or we could also be subject to personal injury or property damage claims relating to such contamination. In general, our tenant contracts prohibit our tenants from using or storing any hazardous substances on our communications infrastructure sites in violation of applicable environmental laws and require our tenants to provide notice of certain environmental conditions caused by them.

As licensees and communications infrastructure owners, we are also subject to regulations and guidelines that impose a variety of operational requirements relating to radio frequency emissions. As employers, we are subject to Occupational Safety and Health Administration and similar guidelines regarding employee protection from radio frequency exposure. The potential connection between radio frequency emissions and certain negative health effects, including some forms of cancer, has been the subject of substantial study by the scientific community in recent years.

We have compliance programs and monitoring projects to help assure that we are in substantial compliance with applicable environmental laws and regulations. Nevertheless, there can be no assurance that the costs of compliance with existing or future environmental laws will not have a material adverse effect on us.

Other Regulations. We hold, through certain of our subsidiaries, spectrum licenses, which are subject to additional regulation by the FCC. We also hold a nationwide FCC license relating to the 1670-1675 MHz spectrum ("1670-1675 Spectrum"), which we have leased to a third party through 2023, subject to the lessee's option to purchase the 1670-1675 Spectrum.

Available Information

We maintain a website at www.crowncastle.com. Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K (and any amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended ("Exchange Act")), proxy statements and other information about us are made available, free of charge, through the investor relations section of our website at http://investor.crowncastle.com and at the SEC's website at http://sec.gov as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC.

In addition, our corporate governance guidelines, business practices, ethics policy and financial code of ethics and the charters of our Audit Committee, Compensation Committee and Nominating & Corporate Governance Committee are available through the investor relations section of our website at http://www.crowncastle.com/investor/corporateGovernance.aspx, and such information is also available in print to any stockholder who requests it. We intend to post to our website any amendments to or waivers from each of the ethics policy and financial code of ethics applicable to our Chief Executive Officer, Chief Financial Officer and Controller that are required to be disclosed.

Item 1A. *Risk Factors*

You should carefully consider all of the risks described below, as well as the other information contained in this document, when evaluating your investment in our securities.

Risks Relating to Our Business

Our business depends on the demand for our communications infrastructure, driven primarily by demand for data, and we may be adversely affected by any slowdown in such demand. Additionally, a reduction in the amount or change in the mix of network investment by our tenants may materially and adversely affect our business (including reducing demand for our communications infrastructure or services).

Tenant demand for our communications infrastructure depends on the demand for data. The willingness of our tenants to utilize our communications infrastructure, or renew or extend existing contracts on our communications infrastructure, is affected by numerous factors, including:

- consumers' and organizations' demand for data;
- availability or capacity of our communications infrastructure or associated land interests;
- location of our communications infrastructure;
- financial condition of our tenants, including their profitability and availability or cost of capital;
- willingness of our tenants to maintain or increase their network investment or changes in their capital allocation strategy;
- need for integrated networks and organizations;
- availability and cost of spectrum for commercial use;
- increased use of network sharing, roaming, joint development, or resale agreements by our tenants;
- mergers or consolidations by and among our tenants;
- changes in, or success of, our tenants' business models;
- governmental regulations and initiatives, including local or state restrictions on the proliferation of communications infrastructure;
- cost of constructing communications infrastructure;
- our market competition, including tenants that may elect to self-perform;
- technological changes, including those (1) affecting the number or type of communications infrastructure needed to provide data to a given geographic area or which may otherwise serve as substitute or alternative to our communications infrastructure or (2) resulting in the obsolescence or decommissioning of certain existing wireless networks; and
- our ability to efficiently satisfy our tenants' service requirements.

A slowdown in demand for data or our communications infrastructure may negatively impact our growth or otherwise have a material adverse effect on us. If our tenants or potential tenants are unable to raise adequate capital to fund their business plans, as a result of disruptions in the financial and credit markets or otherwise, they may reduce their spending, which could adversely affect our anticipated growth or the demand for our communications infrastructure or services.

The amount, timing, and mix of our tenants' network investment is variable and can be significantly impacted by the various matters described in these risk factors. Changes in tenant network investment typically impact the demand for our communications infrastructure. As a result, changes in tenant plans such as delays in the implementation of new systems, new and emerging technologies (including small cells and fiber solutions), or plans to expand coverage or capacity may reduce demand for our communications infrastructure. Furthermore, the industries in which our tenants operate (particularly those in the wireless industry) could experience a slowdown or slowing growth rates as a result of numerous factors, including a reduction in consumer demand (including demand for wireless connectivity) or general economic conditions. There can be no assurances that weakness or uncertainty in the economic environment will not adversely impact our tenants or their industries, which may materially and adversely affect our business, including by reducing demand for our communications infrastructure or services. In addition, a slowdown may increase competition for site rental tenants or services. Such an industry slowdown or a reduction in tenant network investment may materially and adversely affect our business.

A substantial portion of our revenues is derived from a small number of tenants, and the loss, consolidation or financial instability of any of such tenants may materially decrease revenues or reduce demand for our communications infrastructure and services.

Our four largest tenants are AT&T, T-Mobile, Verizon Wireless and Sprint. Collectively, these four tenants accounted for 73% of our 2018 site rental revenues. The loss of any one of our large tenants as a result of consolidation, merger, bankruptcy, insolvency, network sharing, roaming, joint development, resale agreements by our tenants or otherwise may result in (1) a material decrease in our revenues, (2) uncollectible account receivables, (3) an impairment of our deferred site rental receivables, communications infrastructure assets, intangible assets, or (4) other adverse effects to our business. We cannot guarantee that contracts with our major tenants will not be terminated or that these tenants will renew their contracts with us. In addition to our four largest tenants, we also derive a portion of our revenues and anticipated future growth from (1) fiber solutions tenants and (2) new entrants offering or contemplating offering wireless services. Such tenants (including those dependent on government funding) may be smaller or have less financial resources than our four largest tenants, may have business models which may not be successful, or may require additional capital.

Consolidation among our tenants will likely result in duplicate or overlapping parts of networks, for example, where they are co-residents on a tower, which may result in the termination, non-renewal or re-negotiation of tenant contracts and negatively impact revenues from our communications infrastructure. Due to the long-term nature of tenant contracts, we expect that any termination of tenant contracts as a result of this potential consolidation would be spread over multiple years. Such consolidation may result in a reduction in such tenants' future network investment in the aggregate because their expansion plans may be similar. Tenant consolidation could decrease the demand for our communications infrastructure, which in turn may result in a reduction in our revenues or cash flows.

In April 2018, T-Mobile and Sprint entered into a definitive agreement to merge, subject to regulatory approval and other closing conditions. This potential transaction may result in a decrease or delay in demand for our communications infrastructure and services, as a result of the anticipated integration of the T-Mobile and Sprint networks and related duplicate or overlapping parts of their networks, which may lead to a reduction in our revenues or cash flows and may trigger a review for impairment of certain long-lived assets. For the year ended December 31, 2018, T-Mobile and Sprint represented approximately 19% and 14%, respectively, of the Company's consolidated site rental revenues. Further, the Company derived approximately 6% of its consolidated site rental revenues from each of T-Mobile and Sprint on communications infrastructure where both carriers currently reside, inclusive of approximately 1% impact from previously disclosed expected non-renewals from the anticipated decommissioning of portions of T-Mobile's MetroPCS and Sprint's Clearwire networks. In addition, there is an average of approximately five years and six years of current term remaining on all lease agreements with T-Mobile and Sprint, respectively. See also *"Item 1. Business—The Company"* and note 15 to our consolidated financial statements.

The expansion or development of our business, including through acquisitions, increased product offerings or other strategic growth opportunities, may cause disruptions in our business, which may have an adverse effect on our business, operations or financial results.

We seek to expand and develop our business, including through acquisitions, increased product offerings (such as small cells and fiber solutions), or other strategic growth opportunities. In the ordinary course of our business, we review, analyze and evaluate various potential transactions or other activities in which we may engage. Such transactions or activities could be a complex, costly, time-consuming process, or cause disruptions in, increase risk or otherwise negatively impact our business. Among other things, such transactions and activities may:

- disrupt our business relationships with our tenants, depending on the nature of or counterparty to such transactions and activities;
- divert the time or attention of management away from other business operations, including as a result of post-transaction integration activities;
- fail to achieve revenue or margin targets, operational synergies or other benefits contemplated;
- increase operational risk or volatility in our business;
- not result in the benefits management had expected to realize from such expansion and development activities, or those benefits may take longer to realize than expected (including the 2017 Acquisitions);
- impact our cost structure and result in the need to hire additional employees;
- increase demands on current employees or result in current or prospective employees experiencing uncertainty about their future roles with us, which might adversely affect our ability to retain or attract key employees; or
- result in the need for additional TRSs or contributions of certain assets to TRSs, which are subject to federal and state corporate income taxes.

Our Fiber segment has expanded rapidly, and the Fiber business model contains certain differences from our Towers business model, resulting in different operational risks. If we do not successfully operate our Fiber business model or identify or manage the related operational risks, such operations may produce results that are less than anticipated.

In recent years, we have allocated a significant amount of capital to our Fiber business, which is a much less mature business for us than our Towers business (which we have operated since 1994). Our Fiber segment represented 34% and 21% of our site rental revenues for the years ended December 31, 2018 and 2017, respectively. The business model for our Fiber operations contains certain differences from our business model for our Towers operations, including certain differences relating to tenant base, competition, contract terms (including requirements for service level agreements regarding network performance and maintenance), upfront capital requirements, landlord demographics, ownership of certain network assets, operational oversight requirements, government regulations, growth rates and applicable laws.

While our Fiber operations have certain risks that are similar to our Towers operations, they also have certain operational risks (including the scalability of processes) that are different from our Towers business, including:

- the use of public rights-of-way and franchise agreements;
- use of poles and conduits owned solely by, or jointly with, third parties;
- risks relating to overbuilding;
- risks relating to the specific markets that we choose to operate in or plan to operate in;
- risks relating to construction management and construction-related billings to tenants;
- risks relating to wireless carriers building their own small cell networks, or tenants utilizing their own or alternative fiber assets;
- risk of failing to optimize the use of our finite supply of fiber strands;
- damage to our assets and the need to maintain, repair, upgrade and periodically replace our assets;
- the risk of failing to properly maintain or operate highly specialized hardware and software;
- network data security risks;
- the risk of new technologies that could enable tenants to realize the same benefits with less utilization of our fiber;
- potential damage to our overall reputation as a communications infrastructure provider; and
- the use of competitive local exchange carrier status, which we refer to as "CLEC" status.

In addition, the rate at which tenants adopt or prioritize small cells and fiber solutions may be lower or slower than we anticipate or may cease to exist altogether. Our Fiber operations will also expose us to different safety or liability risks or hazards than our Towers business as a result of numerous factors, including the location or nature of the assets involved. There may be risks and challenges associated with small cells and fiber solutions being comparatively new and emerging technologies that are continuing to evolve, and there may be other risks related to small cells and fiber solutions of which we are not yet aware.

Failure to timely and efficiently execute on our construction projects could adversely affect our business.

Our construction projects and related contracts, particularly in our Fiber business, can be long-term, complex in nature, and challenging to execute. The quality of our performance on such construction projects depends in large part upon our ability to manage (1) the associated tenant relationship and (2) the project itself by timely deploying and properly managing appropriate internal and external project resources. In connection with our construction projects, we generally bear the risk of cost over-runs, labor availability and productivity, and contractor pricing and performance. Additionally, contracts with our tenants for these projects typically specify delivery dates, performance criteria and penalties for our failure to perform. Further, investments in newly-constructed communications infrastructure may result in lower initial returns compared to returns on our existing communications infrastructure or us not being able to to realize future tenant additions at anticipated levels. Our failure to manage such tenant relationships, project resources, and project milestones in a timely and efficient manner could have a material adverse effect on our business.

Our substantial level of indebtedness could adversely affect our ability to react to changes in our business, and the terms of our debt instruments and our 6.875% Convertible Preferred Stock limit our ability to take a number of actions that our management might otherwise believe to be in our best interests. In addition, if we fail to comply with our covenants, our debt could be accelerated.

We have a substantial amount of indebtedness (approximately $16.7 billion as of February 22, 2019). See *"Item 7. MD&A—Liquidity and Capital Resources"* for a tabular presentation of our contractual debt maturities. As a result of our substantial indebtedness:

- we may be more vulnerable to general adverse economic or industry conditions;
- we may find it more difficult to obtain additional financing to fund discretionary investments or other general corporate requirements or to refinance our existing indebtedness;

- we are or will be required to dedicate a substantial portion of our cash flows from operations to the payment of principal or interest on our debt, thereby reducing the available cash flows to fund other projects, including the discretionary investments discussed in "*Item 1. Business*" and "*Item 7. MD&A—Liquidity and Capital Resources"*;
- we may have limited flexibility in planning for, or reacting to, changes in our business or in the industry;
- we may have a competitive disadvantage relative to other companies in our industry with less debt;
- we may be adversely impacted by changes in interest rates;
- we may be adversely impacted by changes to credit ratings related to our debt instruments;
- we may be required to issue equity securities or securities convertible into equity or sell some of our assets, possibly on unfavorable terms, in order to meet payment obligations;
- we may be limited in our ability to take advantage of strategic business opportunities, including communications infrastructure development or mergers and acquisitions; and
- we could fail to remain qualified for taxation as a REIT as a result of limitations on our ability to declare and pay dividends to stockholders as a result of restrictive covenants in our debt instruments or the terms of our 6.875% Mandatory Convertible Preferred Stock, Series A, par value $0.01 per share ("6.875% Convertible Preferred Stock").

Currently we have debt instruments in place that limit in certain circumstances our ability to incur additional indebtedness, pay dividends, create liens, sell assets, or engage in certain mergers and acquisitions, among other things. In addition, the credit agreement governing our senior unsecured credit facility ("2016 Credit Facility") contains financial maintenance covenants. Our ability to comply with these covenants or to satisfy our debt obligations will depend on our future operating performance. If we violate the restrictions in our debt instruments or fail to comply with our financial maintenance covenants, we will be in default under those instruments, which in some cases would cause the maturity of a substantial portion of our long-term indebtedness to be accelerated. Furthermore, if the limits on our ability to pay dividends prevent us from satisfying our REIT distribution requirements, we could fail to remain qualified for taxation as a REIT. If these limits do not jeopardize our qualification for taxation as a REIT but nevertheless prevent us from distributing 100% of our REIT taxable income, we will be subject to federal and state corporate income taxes, and potentially a nondeductible excise tax, on our undistributed taxable income. If our operating subsidiaries were to default on their debt, the trustee could seek to foreclose the collateral securing such debt, in which case we could lose the communications infrastructure and the revenues associated with such communications infrastructure. See *"Item 7. MD&A—Liquidity and Capital Resources—Debt Covenants"* for a further discussion of our debt covenants.

CCIC is a holding company that conducts all of its operations through its subsidiaries. Accordingly, CCIC's sources of cash to pay interest or principal on its outstanding indebtedness are distributions relating to its respective ownership interests in its subsidiaries from the net earnings and cash flows generated by such subsidiaries or from proceeds of debt or equity offerings. Earnings and cash flows generated by CCIC's subsidiaries are first applied by such subsidiaries to conduct their operations, including servicing their respective debt obligations, after which any excess cash flows generally may be paid to such holding company, in the absence of any special conditions such as a continuing event of default. However, CCIC's subsidiaries are legally distinct from the holding company and, unless they guarantee such debt, have no obligation to pay amounts due on their debt or to make funds available to us for such payment.

If we fail to pay scheduled dividends on our 6.875% Convertible Preferred Stock, in cash, common stock, or any combination of cash and common stock, we will be prohibited from paying dividends on our common stock, which may jeopardize our status as a REIT.

We have a substantial amount of indebtedness. In the event we do not repay or refinance such indebtedness, we could face substantial liquidity issues and might be required to issue equity securities or securities convertible into equity securities, or sell some of our assets to meet our debt payment obligations.

We have a substantial amount of indebtedness, which, upon final maturity, we will need to refinance or repay. See *"Item 7. MD&A—Liquidity and Capital Resources"* for a tabular presentation of our contractual debt maturities. There can be no assurances we will be able to refinance our indebtedness (1) on commercially reasonable terms, (2) on terms, including with respect to interest rates, as favorable as our current debt, or (3) at all.

Economic conditions and the credit markets have historically experienced, and may continue to experience, periods of volatility, uncertainty, or weakness that could impact the availability or cost of debt financing, including any refinancing of the obligations described above or on our ability to draw the full amount of our $4.25 billion senior unsecured revolving credit facility under our 2016 Credit Facility ("2016 Revolver"), that, as of February 22, 2019, has $4.1 billion of undrawn availability.

Borrowings under our 2016 Credit Facility generally bear an interest rate based on the London interbank offered rate ("LIBOR") per annum plus a credit spread based on our senior unsecured credit rating. In July 2017, the United Kingdom's Financial Conduct Authority, which regulates LIBOR, announced that it will stop compelling banks to submit rates for the calculation of LIBOR after 2021. It is not possible to predict the effect of these changes, other reforms or the establishment of alternative reference rates. The discontinuation or modification of LIBOR could result in interest rate increases on our debt, which could adversely affect our cash flow and operating results.

If we are unable to repay or refinance our debt, we cannot guarantee that we will be able to generate enough cash flows from operations or that we will be able to obtain enough capital to service our debt, fund our planned capital expenditures or pay future dividends. In such an event, we could face substantial liquidity issues and might be required to issue equity securities or securities convertible into equity securities, or sell some of our assets to meet our debt payment obligations. Failure to repay or refinance indebtedness when required could result in a default under such indebtedness. If we incur additional indebtedness, any such indebtedness could exacerbate the risks described above.

Sales or issuances of a substantial number of shares of our common stock or securities convertible into shares of our common stock may adversely affect the market price of our common stock.

Future sales or issuances of common stock or other equity related securities may adversely affect the market price of our common stock, including any shares of our common stock issued to finance capital expenditures, finance acquisitions or repay debt. Our business strategy contemplates access to external financing to fund certain discretionary investments, which may include issuances of common stock or other equity related securities. We maintain an "at-the-market" stock offering program ("2018 ATM Program") through which we may, from time to time, issue and sell shares of our common stock having an aggregate gross sales price of up to $750 million to or through sales agents. As of February 22, 2019, we had approximately $750 million of gross sales of common stock remaining under our 2018 ATM Program. From time to time, we may refresh or implement a new "at-the-market" stock offering program. See note 11 to our consolidated financial statements. As of February 22, 2019, we had approximately 416 million shares of common stock outstanding.

We have reserved 10 million and 17 million shares of common stock, respectively, for issuance in connection with awards granted under our various stock compensation plans and our 6.875% Convertible Preferred Stock, which will automatically convert into common stock on August 1, 2020. See *"Item 7. MD&A—Liquidity and Capital Resources—Mandatory Convertible Preferred Stock."* The dividends on our 6.875% Convertible Preferred Stock may also be paid in cash or, subject to certain limitations, shares of common stock or any combination of cash and shares of common stock.

Further, a small number of common stockholders own a significant percentage of our outstanding common stock. If any one of these common stockholders, or any group of our common stockholders, sells a large quantity of shares of our common stock, or the public market perceives that existing common stockholders might sell a large quantity of shares of our common stock, the market price of our common stock may significantly decline.

As a result of competition in our industry, we may find it more difficult to negotiate favorable rates on our new or renewing tenant contracts.

Our growth is dependent on our entering into new tenant contracts (including amendments to contracts upon modification of an existing tower, fiber, or small cell installation), as well as renewing or renegotiating tenant contracts when existing tenant contracts terminate. Competition in our industry may make it more difficult for us to attract new tenants, maintain or increase our gross margins, or maintain or increase our market share. In addition, competition (primarily in our fiber solutions business) may, in certain circumstances, cause us to renegotiate certain existing tenant contracts to avoid early contract terminations. We face competition for site rental tenants and associated contractual rates from various sources, including (1) other independent communications infrastructure owners or operators, including those that own, operate, or manage towers, rooftops, broadcast towers, utility poles, fiber (including non-traditional competitors such as cable providers) or small cells, or (2) new alternative deployment methods for communications infrastructure.

Our Fiber operations may have different competitors than our Towers business, including other owners of fiber, as well as new entrants into small cells and fiber solutions, some of which may have larger networks or greater financial resources than we have.

New technologies may reduce demand for our communications infrastructure or negatively impact our revenues.

Improvements in the efficiency, architecture, and design of communication networks may reduce the demand for our communications infrastructure. For example, new technologies that may promote network sharing, joint development, wireless backhaul, or resale agreements by our tenants, such as signal combining technologies or network functions virtualization, may reduce the need for our communications infrastructure. In addition, other technologies, such as WiFi, Distributed Antenna Systems ("DAS"), femtocells, other small cells, or satellite (such as low earth orbiting) and mesh transmission systems may, in the future, serve as substitutes for, or alternatives to, leasing on communications infrastructure that might otherwise be anticipated or expected had such technologies not existed. In addition, new technologies that enhance the range, efficiency, and capacity of communication equipment could reduce demand for our communications infrastructure. Any significant reduction in demand for our communications infrastructure resulting from the new technologies may negatively impact our revenues or otherwise have a material adverse effect on us.

If we fail to retain rights to our communications infrastructure, including the land interests under our towers and the right-of-way and other agreements related to our small cells and fiber solutions, our business may be adversely affected.

The property interests, on which our communications infrastructure resides, including the land interests under our towers, consist of leasehold and sub-leasehold interests, fee interests, easements, licenses, and rights-of-way. A loss of these interests may interfere with our ability to conduct our business or generate revenues. For various reasons, we may not always have the ability to access, analyze, or verify all information regarding titles or other issues prior to acquiring communications infrastructure. Further, we may not be able to renew ground leases or other agreements on commercially viable terms.

Our ability to retain rights to the land interests on which our towers reside depends on our ability to purchase such land, including fee interests and perpetual easements, or renegotiate or extend the terms of the leases relating to such land. Approximately 10% of our Towers site rental gross margin for the year ended December 31, 2018 was derived from towers where the leases for the interests under such towers had final expiration dates of less than 10 years. If we are unable to retain rights to the property interests on which our communications infrastructure resides, our business may be adversely affected.

As of December 31, 2018, approximately 53% of our towers were leased or subleased or operated and managed under master leases, subleases, or other agreements with AT&T, Sprint, and T-Mobile. We have the option to purchase these towers at the end of their respective lease terms. We have no obligation to exercise such purchase options. We may not have the required available capital to exercise our right to purchase some or all of these towers at the time these options are exercisable. Even if we do have available capital, we may choose not to exercise our right to purchase these towers or some or all of the T-Mobile or AT&T towers for business or other reasons. In the event that we do not exercise these purchase rights, or are otherwise unable to acquire an interest that would allow us to continue to operate these towers after the applicable period, we will lose the cash flows derived from such towers, which may have a material adverse effect on our business. In the event that we decide to exercise these purchase rights, the benefits of the acquisition of these towers may not exceed the costs, which could adversely affect our business. Additional information concerning these towers and the applicable purchase options as of December 31, 2018 is as follows:

- 22% of our towers are leased or subleased or operated and managed under a master prepaid lease or other related agreements with AT&T for a weighted-average initial term of approximately 28 years, weighted on Towers site rental gross margin. We have the option to purchase the leased and subleased towers from AT&T at the end of the respective lease or sublease terms for aggregate option payments of approximately $4.2 billion, which payments, if exercised, would be due between 2032 and 2048.

- 16% of our towers are leased or subleased or operated and managed for an initial period of 32 years (through May 2037) under master leases, subleases or other agreements with Sprint. We have the option to purchase in 2037 all (but not less than all) of the leased and subleased Sprint towers from Sprint for approximately $2.3 billion.

- 15% of our towers are leased or subleased or operated and managed under a master prepaid lease or other related agreements with T-Mobile for a weighted-average initial term of approximately 28 years, weighted on Towers site rental gross margin. We have the option to purchase the leased and subleased towers from T-Mobile at the end of the respective lease or sublease terms for aggregate option payments of approximately $2.0 billion, which payments, if exercised, would be due between 2035 and 2049. In addition, through the T-Mobile Acquisition, there are another 1% of our towers subject to a lease and sublease or other related arrangements with AT&T. We have the option to purchase these towers that we do not otherwise already own at the end of their respective lease terms for aggregate option payments of up to approximately $405 million, which payments, if exercised, would be due prior to 2032 (less than $10 million would be due before 2025).

Under master lease or master prepaid lease arrangements we have with AT&T, Sprint and T-Mobile, certain of our subsidiaries lease or sublease, or are otherwise granted the right to manage and operate, towers from bankruptcy remote subsidiaries of such carriers. If one of these bankruptcy remote subsidiaries should become a debtor in a bankruptcy proceeding and is permitted to reject the underlying ground lease, our subsidiaries could lose their interest in the applicable sites. If our subsidiaries were to lose their interest in the applicable sites or if the applicable ground leases were to be terminated, we would lose the cash flow derived from the towers on those sites, which may have a material adverse effect on our business. We have similar bankruptcy risks with respect to sites that we operate under management agreements.

For our small cells and fiber solutions, we must maintain rights-of-way, franchise, pole attachment, conduit use and other agreements to operate our assets. For various reasons, we may not always have the ability to maintain these agreements or obtain future agreements to construct, maintain and operate our fiber assets. Access to rights-of-way may depend on our CLEC status, and we cannot be certain that jurisdictions will (1) recognize such CLEC status or (2) not change their laws concerning CLEC access to rights-of-way. If a material portion of these agreements are terminated or are not renewed, we might be forced to abandon our assets, which may adversely impact our business. In order to operate our assets, we must also maintain fiber agreements that we have with public and private entities. There is no assurance that we will be able to renew those agreements on favorable terms, or at all. If we are unable to renew those agreements on favorable terms, we may face increased costs or reduced revenues.

Additionally, in order to expand our communications infrastructure footprint to new locations, we often need to obtain new or additional rights-of-way and other agreements. Our failure to obtain these agreements in a prompt and cost-effective manner may prevent us from expanding our footprint, which may be necessary to meet our contractual obligations to our tenants and could adversely impact our business.

Our services business has historically experienced significant volatility in demand, which reduces the predictability of our results.

The operating results of our services business for any particular period may vary significantly and should not necessarily be considered indicative of longer-term results for this activity. Our services business is generally driven by demand for our communications infrastructure and may be adversely impacted by various factors, including:

- competition;
- the timing, mix and amount of tenant network investments;
- the rate and volume of tenant deployment plans;
- unforeseen delays or challenges relating to work performed;
- economic weakness or uncertainty;
- our market share; or
- changes in the size, scope, or volume of work performed.

New wireless technologies may not deploy or be adopted by tenants as rapidly or in the manner projected.

There can be no assurances that new wireless services or technologies will be introduced or deployed as rapidly or in the manner projected by the wireless carriers. In addition, demand or tenant adoption rates for such new technologies may be lower or slower than anticipated for numerous reasons. As a result, growth opportunities or demand for our communications infrastructure arising from such technologies may not be realized at the times or to the extent anticipated.

If we fail to comply with laws or regulations which regulate our business and which may change at any time, we may be fined or even lose our right to conduct some of our business.

A variety of federal, state, local, and foreign laws and regulations apply to our business, including those discussed in *"Item 1. Business."* Failure to comply with applicable requirements may lead to civil or criminal penalties, require us to assume indemnification obligations or breach contractual provisions. We cannot guarantee that existing or future laws or regulations, including federal, state, local, or foreign tax laws, will not adversely affect our business (including our REIT status), increase delays or result in additional costs. We also may incur additional costs as a result of liabilities under applicable laws and regulations, such as those governing environmental and safety matters. These factors may have a material adverse effect on us.

If radio frequency emissions from wireless handsets or equipment on our communications infrastructure are demonstrated to cause negative health effects, potential future claims could adversely affect our operations, costs or revenues.

The potential connection between radio frequency emissions and certain negative health effects, including some forms of cancer, has been the subject of substantial study by the scientific community in recent years. We cannot guarantee that claims relating to radio frequency emissions will not arise in the future or that the results of such studies will not be adverse to us.

Public perception of possible health risks associated with cellular or other wireless connectivity services may slow or diminish the growth of wireless companies, which may in turn slow or diminish our growth. In particular, negative public perception of, and regulations regarding, these perceived health risks may slow or diminish the market acceptance of wireless services. If a connection between radio frequency emissions and possible negative health effects were established, our operations, costs, or revenues may be materially and adversely affected. We currently do not maintain any significant insurance with respect to these matters.

Certain provisions of our restated certificate of incorporation ("Charter"), amended and restated by-laws ("by-laws") and operative agreements, and domestic and international competition laws may make it more difficult for a third party to acquire control of us or for us to acquire control of a third party, even if such a change in control would be beneficial to our stockholders.

We have a number of anti-takeover devices in place that will hinder takeover attempts or may reduce the market value of our common stock. Our anti-takeover provisions include:

- the authority of the board of directors to issue preferred stock without approval of the holders of our common stock;
- advance notice requirements for director nominations or actions to be taken at annual meetings; and
- a provision that the state courts or, in certain circumstances, the federal courts, in Delaware shall be the sole and exclusive forum for certain actions involving us, our directors, officers, employees and stockholders.

Our by-laws permit special meetings of the stockholders to be called only upon the request of our Chief Executive Officer or a majority of the board of directors, and deny stockholders the ability to call such meetings. Such provisions, as well as the provisions of Section 203 of the Delaware General Corporation Law, may impede a merger, consolidation, takeover, or other business combination or discourage a potential acquirer from making a tender offer or otherwise attempting to obtain control of us.

In addition, domestic or international competition laws may prevent or discourage us from acquiring communications infrastructure in certain geographical areas or impede a merger, consolidation, takeover, or other business combination or discourage a potential acquirer from making a tender offer or otherwise attempting to obtain control of us.

We may be vulnerable to security breaches or other unforeseen events that could adversely affect our operations, business, and reputation.

Despite existing security measures, certain of our communications infrastructure may be vulnerable to damage, disruptions, or shutdowns due to unauthorized access, computer viruses, cyber-attacks, and other security breaches. An attack attempt or security breach, such as a distributed denial of service attack, could potentially result in (1) interruption or cessation of certain of our services to our tenants, (2) our inability to meet expected levels of service to our tenants, or (3) data transmitted over our tenants' networks being compromised. We cannot guarantee that our security measures will not be circumvented, resulting in tenant network failures or interruptions that could impact our tenants' network availability and have a material adverse effect on our business, financial condition, or operational results. Additionally, security incidents impacting our tenants, vendors and business partners could result in a material adverse effect on our business. We may be required to expend significant resources to protect against or recover from such threats. We maintain an insurance policy that includes coverage over cyber-attacks and other security breaches; however, there can be no assurances that such coverage will be adequate to cover exposure for such incidents. If an actual or perceived breach of our security occurs, the market perception of the effectiveness of our security measures could be harmed, and we could lose tenants. Further, the perpetrators of cyber-attacks are not restricted to particular groups or persons. These attacks may be committed by our employees or external actors operating in any geography. In addition, our acquisitions, both past and future, may alter our potential exposure to the risks described above.Additionally, we could be negatively impacted by other unforeseen events, such as natural disasters, which could, among other things, damage our communication infrastructure assets or interrupt service to our tenants. Any such events could result in legal claims or penalties, disruption in operations, misappropriation of sensitive data, damage to our reputation, negative market perception, or costly response measures, which could adversely affect our business.

Risks Relating to Our REIT Status

Future dividend payments to our stockholders will reduce the availability of our cash on hand available to fund future discretionary investments, and may result in a need to incur indebtedness or issue equity securities to fund growth opportunities. In such event, the then current economic, credit market or equity market conditions will impact the availability or cost of such financing, which may hinder our ability to grow our per share results of operations.

During each of the first three quarters of 2018, we paid a common stock dividend of $1.05 per share, totaling approximately $1.3 billion. In October 2018, our board of directors declared a quarterly common stock dividend of $1.125 per share, which represents an increase of 7% from an annualized amount of $4.20 per share to an annualized amount of $4.50 per share from the quarterly common stock dividend declared during each of the first three quarters of 2018. We currently expect our anticipated common stock cash dividends over the next 12 months to be a cumulative amount of at least $4.50 per share, or an aggregate amount of approximately $1.9 billion. Over time, we expect to increase our dividend per share generally commensurate with our realized growth in cash flows. Any future dividends are subject to declaration by our board of directors. See notes 11 and 18 to our consolidated financial statements.

We operate as a REIT for U.S. federal income tax purposes. To remain qualified and be taxed as a REIT, we will generally be required to annually distribute at least 90% of our REIT taxable income (determined without regard to the dividends paid deduction, excluding net capital gain and after the utilization of any available NOLs), to our stockholders. Our quarterly cash common stock dividend will delay the utilization of our NOLs and may cause certain of the NOLs to expire without utilization. See also *"Item 7. MD&A—General Overview—Common Stock Dividend"* and *"Item 1. Business—Company Developments, REIT Status and Industry Update—REIT Status."*

As discussed in *"Item 1. MD&A—Business—Strategy,"* we seek to invest our available capital, including the net cash provided by our operating activities and external financing sources, in a manner that we believe will increase long-term stockholder value on a risk-adjusted basis. Our historical discretionary investments have included the following (in no particular order): construction of communications infrastructure; acquisitions of communications infrastructure; acquisitions of land interests (which primarily relate to land assets under towers); improvements and structural enhancements to our existing communications infrastructure; purchases of shares of our common stock from time to time; and purchases, repayments or redemptions of our debt. External financing, including debt, equity, and equity-related issuances to fund future discretionary investments either (1) may not be available to us or (2) may not be accessible by us at terms that would result in the investment of the net proceeds raised yielding incremental growth in our per share operating results. As a result, future dividend payments may hinder our ability to grow our per share results of operations or otherwise adversely affect our ability to execute our business plan.

Remaining qualified to be taxed as a REIT involves highly technical and complex provisions of the Code. Failure to remain qualified as a REIT would result in our inability to deduct dividends to stockholders when computing our taxable income, which would reduce our available cash.

We operate as a REIT for U.S. federal tax purposes. As a REIT, we are generally entitled to a deduction for dividends that we pay and therefore are not subject to U.S. federal corporate income tax on our net taxable income that is currently distributed to our common stockholders.

While we intend to operate so that we remain qualified as a REIT, given the highly complex nature of the rules governing REITs, the importance of ongoing factual determinations, the possibility of future changes in our circumstances, and the potential impact of future changes to laws and regulations impacting REITs, no assurance can be given that we will qualify as a REIT for any particular year.

We do not expect the Tax Reform Act to significantly affect us, although we cannot predict with certainty how such legislation will affect us in the future. In addition, the present U.S. federal tax treatment of REITs is subject to change, possibly with retroactive effect, by legislative, judicial or administrative action at any time, and any such change might adversely affect our REIT status or benefits. We cannot predict the impact, if any, that such changes, if enacted, might have on our business. However, it is possible that such changes could adversely affect our business, including our REIT status.

If, in any taxable year, we fail to qualify for taxation as a REIT and are not entitled to relief under certain provisions of the the Code, then:

- we will not be allowed a deduction for dividends paid to stockholders in computing our taxable income;
- we will be subject to federal and state income tax, including, for applicable years beginning before January 1, 2018, any applicable alternative minimum tax, on our taxable income at regular corporate rates; and
- we would be disqualified from re-electing REIT status for the four taxable years following the year during which we were so disqualified.

Although we may have federal NOLs available to reduce any taxable income, to the extent our federal NOLs have been utilized or are otherwise unavailable, any such corporate tax liability could be substantial, would reduce the amount of cash available for other purposes and might necessitate the borrowing of additional funds or the liquidation of some investments to pay any additional tax liability. Accordingly, funds available for investment would be reduced.

Under the Code, for taxable years beginning in or after 2018, no more than 20% of the value of the assets of a REIT may be represented by securities of one or more TRSs. These limitations may affect our ability to make additional investments in non-REIT qualifying operations or assets, or in any operations held through TRSs. The net income of our TRSs is not required to be distributed to us, and income that is not distributed to us generally will not be subject to the REIT income distribution requirement. However, there may be limitations on our ability to accumulate earnings in our TRSs and the accumulation or reinvestment of significant earnings in our TRSs could result in adverse tax treatment. In particular, if the accumulation of cash in our TRSs causes the fair market value of our securities in our TRSs to exceed current or future limitations of the fair market value of our assets at the end of any quarter, then we may fail to remain qualified as a REIT.

If we fail to pay scheduled dividends on our 6.875% Convertible Preferred Stock, in cash, common stock, or any combination of cash and common stock, we will be prohibited from paying dividends on our common stock, which may jeopardize our status as a REIT.

The terms of the 6.875% Convertible Preferred Stock provide that, unless accumulated dividends have been paid or set aside for payment on all outstanding 6.875% Convertible Preferred Stock for all past dividend periods, no dividends may be declared or paid on our common stock. If that were to occur, the inability to pay dividends on our common stock might jeopardize our status as a REIT for U.S. federal income tax purposes. See note 11 to our consolidated financial statements.

Complying with REIT requirements, including the 90% distribution requirement, may limit our flexibility or cause us to forgo otherwise attractive opportunities, including certain discretionary investments and potential financing alternatives.

To remain qualified and be taxed as a REIT, we are required to satisfy the 90% distribution requirement as described above. We commenced declaring regular quarterly dividends to our common stockholders beginning with the first quarter of 2014. See notes 11 and 18 to our consolidated financial statements. Any such dividends, however, are subject to the determination of and declaration by our board of directors based on then-current and anticipated future conditions, including our earnings, net cash provided by operating activities, capital requirements, financial condition, our relative market capitalization, our existing federal NOLs of approximately $1.5 billion or other factors deemed relevant by our board of directors.

To the extent that we satisfy the 90% distribution requirement, but distribute less than 100% of our REIT taxable income (determined without regard to the dividends paid deduction, excluding net capital gain and after the utilization of any available NOLs), we will be subject to federal corporate income tax on our undistributed taxable income. In addition, we will be subject to a 4% nondeductible excise tax if the actual amount that we pay out to our stockholders for a calendar year is less than a minimum amount specified under the Code.

From time to time, we may generate REIT 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. 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, or distribute amounts that would otherwise be invested in future acquisitions to make distributions sufficient to enable us to pay out enough of our taxable income to satisfy the REIT dividend requirement and to avoid corporate income tax and the 4% excise tax in a particular year. These alternatives could increase our costs or reduce our equity. Thus, compliance with the REIT requirements may hinder our ability to grow, which could adversely affect the value of our common stock. Furthermore, the REIT dividend requirements may increase the financing we need to fund capital expenditures, future growth, or expansion initiatives, which would increase our total leverage.

In addition to satisfying the 90% distribution requirement, to remain qualified as a REIT for tax purposes, we will need to continually satisfy tests concerning, among other things, the sources of our income, the nature and diversification of our assets and the ownership of our capital stock. Compliance with these tests will require us to refrain from certain activities and may hinder our ability to make certain attractive investments, including the purchase of non-qualifying assets, the expansion of non-real estate activities, or investments in the businesses to be conducted by our TRSs, and to that extent, limit our opportunities and our flexibility to change our business strategy. Furthermore, acquisition opportunities in domestic or international markets may be adversely affected if we need or require the target company to comply with some REIT requirements prior to completing any such acquisition. In addition, our conversion to a REIT may result in investor pressures not to pursue growth opportunities that are not immediately accretive.

Moreover, if we fail to comply with certain asset ownership tests, at the end of any calendar quarter, we must correct the failure within 30 days after the end of the calendar quarter or qualify for certain statutory relief provisions to avoid losing our REIT qualification. As a result, we may be required to liquidate assets in adverse market conditions or forgo otherwise attractive investments. These actions may reduce our income and amounts available for distribution to our stockholders.

REIT related ownership limitations and transfer restrictions may prevent or restrict certain transfers of our capital stock.

In order for us to continue to satisfy the requirements for REIT qualification, our capital stock must be beneficially owned by 100 or more persons during at least 335 days of a taxable year of 12 months or during a proportionate part of a shorter taxable year. Also, not more than 50% of the value of the outstanding shares of our capital stock may be owned, directly or indirectly, by five or fewer "individuals" (as defined in the Code to include certain entities such as private foundations) during the last half of a taxable year. In order to facilitate compliance with the REIT rules, our Charter includes provisions that implement REIT-related ownership limitations and transfer restrictions that generally prohibit any "person" (as defined in our Charter) from beneficially or constructively owning, or being deemed to beneficially or constructively own by virtue of the attribution provisions of the Code, more than 9.8%, by value or number of shares, whichever is more restrictive, of the outstanding shares of our common stock, or 9.8% in aggregate value of the outstanding shares of all classes and series of our capital stock, including our common stock and any shares of our 6.875% Convertible Preferred Stock. In addition, our Charter provides for certain other ownership limitations and transfer restrictions. Under applicable constructive ownership rules, any shares of capital stock owned by certain affiliated owners generally would be added together for purposes of the ownership limitations. These ownership limitations and transfer restrictions could have the effect of delaying, deferring or preventing a transaction or a change in control of our company that might involve a premium price for our capital stock or otherwise might be in the best interest of our stockholders.

Certifications

We submitted the Chief Executive Officer certification required by Section 303A.12(a) of the New York Stock Exchange ("NYSE") Listed Company Manual, relating to compliance with the NYSE's corporate governance listing standards, to the NYSE on June 13, 2018 with no qualifications. We have included the certifications of our Chief Executive Officer and Chief Financial Officer required by Section 302 of the Sarbanes-Oxley Act of 2002 and related rules as Exhibits 31.1 and 31.2 to this Annual Report on Form 10-K.

Item 1B. *Unresolved Staff Comments*

None.

Item 2. *Properties*

Communications Infrastructure

We own, lease or manage approximately 40,000 towers geographically dispersed throughout the U.S. Towers are vertical metal structures generally ranging in height from 50 to 300 feet. Our tenants' wireless equipment may be placed on towers, building rooftops and other structures. Our towers are located on tracts of land that support the towers, equipment shelters, and where applicable, guy-wires to stabilize the tower.

Additionally, we own or lease approximately 65,000 route miles of fiber primarily supporting our small cells and fiber solutions. The majority of our fiber assets are located in major metropolitan areas. Our small cells and fiber are typically located outdoors and are often attached to public right-of-way infrastructure, including utility poles or street lights.

See the following for further information regarding our communications infrastructure:

- *"Item 1. Business—Overview"* for information regarding our tower and fiber portfolios
- *"Item 7. MD&A—Liquidity and Capital Resources—Contractual Cash Obligations"* for a tabular presentation of the remaining contractual obligations related to our business as of December 31, 2018, including our lease and access agreement obligations.
- *"Schedule III - Schedule of Real Estate and Accumulated Depreciation"* for further information on our productive properties.

Approximately 53% of our towers are leased or subleased or operated and managed under master leases, subleases, or other agreements with AT&T, Sprint, and T-Mobile. We have the option to purchase these towers at the end of their respective lease terms. We have no obligation to exercise such purchase options. See note 1 to our consolidated financial statements and *"Item 1A. Risk Factors"* for a further discussion.

Substantially all of our communications infrastructure can accommodate additional tenancy, either as currently constructed or with appropriate modifications. Additionally, if so inclined as a result of a request for a tenant addition, we could generally replace an existing tower with another tower, replace a small cell network antenna with another antenna or overlay additional fiber in order to provide additional coverage or capacity, subject to certain restrictions.

Offices

Our principal corporate headquarters is owned and located in Houston, Texas. In addition, we have offices throughout the U.S. in locations convenient for the management and operation of our communications infrastructure, with significant consideration being given to the amount of our communications infrastructure located in a particular area. We believe that our facilities are suitable and adequate to meet our anticipated needs.

Item 3. *Legal Proceedings*

We are periodically involved in legal proceedings that arise in the ordinary course of business. Most of these proceedings arising in the ordinary course of business involve disputes with landlords, vendors, collection matters involving bankrupt tenants, zoning or siting matters, condemnation, tax, employment, or wrongful termination matters. While the outcome of these matters cannot be predicted with certainty, management does not expect any pending matters to have a material adverse effect on us.

Item 4. *Mine Safety Disclosures*

N/A

PART II

Item 5. *Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities*

Market Information and Holders

Our common stock is listed and traded on the New York Stock Exchange ("NYSE") under the symbol "CCI."

As of February 22, 2019, there were approximately 180 holders of record of our common stock.

Dividend Policy

We operate as a REIT for U.S. federal income tax purposes. To remain qualified and be taxed as a REIT, we will generally be required to annually distribute to our stockholders at least 90% of our REIT taxable income after the utilization of any available NOLs (determined without regard to the dividends paid deduction and excluding net capital gain). See also *"Item 1. Business—Company Developments, REIT Status and Industry Update—REIT Status," "Item 1A. Risk Factors," "Item 7. MD&A—General Overview—Common Stock Dividend," "Item 7. MD&A—Liquidity and Capital Resources—Financing Activities—Common Stock"* and notes 10 and 11 to our consolidated financial statements.

Over time, we expect to increase our dividend per share generally commensurate with our realized growth in cash flows. The declaration amount and payment of any future dividends, however, are subject to the determination and approval of our board of directors based on then-current or anticipated future conditions, including our earnings, net cash provided by operating activities, capital requirements, financial condition, our relative market capitalization, our existing NOLs, or other factors deemed relevant by our board of directors. In addition, our ability to pay dividends is limited by the terms of our debt instruments and our 6.875% Convertible Preferred Stock under certain circumstances.

Issuer Purchases of Equity Securities

The following table summarizes information with respect to purchase of our equity securities during the fourth quarter of 2018:

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number (or Approximate Dollar Value) of Shares that May Yet Be Purchased Under the Plans or Programs
	(In thousands)			
October 1 - October 31, 2018	—	$ —	—	—
November 1 - November 30, 2018	3	111.37	—	—
December 1 - December 31, 2018	—	—	—	—
Total	3	$ 111.37	—	—

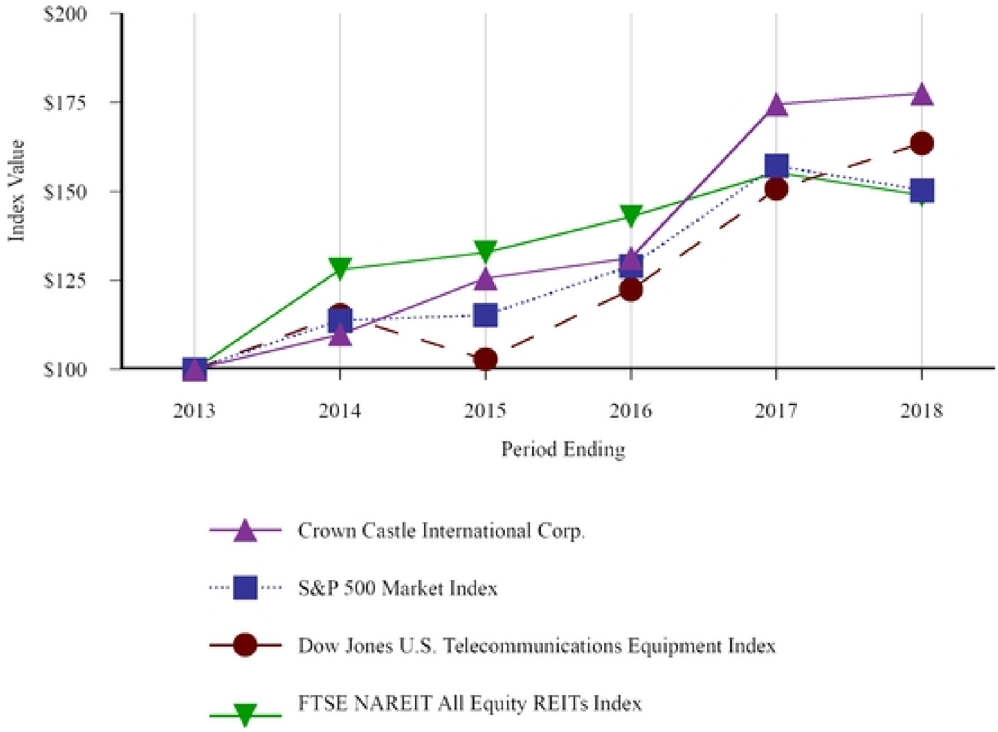
We paid $0.3 million in cash to effect these purchases. The shares purchased relate to shares withheld in connection with the payment of withholding taxes upon vesting of restricted stock.

Equity Compensation Plans

Certain information with respect to our equity compensation plans is set forth in *"Item 12. Security Ownership of Certain Beneficial Owners and Management"* herein.

Performance Graph

The following performance graph is a comparison of the five year cumulative total stockholder return on our common stock against the cumulative total return of the S&P 500 Market Index, the Dow Jones U.S. Telecommunications Equipment Index and the FTSE NAREIT All Equity REITs Index for the period commencing December 31, 2013 and ending December 31, 2018. The performance graph assumes an initial investment of $100.0 and the reinvestment of all dividends in our common stock and in each of the indices. The performance graph and related text are based on historical data and are not necessarily indicative of future performance.



	Years Ended December 31,					
Company/Index/Market	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
Crown Castle International Corp.	$ 100.00	$ 109.85	$ 125.60	$ 131.27	$ 174.49	$ 177.52
S&P 500 Market Index	100.00	113.69	115.26	129.05	157.22	150.33
DJ US Telecommunications Equipment Index	100.00	115.21	102.76	122.43	150.65	163.51
FTSE NAREIT All Equity REITs Index	100.00	128.03	132.79	142.86	155.25	148.98

The performance graph above and related text are being furnished solely to accompany this Annual Report on Form 10-K pursuant to Item 201(e) of Regulation S-K, and are not being filed for purposes of Section 18 of the Exchange Act, and are not to be incorporated by reference into any filing of ours, whether made before or after the date hereof, regardless of any general incorporation language in such filing.

Item 6. *Selected Financial Data*

Our selected historical consolidated financial and other data set forth below have been derived from our consolidated financial statements. The information set forth below should be read in conjunction with *"Item 1. Business," "Item 7. MD&A"* and our consolidated financial statements. Our formerly 77.6% owned subsidiary that operated towers in Australia ("CCAL") was sold in 2015 and is presented on a discontinued operations basis for all periods presented.

	Years Ended December 31,				
	2018 [a]	2017 [a]	2016 [a]	2015 [a]	2014 [a]
	(In millions of dollars, except per share amounts)				
Statement of Operations Data:					
Net revenues:					
Site rental	$ 4,716	$ 3,669	$ 3,233	$ 3,018	$ 2,867
Services and other	707	687	688	645	672
Net revenues	5,423	4,356	3,921	3,663	3,539
Operating expenses:					
Costs of operations[b]:					
Site rental	1,410	1,144	1,024	964	906
Services and other	437	420	417	358	400
Total costs of operations	1,847	1,564	1,441	1,322	1,306
Selling, general and administrative	563	426	371	310	257
Asset write-down charges	26	17	34	33	14
Acquisition and integration costs	27	61	17	16	34
Depreciation, amortization and accretion	1,528	1,242	1,109	1,036	986
Operating income (loss)	1,432	1,046	949	946	942
Interest expense and amortization of deferred financing costs	(642)	(591)	(515)	(527)	(573)
Gains (losses) on retirement of long-term obligations	(106)	(4)	(52)	(4)	(45)
Interest income	5	19	1	2	—
Other income (expense)	1	1	(9)	57	12
Income (loss) from continuing operations before income taxes	690	471	374	474	336
Benefit (provision) for income taxes[c]	(19)	(26)	(17)	51	11
Income (loss) from continuing operations	671	445	357	525	347
Discontinued operations:					
Income (loss) from discontinued operations, net of tax	—	—	—	20	52
Net gain (loss) from disposal of discontinued operations, net of tax	—	—	—	979	—
Income (loss) from discontinued operations, net of tax	—	—	—	999	52
Net income (loss)	671	445	357	1,524	399
Less: Net income (loss) attributable to the noncontrolling interest	—	—	—	3	8
Net income (loss) attributable to CCIC stockholders	671	445	357	1,521	391
Dividends on preferred stock and losses on purchases of preferred stock	(113)	(58)	(33)	(44)	(44)
Net income (loss) attributable to CCIC common stockholders	$ 558	$ 387	$ 324	$ 1,477	$ 347
Income (loss) from continuing operations attributable to CCIC common stockholders, per common share - basic[d]	$ 1.35	$ 1.01	$ 0.95	$ 1.45	$ 0.91
Income (loss) from continuing operations attributable to CCIC common stockholders, per common share - diluted[d]	$ 1.34	$ 1.01	$ 0.95	$ 1.44	$ 0.91
Weighted-average common shares outstanding (in millions):					
Basic[d][f]	413	382	340	333	332
Diluted[d][f]	415	383	341	334	333
Dividends/distributions declared per share of common stock	$ 4.28	$ 3.90	$ 3.61	$ 3.35	$ 1.87

	Years Ended December 31,				
	2018 [a][e]	2017 [a][e]	2016 [a][e]	2015 [a][e]	2014 [a][e]
	(In millions of dollars, except per share amounts)				
Other Data:					
Summary cash flow information:					
Net cash provided by (used for) operating activities	$ 2,502	$ 2,043	$ 1,787	$ 1,790	$ 1,594
Net cash provided by (used for) investing activities	(1,795)	(10,493)	(1,429)	(1,956)	(1,217)
Net cash provided by (used for) financing activities	(733)	8,192	(89)	(952)	(493)
Balance Sheet Data (at period end):					
Cash and cash equivalents	$ 277	$ 314	$ 568	$ 179	$ 151
Property and equipment, net	13,676	12,933	9,805	9,580	8,983
Total assets	32,785	32,229	22,675	21,937	21,027
Total debt and other long-term obligations	16,682	16,159	12,171	12,150	11,804
Total CCIC stockholders' equity[f]	12,034	12,339	7,557	7,089	6,716

(a) Inclusive of the impact of acquisitions. See note 3 to our consolidated financial statements for a discussion of our acquisitions during 2016 and 2017. In 2015, we acquired rights to approximately 10,000 miles of fiber route miles through the Sunesys Acquisition. In addition, during 2014, we acquired several portfolios of land interests under towers.

(b) Exclusive of depreciation, amortization and accretion, which are shown separately.

(c) See note 10 to our consolidated financial statements regarding our income taxes, including our REIT status.

(d) Basic net income (loss) attributable to CCIC common stockholders, per common share, excludes dilution and is computed by dividing net income (loss) attributable to CCIC common stockholders by the weighted-average number of common shares outstanding during the period. Diluted net income (loss) attributable to CCIC common stockholders, per common share is computed by dividing net income (loss) attributable to CCIC common stockholders by the weighted-average number of common shares outstanding during the period, plus any potential dilutive common share equivalents, including shares issuable (1) upon the vesting of restricted stock awards and restricted stock units as determined under the treasury stock method and (2) upon conversion of convertible preferred stock securities (including, as applicable, the currently outstanding 6.875% Convertible Preferred Stock, which was issued in 2017, and the formerly outstanding 4.50% Mandatory Convertible Preferred Stock, Series A, par value $0.01 per share ("4.50% Convertible Preferred Stock") which was issued in 2013 and converted to common stock in 2016), as determined under the if-converted method. See note 2 to our consolidated financial statements.

(e) Amounts reflect the impact of all applicable adopted accounting pronouncements during the periods presented. See note 2 to our consolidated financial statements.

(f) See note 11 to our consolidated financial statements for a discussion of our equity offerings during 2018 and 2017. During 2016, we issued shares of our common stock in connection with (1) our 2015 ATM Program (as defined below), the proceeds of which we utilized to partially fund our acquisition of Tower Development Corporation ("TDC Acquisition") in April 2016, (2) the conversion of our then outstanding 4.50% Convertible Preferred Stock to common stock and (3) our November 2016 issuance of 11.4 million shares of common stock, which generated net proceeds of $1.0 billion ("November 2016 Common Stock Offering") to partially fund the FiberNet Acquisition.

Item 7. *Management's Discussion and Analysis of Financial Condition and Results of Operations*

General Overview

Overview

We own, operate, and lease shared communications infrastructure. See *"Item 1. Business"* for a further discussion of our business, including our long-term strategy, our REIT status, certain key terms of our contracts and growth trends in the demand for data. Site rental revenues represented 87% of our 2018 consolidated net revenues. The vast majority of our site rental revenues is of a recurring nature and has been contracted for in a prior year.

Business Fundamentals and Results

The following are certain highlights of our business fundamentals and results:

- We operate as a REIT for U.S. federal income tax purposes (see *"Item 1. Business—Company Developments, REIT Status and Industry Updates—REIT Status"* and note 10 to our consolidated financial statements).
- Potential growth resulting from the increasing demand for data
  - We expect existing and potential new tenant demand for our communications infrastructure will result from (1) new technologies, (2) increased usage of mobile entertainment, mobile internet usage, and machine-to-machine applications, (3) adoption of other emerging and embedded wireless devices (including smartphones, laptops, tablets, and other devices), (4) increasing smartphone penetration, (5) wireless carrier focus on expanding both network quality and capacity, including the use of both towers and small cells, (6) the adoption of other bandwidth-intensive applications (such as cloud services and video communications) and (7) the availability of additional spectrum.
  - We expect U.S. wireless carriers will continue their focus on improving network quality and expanding capacity (including through 5G initiatives) by utilizing a combination of towers and small cells. We believe our product offerings of towers and small cells provide a comprehensive solution to our wireless tenants' growing communications infrastructure needs.
  - We expect organizations will continue to increase the usage of high-bandwidth applications that will require the utilization of more fiber infrastructure and solutions such as those we provide.
  - Within our Fiber segment, we are able to generate growth and returns for our stockholders by deploying our fiber for both small cells and fiber solutions tenants.
  - Tenant additions on our existing communications infrastructure are achieved at a low incremental operating cost, delivering high incremental returns.
    - Substantially all of our communications infrastructure can accommodate additional tenancy, either as currently constructed or with appropriate modifications.
  - Returning cash flows provided by operations to stockholders in the form of dividends (see also *"Item 1. Business—Strategy"*)
    - During 2018, we paid common stock dividends totaling approximately $1.8 billion. See *"Item 7. MD&A—General Overview—Common Stock Dividend"* for a discussion of the increase to our quarterly dividend in the fourth quarter of 2018.
  - Investing capital efficiently to grow long-term dividends per share (see also *"Item 1. Business"*)
    - Discretionary capital expenditures of $1.6 billion, predominately resulting from the construction of communications infrastructure and communications infrastructure improvements in order to support additional site rental revenues.
    - We expect to continue to construct and acquire new communications infrastructure based on our tenants' needs and generate attractive long-term returns by adding additional tenants over time.
- Site rental revenues under long-term tenant contracts
  - Initial terms of five to 15 years for site rental revenues derived from wireless tenants, with contractual escalations and multiple renewal periods at the option of the tenant of five to 10 years each.
  - Initial terms that generally vary between three to 20 years for site rental revenues derived from our fiber solutions tenants (including from organizations with high-bandwidth and multi-location demands).
  - Weighted-average remaining term of approximately five years, exclusive of renewals at the tenants' option, currently representing approximately $23 billion of expected future cash inflows.
- Majority of our revenues from large wireless carriers
  - Approximately 73% of our site rental revenues were derived from AT&T, T-Mobile, Verizon Wireless and Sprint. See also *"Item 1A. Risk Factors"* and note 15 to our consolidated financial statements.
- Majority of land interests under our towers are under long-term control.

    - Approximately 90% of our Towers site rental gross margin and more than 75% of our Towers site rental gross margin is derived from towers that reside on land that we own or control for greater than 10 and 20 years, respectively. The aforementioned percentages include towers that reside on land interests that are owned, including fee interests and perpetual easements, which represent approximately 40% of our Towers site rental gross margin.
- Majority of our fiber assets are located in major metropolitan areas and are on public rights-of-way.
- Minimal sustaining capital expenditure requirements
    - Sustaining capital expenditures represented approximately 2% of net revenues.
- Debt portfolio with long-dated maturities extended over multiple years, with the majority of such debt having a fixed rate (see *"Item 7A. Quantitative and Qualitative Disclosures About Market Risk"* for a further discussion of our debt)
- During 2018, we completed several debt transactions to refinance and extend the maturities of certain of our debt. See *"Item 7. MD&A—Liquidity and Capital Resources—Financing Activities"* for further discussion of our debt transactions.
    - As of December 31, 2018, after giving effect to our February 2019 Senior Notes offering and the application of the net proceeds therefrom, our outstanding debt has a weighted average interest rate of 4.0% and weighted average maturity of approximately seven years (assuming anticipated repayment dates where applicable).
    - After giving effect to our February 2019 issuance of $600 million aggregate principal amount of 4.300% senior unsecured notes due February 2029 and $400 million aggregate principal amount of 5.200% senior unsecured notes due 2049 (collectively, "February 2019 Senior Notes") and the application of the net proceeds therefrom, 85% of our debt has fixed rate coupons.
    - Our debt service coverage and leverage ratios are comfortably within their respective financial maintenance covenants. See *"Item 7. MD&A—Liquidity and Capital Resources—Debt Covenants"* for a further discussion of our debt covenants.
- In March 2018, we issued 8 million shares of our common stock ("March 2018 Equity Financing"), and we utilized the proceeds for general corporate purposes as well as repayment of outstanding indebtedness.
- Significant cash flows from operations
    - Net cash provided by operating activities was $2.5 billion.
    - In addition to the positive impact of contractual escalators, we expect to grow our core business of providing access to our communications infrastructure as a result of future anticipated additional demand for our communications infrastructure.

Common Stock Dividend

In aggregate, we paid approximately $1.8 billion in common stock dividends in 2018. During each of the first three quarters of 2018, we paid a quarterly common stock dividend of $1.05 per share, totaling approximately $1.3 billion. In October 2018, our board of directors declared a quarterly common stock cash dividend of $1.125 per share, which represents an increase of 7% from an annualized amount of $4.20 per share to an annualized amount of $4.50 per share from the quarterly common stock dividend declared during each of the first three quarters of 2018. We currently expect our anticipated common stock dividends over the next 12 months to be a cumulative amount of at least $4.50 per share, or an aggregate amount of approximately $1.9 billion. Over time, we expect to increase our dividend per share generally commensurate with our realized growth in cash flows. Any future common stock dividends are subject to declaration by our board of directors. See notes 11 and 18 to our consolidated financial statements.

Outlook Highlights

The following are certain highlights of our 2019 outlook that impact our business fundamentals described above.

- We expect that, when compared to full year 2018, our full year 2019 site rental revenue growth will be positively impacted by higher tenant additions, as large wireless carriers and fiber solutions tenants attempt to meet the increasing demand for data. See note 4 to our consolidated financial statements.
- We expect discretionary capital expenditures for 2019 to exceed 2018 levels with a continued increase in the construction of new small cells and fiber as a result of the anticipated returns on such discretionary investments. We also expect sustaining capital expenditures of approximately 2% of net revenues for full year 2019.

Results of Operations

The following discussion of our results of operations should be read in conjunction with *"Item 1. Business," "Item 7. MD&A—Liquidity and Capital Resources"* and our consolidated financial statements.

The following discussion of our results of operations is based on our consolidated financial statements prepared in accordance with generally accepted accounting principles in the U.S. ("GAAP") which require us to make estimates and judgments that affect the reported amounts (see *"Item 7. MD&A—Accounting and Reporting Matters—Critical Accounting Policies and Estimates"* and note 2 to our consolidated financial statements).

Our operating segments consist of (1) Towers and (2) Fiber. See note 15 to our consolidated financial statements for further discussion of our operating segments.

See *"Item 7. MD&A—Accounting and Reporting Matters—Non-GAAP and Segment Financial Measures"* for a discussion of our use of (1) segment site rental gross margin, (2) segment services and other gross margin, (3) segment operating profit, including their respective definitions and (4) Adjusted EBITDA, including its definition, and a reconciliation to net income.

Highlights of our results of operations for 2018, 2017 and 2016 are depicted below:

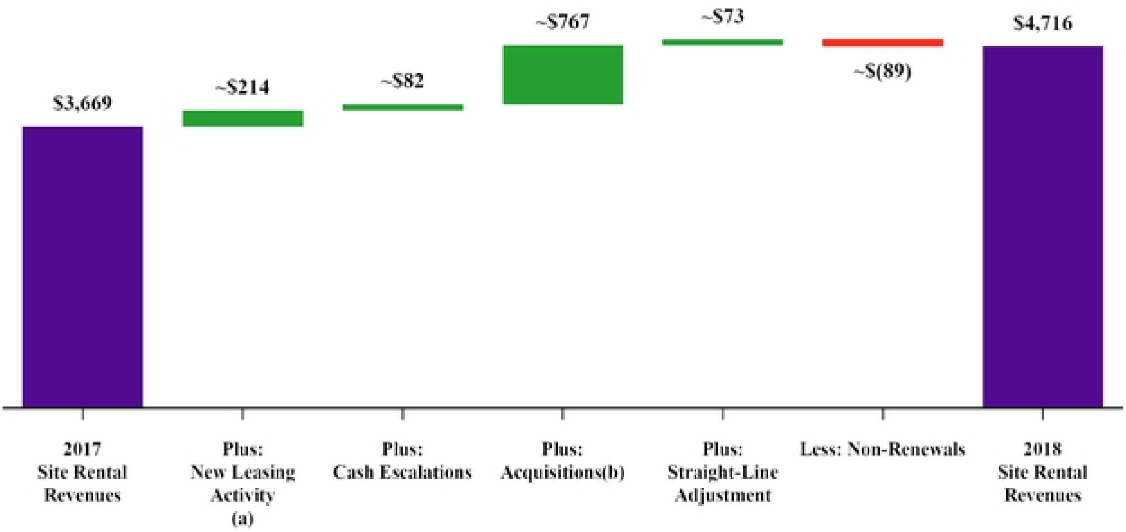
	Years Ended December 31,			Percent Change	
	2018	2017	2016	2018 vs. 2017	2017 vs. 2016
	(In millions of dollars)				
Site rental revenues:					
Towers site rental revenues	$ 3,116	$ 2,900	$ 2,831	7 %	2 %
Fiber site rental revenues	1,600	769	402	108 %	91 %
Total site rental revenues	4,716	3,669	3,233	29 %	13 %
Site rental gross margin:					
Towers site rental gross margin[(a)]	2,268	2,055	1,991	10 %	3 %
Fiber site rental gross margin[(a)]	1,075	505	255	113 %	98 %
Services and other gross margin:					
Towers services and other gross margin[(a)]	273	263	259	4 %	2 %
Fiber services and other gross margin[(a)]	5	9	19	(44)%	(53)%
Segment operating profit:					
Towers operating profit[(a)]	2,431	2,224	2,157	9 %	3 %
Fiber operating profit[(a)]	901	425	214	112 %	99 %
Adjusted EBITDA[(b)]	3,141	2,482	2,228	27 %	11 %
Net income attributable to CCIC common stockholders	558	387	324	44 %	19 %

(a) See note 15 to our consolidated financial statements for our definitions of segment site rental gross margin, segment services and other gross margin and segment operating profit.
(b) See reconciliation of Adjusted EBITDA in "*Item 7. MD&A—Accounting and Reporting Matters—Non-GAAP and Segment Financial Measures*."

2018 and 2017

Total site rental revenues for 2018 grew $1.0 billion, or 29%, from 2017. This increase was predominately comprised of the factors depicted in the chart below:

($ in millions)



(a) Includes amortization of upfront payments received from long-term tenant contracts and other deferred credits (commonly referred to as prepaid rent).
(b) Represents initial contribution of acquisitions until the one-year anniversary of the acquisition, with the exception of.the entire contribution to growth in site rental revenues in 2018 attributable to the Lightower Acquisition, which is included within acquisitions.

Towers site rental revenues for 2018 were approximately $3.1 billion and increased by $216 million, or 7%, from approximately $2.9 billion during 2017. The increase in Towers site rental revenues was impacted by the following items, inclusive of straight-line accounting: tenant additions across our entire portfolio, renewals or extensions of tenant contracts, escalations and non-renewals of tenants contracts. Tenant additions were influenced by our tenants' ongoing efforts to improve network quality and capacity.

Fiber site rental revenues for 2018 were $1.6 billion and increased by $831 million, or 108%, from $769 million from 2017. The increase in Fiber site rental revenues was predominately impacted by the 2017 Acquisitions and the increased demand for small cells and fiber solutions. Increased demand for small cells was driven by our tenants' network strategy in an effort to provide capacity and relieve network congestion, and increased demand for fiber solutions was driven by increasing demand for data.

The increase in Towers site rental gross margin from 2017 to 2018 was related to the previously-mentioned 7% increase in Towers site rental revenues and relatively fixed costs to operate our towers. The increase in Fiber site rental gross margins was predominately related to the previously-mentioned 108% increase in Fiber site rental revenues.

Towers services and other gross margin was $273 million for 2018 and increased by $10 million, or 4%, from $263 million in 2017, which is a reflection of (1) the volume of activity from carrier network enhancements and (2) the volume and mix of services and other work. Our services and other offerings are of a variable nature as these revenues are not under long-term contracts.

Selling, general and administrative expenses for 2018 were $563 million and increased by $137 million, or 32%, from $426 million during 2017. The increase in selling, general and administrative expenses was primarily related to the growth in our Fiber business, including the Lightower Acquisition and Wilcon Acquisition.

Towers operating profit for 2018 increased by $207 million, or 9%, from 2017. Towers operating profit was primarily reflecting the growth in our Towers site rental revenues and relatively fixed costs to operate our towers.

Fiber operating profit for 2018 increased by $476 million, or 112%, from 2017. Fiber operating profit was positively impacted by the previously-mentioned Lightower Acquisition and Wilcon Acquisition and the increased demand for small cells and fiber solutions as described above.

Depreciation, amortization and accretion was approximately $1.5 billion for 2018 and increased by $286 million, or 23%, from approximately $1.2 billion during 2017. This increase predominately resulted from a corresponding increase in our gross property and equipment due to capital expenditures and acquisitions, including the Lightower Acquisition and Wilcon Acquisition as discussed above.

Interest expense and amortization of deferred financing costs were $642 million for 2018 and increased by $51 million, or 9%, from $591 million during 2017. The increase predominately resulted from the full year impact of 2017 financing activities used to partially fund our 2017 Acquisitions and the financing of our discretionary capital expenditures. See notes 3 and 8 to our consolidated financial statements.

As a result of repaying certain of our debt, in conjunction with our refinancing activities, we incurred losses of $106 million and $4 million during 2018 and 2017, respectively. For a further discussion of the debt refinancings, see note 8 to our consolidated financial statements, *"Item 7. MD&A—Liquidity and Capital Resources"* and *"Item 7A. Quantitative and Qualitative Disclosures About Market Risk."*

The provision for income taxes for 2018 and 2017 were $19 million and $26 million, respectively. For both 2018 and 2017, the effective tax rate differs from the federal statutory rate predominately due to our REIT status, including the dividends paid deduction. In addition, in 2017 the effective rate also differs from the federal statutory rate due to a non-cash tax provision of $15 million as a result of the enactment of the Tax Reform Act. See *"Item 1. Business——Company Developments, REIT Status and Industry Update—REIT Status," "Item 7. MD&A—Accounting and Reporting Matters—Critical Accounting Policies and Estimates"* and note 10 to our consolidated financial statements.

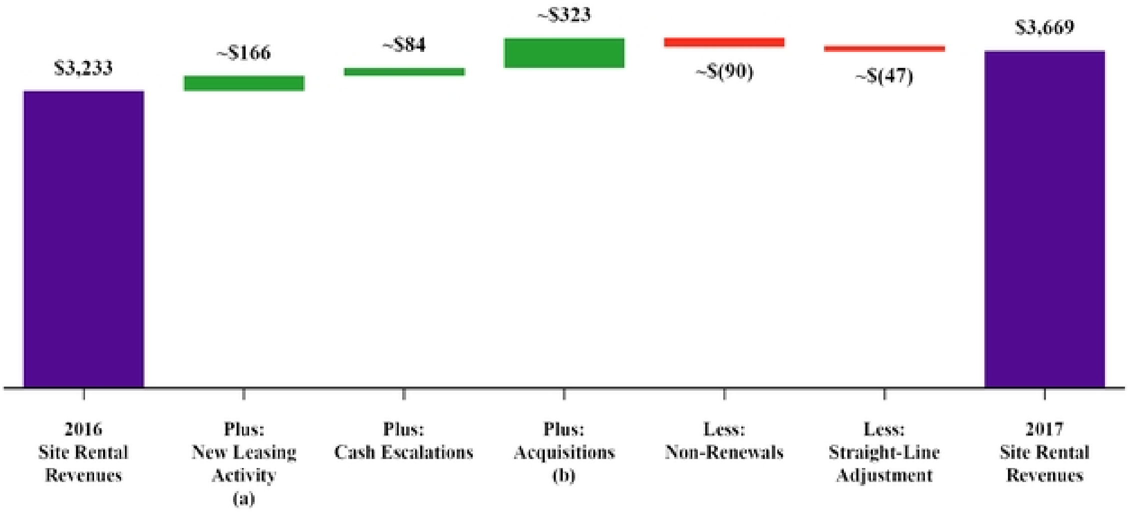
Net income (loss) attributable to CCIC stockholders was income of $671 million during 2018 compared to income of $445 million during 2017. The increase was predominately related to net growth in both our Towers and Fiber segments, partially offset by an increase in expenses, including (1) depreciation, amortization and accretion, (2) selling, general and administrative expenses, (3) losses on the retirement of long-term obligations, and (4) interest expense and amortization of deferred financing costs.

Adjusted EBITDA increased $659 million, or 27%, from 2017 to 2018, reflecting the growth in our site rental activities in both Towers and Fiber, including the Lightower Acquisition and the Wilcon Acquisition as discussed above.

2017 and 2016

Total site rental revenues for 2017 grew $436 million, or 13%, from 2016. This increase was predominately comprised of the factors depicted in the chart below:

($ in millions)



(a) Includes amortization of upfront payments received from long-term tenant contracts and other deferred credits (commonly referred to as prepaid rent).
(b) Represents the contribution from recent acquisitions until the one-year anniversary of the acquisition.

Towers site rental revenues for 2017 were approximately $2.9 billion and increased by $69 million, or 2%, from approximately $2.8 billion during 2016. The increase in Towers site rental revenues was impacted by the following items, inclusive of straight-line accounting: tenant additions across our entire portfolio, renewals or extensions of tenant contracts, escalations and non-renewals of tenant contracts. Tenant additions were influenced by our tenants' ongoing efforts to improve network quality and capacity.

Fiber site rental revenues for 2017 were $769 million and increased by $367 million, or 91%, from $402 million in 2016. The increase in Fiber site rental revenues was predominately impacted by the 2017 Acquisitions and the increased demand for small cells and fiber solutions. Increased demand for small cells was driven by our tenants' network strategy in an effort to provide capacity and relieve network congestion, and increased demand for fiber solutions was driven by increasing demand for data.

The increase in Towers site rental gross margin from 2016 to 2017 was related to the previously-mentioned 2% increase in Towers site rental revenues and relatively fixed costs to operate our towers. The increase in Fiber site rental gross margins was predominately related to the previously-mentioned 91% increase in Fiber site rental revenues.

Towers services and other gross margin was $263 million for 2017 and increased by $4 million, or 2%, from $259 million in 2016, which is a reflection of (1) the volume of activity from carrier network enhancements and (2) the volume and mix of services and other work. Our services and other offerings are of a variable nature as these revenues are not under long-term contracts.

Selling, general and administrative expenses for 2017 were $426 million and increased by $55 million, or 15%, from $371 million during 2016. The increase in selling, general and administrative expenses was primarily related to the growth in our Fiber business, including the 2017 Acquisitions.

Towers operating profit for 2017 increased by $67 million, or 3%, from 2016. Towers operating profit was primarily reflecting the growth in our Towers site rental revenues and relatively fixed costs to operate our towers.

Fiber operating profit for 2017 increased by $211 million, or 99%, from 2016 and was positively impacted by the previously-mentioned 2017 Acquisitions and the increased demand for small cells and fiber solutions as described above.

Depreciation, amortization and accretion was approximately $1.2 billion for 2017 and increased by $133 million, or 12%, from approximately $1.1 billion during 2016. This increase predominately resulted from a corresponding increase in our gross property and equipment due to capital expenditures and acquisitions, including the 2017 Acquisitions discussed above.

Interest expense and amortization of deferred financing costs were $591 million for 2016 and increased by $76 million, or 15%, from $515 million during 2016. This increase predominately resulted from a corresponding increase in our outstanding indebtedness due to the financing of our 2017 Acquisitions and our discretionary capital expenditures. See 9 to our consolidated financial statements.

As a result of repaying and redeeming certain of our debt, in conjunction with our refinancing activities, we incurred losses of $4 million and $52 million for 2017 and 2016, respectively. For a further discussion of the debt refinancings, see note 8 to our consolidated financial statements, *"Item 7. MD&A—Liquidity and Capital Resources"* and *"Item 7A. Quantitative and Qualitative Disclosures About Market Risk."*

The provisions for income taxes for 2017 and 2016 were $26 million and $17 million, respectively. For both 2017 and 2016, the effective tax rate differs from the federal statutory rate predominately due to our REIT status, including the dividends paid deduction. In addition to our REIT status, in 2017 the effective rate differs from the federal statutory rate due to a non-cash tax provision of $15 million as a result of the enactment of the Tax Reform Act. See *"Item 1. Business——Company Developments, REIT Status and Industry Update—REIT Status," "Item 7. MD&A—Accounting and Reporting Matters—Critical Accounting Policies and Estimates"* and note 10 to our consolidated financial statements.

Net income (loss) attributable to CCIC stockholders for 2017 was income of $445 million during 2017 compared to income of $357 million during 2016. The increase was predominately related to net growth in both our Towers and Fiber segments as well as a decrease in the losses on retirement of long-term obligations, partially offset by an increase in expenses, including (1) interest expense and amortization of deferred financing costs, (2) depreciation, amortization and accretion and (3) general and administrative expenses.

Adjusted EBITDA increased by $254 million, or 11%, from 2016 to 2017 reflecting the growth in our site rental activities in both Towers and Fiber, including the 2017 Acquisitions as discussed above.

Liquidity and Capital Resources

Overview

General. Our core business generates revenues under long-term contracts (see *"Item 1. Business—Overview" and "Item 7. MD&A—General Overview—Overview"*) from the largest U.S. wireless carriers and fiber solutions tenants. As a leading provider of shared communications infrastructure in the U.S., our strategy is to create long-term stockholder value via a combination of (1) growing cash flows generated from our portfolio of communications infrastructure, (2) returning a meaningful portion of our cash provided by operating activities to our stockholders in the form of dividends and (3) investing capital efficiently to grow cash flows and long-term dividends per share. Our U.S. focused strategy is based, in part, on our belief that the U.S. is the most attractive market for shared communications infrastructure investment with the greatest long-term growth potential. We measure our efforts to create "long-term stockholder value" by the combined payment of dividends to stockholders and growth in our per share results. See *"Item 1. Business—Strategy"* for a further discussion of our strategy.

We have engaged and expect to continue to engage in discretionary investments that we believe will maximize long-term stockholder value. Our historical discretionary investments include (in no particular order): constructing communications infrastructure, acquiring communications infrastructure, acquiring land interests (which primarily relate to land assets under towers), improving and structurally enhancing our existing communications infrastructure, purchasing shares of our common stock, and purchasing, repaying or redeeming our debt. We have recently spent and expect to continue to spend a significant percentage of our discretionary investments on the construction of new small cells and fiber. We seek to fund our discretionary investments with both net cash provided by operating activities and cash available from financing capacity, such as the use of our undrawn availability from the 2016 Revolver, debt financings and issuances of equity or equity related securities, including under our 2018 ATM Program.

We seek to maintain a capital structure that we believe drives long-term stockholder value and optimizes our weighted-average cost of capital. We target a leverage ratio of approximately four to five times Adjusted EBITDA and interest coverage of Adjusted EBITDA to interest expense of approximately three times, subject to various factors such as the availability and cost of capital and the potential long-term return on our discretionary investments. We may choose to increase or decrease our leverage or coverage from these targets for various periods of time. We have no significant contractual debt maturities until 2021 (other than principal payments on certain outstanding debt).

We operate as a REIT for U.S. federal income tax purposes. We expect to continue to pay minimal cash income taxes as a result of our REIT status and our NOLs. See *"Item 1. Business—Company Developments, REIT Status and Industry Update—REIT Status," "Item 7. MD&A—General Overview"* and note 10 to our consolidated financial statements.

Liquidity Position. The following is a summary of our capitalization and liquidity position as of December 31, 2018, after giving effect to our February 2019 Senior Notes offering and the application of the net proceeds therefrom. See *"Item 7A. Quantitative and Qualitative Disclosures About Market Risk"*,notes 8 and 18 to our consolidated financial statements for additional information regarding our debt.

	(In millions of dollars)
Cash and cash equivalents	$ 277
Restricted cash[(a)]	136
Undrawn 2016 Revolver availability[(b)]	4,141
Debt and other long-term obligations (current and non-current)	16,682
Total equity	12,034

(a) Inclusive of $5 million included within long-term prepaid rent and other assets, net on our consolidated balance sheet.
(b) Availability at any point in time is subject to certain restrictions based on the maintenance of financial covenants contained in the 2016 Credit Facility. See *"Item 7. MD&A—Liquidity and Capital Resources—Financing Activities"* and *"Item 7. MD&A—Liquidity and Capital Resources—Debt Covenants."*

Over the next 12 months:

- Our liquidity sources may include (1) cash on hand, (2) net cash provided by operating activities, (3) undrawn availability under our 2016 Revolver and (4) issuances of equity pursuant to our 2018 ATM Program. Our liquidity uses over the next 12 months are expected to include (1) debt service obligations of approximately $107 million (principal payments), (2) common stock dividend payments expected to be at least $4.50 per share, or an aggregate of approximately $1.9 billion (see *"Item 7. MD&A—General Overview—Common Stock Dividend"*), (3) 6.875% Convertible Preferred Stock dividend payments of approximately $113 million and (4) capital expenditures (expected to be greater than current levels). During the next 12 months, while our liquidity uses are expected to exceed our net cash provided by our operating activities, we expect that our liquidity sources described above should be sufficient to cover our expected uses. Historically, from time to time, we have accessed the capital markets to issue debt and equity.
- We have no scheduled contractual debt maturities other than principal payments on amortizing debt. See *"Item 7A. Quantitative and Qualitative Disclosures About Market Risk"* for a tabular presentation of our debt maturities and a discussion of anticipated repayment dates.

Summary Cash Flows Information

	Years Ended December 31, (in millions of dollars)		
	2018	2017	2016
Net increase (decrease) in cash, cash equivalents and restricted cash - continuing operations			
Operating activities	$ 2,502	$ 2,043	$ 1,787
Investing activities	(1,795)	(10,493)	(1,429)
Financing activities	(733)	8,192	(89)
Net increase (decrease) in cash, cash equivalents and restricted cash - continuing operations	(26)	(258)	269

Operating Activities. The increase in net cash provided by operating activities for 2018 from 2017 was due primarily to growth in our core business, including the Lightower Acquisition and Wilcon Acquisition, offset by a net decrease from changes in working capital. The increase in net cash provided by operating activities for 2017 from 2016 was due primarily to growth in our core business, including the 2017 Acquisitions and a net benefit from changes in working capital. Changes in working capital contribute to variability in net cash provided by operating activities, largely due to the timing of advanced payments by us and advanced receipts from tenants. We expect to grow our net cash provided by operating activities in the future (exclusive of movements in working capital) if we realize expected growth in our core business.

Investing Activities. Net cash used for investing activities for 2018 decreased $8.7 billion from 2017 as a result of the 2017 Acquisitions. See note 3 to our consolidated financial statements.

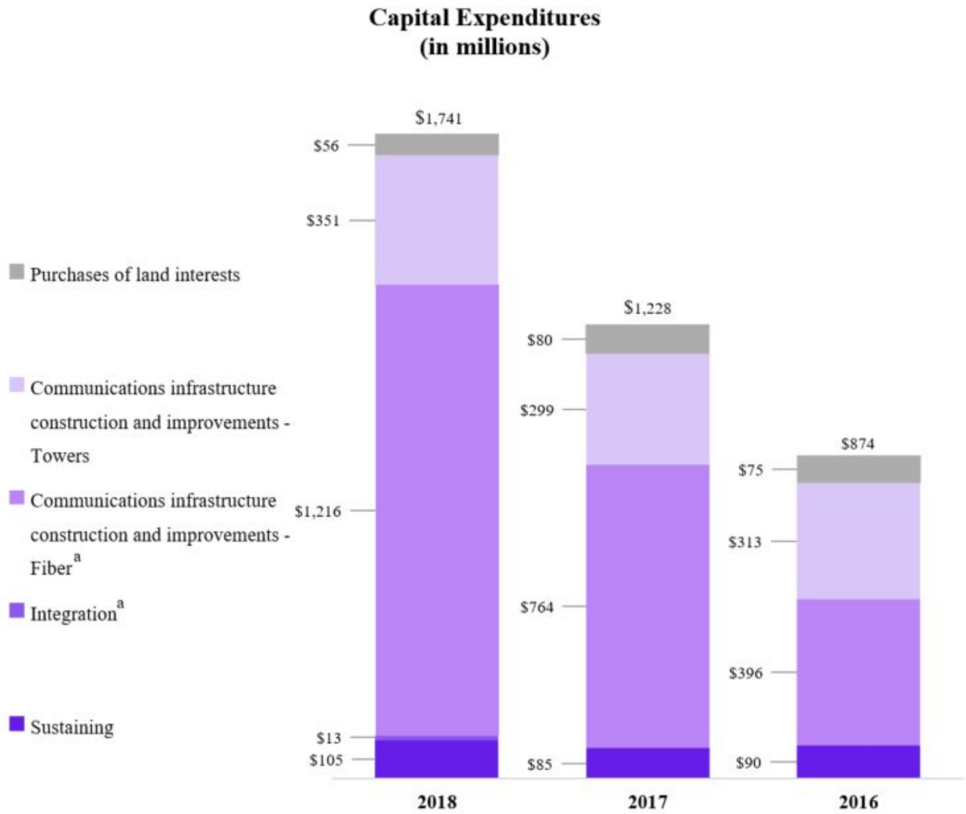
Our capital expenditures have been categorized as discretionary, sustaining or integration, as described below.

- Discretionary capital expenditures are those capital expenditures made with respect to activities which we believe exhibit sufficient potential to enhance long-term stockholder value. They consist of expansion or development of existing communications infrastructure, construction of new communications infrastructure, and, to a lesser extent, purchases of land interests (which primarily relates to land assets under towers as we seek to manage our interests in the land beneath our towers) and other capital projects. The expansion or development of existing communications infrastructure to accommodate tenant additions typically vary based on, among other factors: (1) the type of communications infrastructure, (2) the scope, volume, and mix of work performed on the communications infrastructure, (3) existing capacity prior to installation or (4) changes in structural engineering regulations and standards. Currently, construction of new communications infrastructure is predominately comprised of the construction of small cells and fiber. Our decisions regarding discretionary capital expenditures are influenced by the availability and cost of capital and expected returns on alternative uses of cash, such as payments of dividends and investments.

- Integration capital expenditures consist of those capital expenditures made as a result of integrating acquired companies into our business.

- Sustaining capital expenditures consist of those capital expenditures not otherwise categorized as discretionary or integration capital expenditures, such as (1) maintenance capital expenditures on our communications infrastructure assets that enable our tenants' ongoing quiet enjoyment of the communications infrastructure and (2) corporate capital expenditures.

A summary of our capital expenditures for the last three years is as follows (in millions of dollars):



(a) Prior to January 1, 2018, integration capital expenditures were included within sustaining capital expenditures.

Capital expenditures increased from 2017 to 2018 and were primarily impacted by the construction of small cells and fiber (including certain construction projects that may take 18 to 24 months to complete) to address our tenants' growing demand for data partially offset by lower amounts of improvements to existing towers. Our sustaining capital expenditures have historically been approximately 2% of net revenues annually and were approximately 2% of net revenues in 2018. See *"Item 7. MD&A—General Overview—Outlook Highlights"* for a discussion of our expectations surrounding 2019 capital expenditures.

Acquisitions. See notes 3 and 6 to our consolidated financial statements for a discussion of our acquisitions during the years ended December 31, 2017 and 2016.

Financing Activities. We seek to allocate cash generated by our operations in a manner that will enhance long-term stockholder value, which may include various financing activities, such as (in no particular order) paying dividends on our common stock (currently expected to total at least $4.50 per share over the next 12 months, or an aggregate of approximately $1.9 billion, paying dividends on our 6.875% Convertible Preferred Stock (expected to total approximately $113 million over the next 12 months), purchasing our common stock, or purchasing, repaying, or redeeming our debt. See *"Item 7. MD&A—Liquidity and Capital Resources—Overview," "Item 7. MD&A—General Overview—Common Stock Dividend"* and notes 8, 11 and 18 to our consolidated financial statements.

In 2018, our financing activities predominately related to the following:

- paying an aggregate of $1.8 billion in dividends on our common stock,
- paying an aggregate of $113 million in dividends on our 6.875% Convertible Preferred Stock;
- issuing $1.75 billion aggregate principal amount of senior unsecured notes in January 2018, the proceeds of which we used to repay (1) in full the Senior Secured Tower Revenue Notes, Series 2010-3, Class C-2020 and pay related fees and expenses and (2) a portion of the outstanding borrowings under the 2016 Revolver;
- completing the March 2018 Equity Financing, the proceeds of which we used for general corporate purposes, including repayment of outstanding indebtedness;
- terminating the previously outstanding 2015 ATM Program in March 2018, and in April 2018, establishing the 2018 ATM Program through which we may issue and sell shares of our common stock having an aggregate gross sales price of up to $750 million;
- entering into an amendment to the 2016 Credit Facility in June 2018 to (1) increase our commitments under the 2016 Revolver by $750 million for total commitments of $4.25 billion and (2) extend the maturity of the 2016 Credit Facility from August 2022 to June 2023; and
- issuing $1.0 billion aggregate principal amount of senior secured tower revenue notes in July 2018, the proceeds of which we used, together with cash on hand, to repay, in full, the Senior Secured Tower Revenue Notes, Series 2010-6, Class C-2020 and pay related fees and expenses.

In 2017, our financing activities predominately related to the following:

- paying an aggregate of $1.5 billion in dividends on our common stock;
- issuing $500 million aggregate principal amount of senior unsecured notes in February 2017, the proceeds of which we used to repay a portion of the borrowings under the 2016 Revolver;
- entering into a first amendment to the 2016 Credit Facility in February 2017 to (1) incur additional term loans in an aggregate principal amount of $500 million and (2) extend the maturity of both the 2016 Credit Facility to January 2022;
- completing an offering of 5 million shares of our common stock, which generated net proceeds of $442 million ("May 2017 Common Stock Offering"), the proceeds of which we used to partially fund the Wilcon Acquisition;
- issuing the $350 million aggregate principal amount of senior unsecured notes in May 2017, the proceeds of which we used to (1) partially fund the Wilcon Acquisition and (2) repay a portion of the borrowings under the 2016 Revolver;
- completing an offering of 40 million shares of common stock, which generated net proceeds of $3.8 billion ("July 2017 Common Stock Offering"), the proceeds of which we used to partially fund the Lightower Acquisition;
- completing and offering of 2 million shares of our 6.875% Mandatory Convertible Preferred Stock, which generated net proceeds of $1.6 billion, the proceeds of which we used to partially fund the Lightower Acquisition;

- issuing $1.7 billion aggregate principal amount of senior unsecured notes in August 2017, the proceeds of which we used to partially fund the Lightower Acquisition and pay related fees and expenses; and

- entering into an amendment to the 2016 Credit Facility in August 2017 to (1) increase the commitments under the 2016 Revolver by $1.0 billion, for total commitments of $3.5 billion and (2) extend the maturity of both the 2016 Term Loan A and the 2016 Revolver to August 2022.

Incurrences, Purchases and Repayments of Debt. See notes 8 and 18 to our consolidated financial statements, *"Item 7. MD&A—General Overview" and "Item 7. MD&A—Liquidity and Capital Resources—Overview—Liquidity Position"* for further discussion of our recent issuances, purchases and repayments of debt.

*Common Stock. S*ee notes 11 and 18 to our consolidated financial statements for further information regarding our common stock as well as dividends declared and paid.

ATM Program. See note 11 to our consolidated financial statements for further information regarding our 2018 ATM Program. As of February 22, 2019, we had approximately $750 million of gross sales of common stock availability remaining on our 2018 ATM Program.

Mandatory Convertible Preferred Stock. See note 11 to our consolidated financial statements for further information regarding our 6.875% Convertible Preferred Stock as well as dividends declared and paid during 2018.

Credit Facility. See note 8 to our consolidated financial statements for further information regarding our 2016 Credit Facility. As of February 22, 2019, there was approximately $4.1 billion in availability under the 2016 Revolver.

Restricted Cash. Pursuant to the indentures governing certain of our operating companies' debt securities, all rental cash receipts of the issuers of these debt instruments and their subsidiaries are restricted and held by an indenture trustee. The restricted cash in excess of required reserve balances is subsequently released to us in accordance with the terms of the indentures. See also note 2 to our consolidated financial statements.

Contractual Cash Obligations

The following table summarizes our contractual cash obligations as of December 31, 2018, after giving effect to our February 2019 Senior Notes offering and the application of the net proceeds therefrom. These contractual cash obligations relate primarily to our outstanding borrowings or lease obligations for land interests under our towers. The debt maturities reflect contractual maturity dates and do not consider the impact of the principal payments that will commence following the anticipated repayment dates on the tower revenue notes (see footnote (b)).

	Years Ending December 31,						
Contractual Obligations[(a)]	**2019**	**2020**	**2021**	**2022**	**2023**	**Thereafter**	**Totals**
	(In millions of dollars)						
Debt and other long-term obligations[(b)]	$ 107	$ 142	$ 1,702	$ 1,087	$ 5,378	$ 8,390	$ 16,806
Interest payments on debt and other long-term obligations[(c)(d)]	648	665	644	595	475	5,334	8,361
Lease obligations[(e)]	640	631	628	623	619	8,054	11,195
Access agreement obligations[(f)]	35	24	18	15	11	64	167
Total contractual obligations	$ 1,430	$ 1,462	$ 2,992	$ 2,320	$ 6,483	$ 21,842	$ 36,529

(a) The following items are in addition to the obligations disclosed in the above table:
- We have a legal obligation to perform certain asset retirement activities, including requirements upon lease and easement terminations to remove communications infrastructure or remediate the land upon which our communications infrastructure resides. The cash obligations disclosed in the above table, as of December 31, 2018, are exclusive of estimated undiscounted future cash outlays for asset retirement obligations of approximately $1.1 billion. As of December 31, 2018, the net present value of these asset retirement obligations was approximately $192 million. See note 7 to our consolidated financial statements.
- We are contractually obligated to pay or reimburse others for property taxes related to our communications infrastructure.
- We have the option to purchase approximately 53% of our towers that are leased or subleased or operated and managed under master leases, subleases and other agreements with AT&T, Sprint and T-Mobile at the end of their respective lease terms. We have no obligation to exercise such purchase options. See note 1 to our consolidated financial statements.
- We have legal obligations for open purchase order commitments obtained in the ordinary course of business that have not yet been fulfilled.

(b) The impact of principal payments that will commence following the anticipated repayment dates of our tower revenue notes is not considered. The tower revenue notes have principal amounts of $300 million, $250 million, $700 million and $750 million, with anticipated repayment dates in 2022, 2023, 2025 and 2028, respectively. See note 8 to our consolidated financial statements.

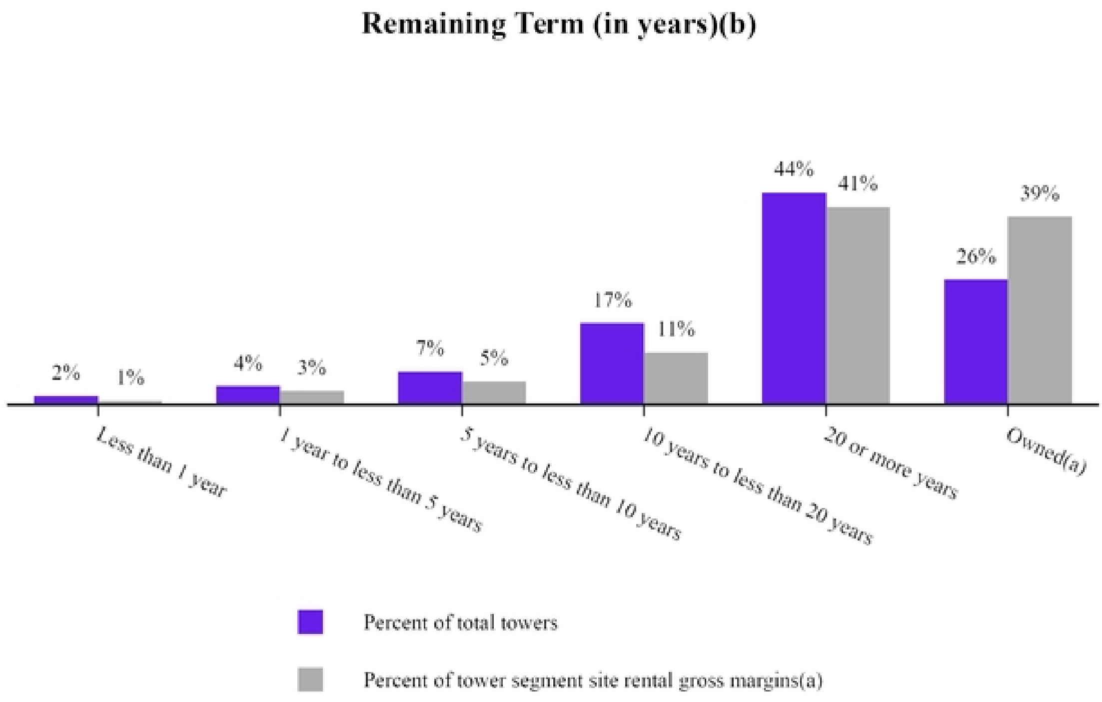
(c) If the tower revenue notes are not repaid in full by the applicable anticipated repayment dates, the applicable interest rate increases by approximately 5% per annum and monthly principal payments commence using the Excess Cash Flow (as defined in the indenture governing the applicable tower revenue notes) of the issuers of the tower revenue notes. The tower revenue notes are presented based on their contractual maturity dates ranging from 2042 to 2048 and include the impact of an assumed 5% increase in interest rate that would occur following the anticipated repayment dates but exclude the impact of monthly principal payments that would commence using Excess Cash Flow (as defined in the indenture governing the applicable tower revenue notes) of the issuers of the tower revenue notes. The full year 2018 Excess Cash Flow (as defined in the indenture governing the applicable tower revenue notes) of the issuers of the tower revenue notes was approximately $720 million. We currently expect to refinance these notes on or prior to the respective anticipated repayment dates.

(d) Interest payments on the floating rate debt are based on estimated rates currently in effect.

(e) Amounts relate primarily to lease obligations for the land interests on which our towers reside and are based on the assumption that payments will be made for certain renewal periods at our option that are reasonably certain to be exercised and an estimate of contingent payments based on revenues and gross margins derived from existing tenant leases. See table below summarizing remaining terms to expiration.

(f) Amounts relate primarily to access agreement obligations for rights-of-way, franchise pole attachments and other agreements to operate our fiber assets and are based on the assumption that payments will be made for certain renewal periods at our option that are reasonably certain to be exercised and an estimate of contingent payments based on revenues and gross margins derived from existing tenant contracts.

The following chart summarizes our rights to the land interests under our towers, including renewal terms at our option, as of December 31, 2018. As of December 31, 2018, the leases for land interests under our towers had an average remaining life of approximately 35 years, weighted based on Towers site rental gross margin. See *"Item 1A. Risk Factors."*



(a) Inclusive of fee interests and perpetual easements.

(b) For the year ended December 31, 2018, without consideration of the term of the tenant contract.

Debt Covenants

The credit agreement governing the 2016 Credit Facility contains financial maintenance covenants. We are currently in compliance with these financial maintenance covenants and, based upon our current expectations, we believe we will continue to comply with these financial maintenance covenants. In addition, certain of our debt agreements also contain restrictive covenants that place restrictions on us and may limit our ability to, among other things, incur additional debt and liens, purchase our securities, make capital expenditures, dispose of assets, undertake transactions with affiliates, make other investments, pay dividends or distribute excess cash flow. See note 8 to our consolidated financial statements for further discussion of our debt covenants. See *"Item 1A. Risk Factors."* The following are ratios applicable to the financial maintenance covenants under the credit agreement governing our 2016 Credit Facility as of December 31, 2018.

Borrower / Issuer	Financial Maintenance Covenant(a)(b)	Covenant Level Requirement	As of December 31, 2018
CCIC	Total Net Leverage Ratio	≤ 6.50x	5.2x
CCIC	Total Senior Secured Leverage Ratio	≤ 3.50x	1.0x
CCIC	Consolidated Interest Coverage Ratio(c)	N/A	N/A

(a) Failure to comply with the financial maintenance covenants would, absent a waiver, result in an event of default under the credit agreement governing our 2016 Credit Facility.
(b) As defined in the credit agreement governing our 2016 Credit Facility.
(c) Applicable solely to the extent that the senior unsecured debt rating by any two of S&P, Moody's and Fitch is lower than BBB-, Baa3 or BBB-, respectively. If applicable, the consolidated interest coverage ratio must be greater than or equal to 2.50.

Off-balance Sheet Arrangements

We have no off-balance sheet arrangements as defined in Item 303(a)(4)(ii) of Regulation S-K.

Accounting and Reporting Matters

Critical Accounting Policies and Estimates

The following is a discussion of the accounting policies and estimates in effect for 2018 that we believe (1) are most important to the portrayal of our financial condition and results of operations or (2) require our most difficult, subjective or complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain. The critical accounting policies and estimates for 2018 are not intended to be a comprehensive list of our accounting policies and estimates. See note 2 to our consolidated financial statements for a summary of our significant accounting policies. In many cases, the accounting treatment of a particular transaction is specifically prescribed by GAAP. In other cases, management is required to exercise judgment in the application of accounting principles with respect to particular transactions.

Revenue Recognition. 87% of our total revenue for 2018 consists of site rental revenues, which are recognized on a ratable basis over the fixed, non-cancelable term of the relevant contract (generally ranging from five to 15 years for site rental revenues derived from wireless tenants and three to 20 years for site rental revenues derived from our fiber solutions business), regardless of whether the payments from the tenant are received in equal monthly amounts during the life of a contract. Certain of our contracts contain fixed escalation clauses (such as fixed-dollar or fixed-percentage increases) or inflation-based escalation clauses (such as those tied to the consumer price index). If the payment terms call for fixed escalations, upfront payments or rent free periods, the revenue is recognized on a straight-line basis over the fixed, non-cancelable term of the contract. When calculating our straight-line rental revenues, we consider all fixed elements of tenant contractual escalation provisions, even if such escalation provisions contain a variable element (such as an escalator tied to an inflation-based index) in addition to a minimum. To the extent we acquire below-market tenant leases for contractual interests with tenants on the acquired communications infrastructure (for example with respect to small cells and fiber), we record the fair value as deferred credits and amortize such deferred credits to site rental revenues over their estimated lease term. Since we recognize revenue on a straight-line basis, a portion of the site rental revenue in a given period represents cash collected or contractually collectible in other periods. Our assets related to straight-line site rental revenues are included in "other current assets" and "deferred site rental receivables." Amounts billed or received prior to being earned are deferred and reflected in "deferred revenues" and "other long-term liabilities." Amounts to which we have an unconditional right to payment, which are related to both satisfied or partially satisfied performance obligations, are recorded within "receivables, net" on the consolidated balance sheet.

As part of our effort to provide comprehensive communications infrastructure solutions, we also offer certain services primarily relating to our communications infrastructure, which represent13% of our total revenues for 2018. Services and other revenue consists of (1) site development services primarily relating to existing or new tenant equipment installations on our towers and small cells, including: site acquisition, architectural and engineering, or zoning and permitting (collectively, "site development services") and (2) tenant equipment installation or subsequent augmentations (collectively, "installation services"). Upon contract commencement, we assess our services to tenants and identify performance obligations for each promise to provide a distinct service.

We may have multiple performance obligations for site development services, which primarily include: structural analysis, zoning, permitting and construction drawings. For each of the above performance obligations, services revenues are recognized at completion of the applicable performance obligation, which represents the point at which we believe we have transferred goods or services to the tenant. The revenue recognized is based on an allocation of the transaction price among the performance obligations in a respective contract based on estimated standalone selling price. We have one performance obligation for installation services, which is satisfied at the time of the respective installation or augmentation. Since performance obligations are typically satisfied prior to receiving payment from tenants, the unconditional right to payment is recorded within "receivables, net" on our consolidated balance sheet.

The vast majority of our services revenues relates to our Towers segment and generally have a duration of one year or less. See notes 2 to our consolidated financial statements.

Accounting for Acquisitions — General. As described in "*Item 1. Business,*" the majority of our communications infrastructure has been acquired directly or indirectly from the four largest wireless carriers (or their predecessors) through transactions consummated since 1999. We evaluate each of our acquisitions to determine if it should be accounted for as a business combination or as an acquisition of assets. For our business combinations, we allocate the purchase price to the assets acquired and liabilities assumed based on their estimated fair value at the date of acquisition. Any purchase price in excess of the net fair value of the assets acquired and liabilities assumed is allocated to goodwill. See *"Item 7. MD&A—Accounting and Reporting Matters—Accounting for Acquisitions—Valuation"* below and note 2 to our consolidated financial statements.

The determination of the final purchase price allocation could extend over several quarters resulting in the use of preliminary estimates that are subject to adjustment until finalized. Such changes could have a significant impact on our financial statements.

Accounting for Acquisitions — Leases. With respect to business combinations that include towers that we lease and operate, such as the AT&T, T-Mobile and Sprint leased and subleased towers, we evaluate such agreements to determine treatment as capital or operating leases. The evaluation of such agreements for capital or operating lease treatment includes consideration of each of the lease classification criteria under ASC 840-10-25, namely (1) the transfer of ownership provisions, (2) the existence of bargain purchase options, (3) the length of the remaining lease term, and (4) the present value of the minimum lease payments. With respect to the AT&T Acquisition, T-Mobile Acquisition, and the Sprint towers acquired in the Global Signal Acquisition, we determined that the tower leases were capital leases and the underlying land leases were operating leases based upon the lease term criterion, after considering the fragmentation criteria applicable under ASC 840-10-25 to leases involving both land and buildings (i.e., towers). We determined that the fragmentation criteria was met, and the tower leases could be accounted for as capital leases apart from the land leases, which are accounted for as operating leases, since (1) the fair value of the land in the aforementioned business combinations was greater than 25% of the total fair value of the leased property at inception and (2) the tower lease expirations occur beyond 75% of the estimated economic life of the tower assets.

Effective January 1, 2019, we adopted new lease accounting guidance on the recognition, measurement, presentation and disclosure of leases. See note 2 to our consolidated financial statements for further information.

Accounting for Acquisitions — Valuation. As of December 31, 2018, our largest asset was property and equipment, which primarily consists of communications infrastructure, followed by goodwill and intangible assets. Our identifiable intangible assets predominately relate to the site rental contracts and tenant relationships intangible assets. See note 2 to our consolidated financial statements for further information regarding the nature and composition of the site rental contracts and tenant relationships intangible assets.

The fair value of the vast majority of our assets and liabilities is determined by using either:

(1) discounted cash flow valuation methods (for estimating identifiable intangibles such as site rental contracts and tenant relationships and above-market and below-market leases) or
(2) estimates of replacement costs (for tangible fixed assets such as communications infrastructure).

The purchase price allocation requires subjective estimates that, if incorrectly estimated, could be material to our consolidated financial statements, including the amount of depreciation, amortization and accretion expense. The most important estimates for measurement of tangible fixed assets are (1) the cost to replace the asset with a new asset and (2) the economic useful life after giving effect to age, quality, and condition. The most important estimates for measurement of intangible assets are (1) discount rates and (2) timing and amount of cash flows including estimates regarding tenant renewals and cancellations. The most important estimates for measurement of above and below-market leases is the determination of (1) favorability or unfavorability to the current market terms and (2) applicable lease term, including whether renewals or extensions should be measured. With respect to business combinations that include towers that we lease and operate, such as the T-Mobile, Sprint and AT&T leased and subleased towers, we evaluate such agreements to determine treatment as capital or operating leases and identification of any bargain purchase options.

We record the fair value of obligations to perform certain asset retirement activities, including requirements, pursuant to our ground lease, easements, and leased facility agreements to remove communications infrastructure or remediate the space upon which certain of our communications infrastructure resides. In determining the fair value of these asset retirement obligations we must make several subjective and highly judgmental estimates such as those related to: (1) timing of cash flows; (2) future costs; (3) discount rates; and (4) the probability of enforcement to remove the towers or small cells or remediate the land. See note 2 to our consolidated financial statements.

Accounting for Long-Lived Assets — Useful Lives. We are required to make subjective assessments as to the useful lives of our tangible and intangible assets for purposes of determining depreciation, amortization and accretion expense that, if incorrectly estimated, could be material to our consolidated financial statements. Depreciation expense for our property and equipment is computed using the straight-line method over the estimated useful lives of our various classes of tangible assets. The substantial portion of our property and equipment represents the cost of our communications infrastructure, which is depreciated with an estimated useful life equal to the shorter of (1) 20 years or (2) the term of the lease (including optional renewals) for the land interests under the communications infrastructure.

The useful life of our intangible assets is estimated based on the period over which the intangible asset is expected to benefit us and gives consideration to the expected useful life of other assets to which the useful life may relate. We review the expected useful lives of our intangible assets on an ongoing basis and adjust if necessary. Amortization expense for intangible assets is computed using the straight-line method over the estimated useful life of each of the intangible assets. The useful life of the site rental contracts and tenant relationships intangible assets is limited by the maximum depreciable life of the communications infrastructure (20 years), as a result of the interdependency of the communications infrastructure and site rental contracts and tenant relationships. In contrast, the site rental contracts and tenant relationships are estimated to provide economic benefits for several decades because of the low rate of tenant cancellations and high rate of renewals experienced to date. Thus, while site rental contracts and tenant relationships are valued based upon the fair value of the site rental contracts and tenant relationships which includes assumptions regarding both (1) tenants' exercise of optional renewals contained in the acquired leases and (2) renewals of the acquired leases past the contractual term including exercisable options, the site rental contracts are amortized over a period not to exceed 20 years as a result of the useful life being limited by the depreciable life of the communications infrastructure.

Accounting for Long-Lived Assets — Impairment Evaluation. We review the carrying values of property and equipment, intangible assets, or other long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amounts may not be recoverable. We utilize the following dual grouping policy for purposes of determining the unit of account for testing impairment of the site rental contracts and tenant relationships:

(1) we pool site rental contracts and tenant relationships intangible assets and property and equipment into portfolio groups; and
(2) we separately pool site rental contracts and tenant relationships by significant tenant or by tenant grouping for individually insignificant tenants, as appropriate.

We first pool site rental contracts and tenant relationships intangible assets and property and equipment into portfolio groups for purposes of determining the unit of account for impairment testing, because we view communications infrastructure as portfolios and communications infrastructure in a given portfolio and its related tenant contracts are not largely independent of the other communications infrastructure in the portfolio. We re-evaluate the appropriateness of the pooled groups at least annually. This use of grouping is based in part on (1) our limitations regarding disposal of communications infrastructure, (2) the interdependencies of communications infrastructure portfolios, and (3) the manner in which communications infrastructure is traded in the marketplace. The vast majority of our site rental contracts and tenant relationships intangible assets and property and equipment are pooled into the U.S. owned communications infrastructure group. Secondly, and separately, we pool site rental contracts and tenant relationships by significant tenant or by tenant grouping for individually insignificant tenants, as appropriate, for purposes of determining the unit of account for impairment testing because we associate the value ascribed to site rental contracts and tenant relationships intangible assets to the underlying contracts and related tenant relationships acquired.

Our determination that an adverse event or change in circumstance has occurred that indicates that the carrying amounts may not be recoverable will generally involve (1) a deterioration in an asset's financial performance compared to historical results, (2) a shortfall in an asset's financial performance compared to forecasted results, or (3) changes affecting the utility and estimated future demands for the asset. When considering the utility of our assets, we consider events that would meaningfully impact (1) our communications infrastructure or (2) our tenant relationships. For example, consideration would be given to events that impact (1) the structural integrity and longevity of our communications infrastructure or (2) our ability to derive benefit from our existing tenant relationships, including events such as tenant's bankruptcy or insolvency or loss of a significant tenant. During 2018, there were no events or circumstances that caused us to review the carrying value of our intangible assets or property and equipment due in part to our assets performing consistently with or better than our expectations.

If the sum of the estimated future cash flows (undiscounted) from an asset, or portfolio group, significant tenant or tenant group (for individually insignificant tenants), as applicable, is less than its carrying amount, an impairment loss may be recognized. If the carrying value were to exceed the undiscounted cash flows, measurement of an impairment loss would be based on the fair value of the asset, which is based on an estimate of discounted future cash flows. The most important estimates for such calculations of undiscounted cash flows are (1) the expected additions of new tenants and equipment on our communications infrastructure and (2) estimates regarding tenant cancellations and renewals of contracts. We could record impairments in the future if changes in long-term market conditions, expected future operating results or the utility of the assets results in changes for our impairment test calculations which negatively impact the fair value of our property and equipment and intangible assets, or if we changed our unit of account in the future.

Approximately 2% of our total towers currently have no tenants. We continue to pay operating expenses on these towers in anticipation of obtaining tenants on these towers in the future, primarily because of the individual tower site demographics. We estimate, based on current visibility, potential tenants on approximately half of these towers. To the extent we do not believe there are long-term prospects of obtaining tenants on an individual asset and all other possible avenues for recovering the carrying value has been exhausted, including sale of the asset, we appropriately reduce the carrying value of such assets to fair value.

Accounting for Goodwill — Impairment Evaluation. We test goodwill for impairment on an annual basis, regardless of whether adverse events or changes in circumstances have occurred. The annual test begins with goodwill and all intangible assets being allocated to applicable reporting units. We then perform a qualitative assessment to determine whether it is "more likely than not" that the fair value of the reporting unit is less than its carrying amount. If we conclude that it is "more likely than not" that the fair value of a reporting unit is less than its carrying amount, we would be required to perform the two-step goodwill impairment test. Otherwise, the two-step goodwill impairment test is not required. Our reporting units are the same as our operating segments (Towers and Fiber). See note 15. We performed our most recent annual goodwill impairment test as of October 1, 2018, which resulted in (1) the fair value of our reporting units substantially exceeding the carrying value and (2) no impairments.

Deferred Income Taxes. We operate as a REIT for U.S. federal income tax purposes. Our REIT taxable income is generally not subject to federal and state income taxes as a result of the deduction for dividends paid and any usage of our remaining NOLs. Accordingly, the only provision or benefit for federal income taxes for the year ended December 31, 2018 relates to TRSs. Furthermore, as a result of the deduction for dividends paid, some or all of our NOLs related to our REIT may expire without utilization. See *"Item 1. Business—Company Developments, REIT Status and Industry Update—REIT Status"* for a discussion of the impact of our REIT status.

Our TRSs will continue to be subject, as applicable, to federal and state income taxes and foreign taxes in the jurisdictions in which such assets and operations are located. Our ability to utilize our NOLs is dependent, in part, upon us having sufficient future earnings to utilize our NOLs before they expire. If market conditions change materially and we determine that we will be unable to generate sufficient taxable income in the future to utilize our NOLs, we would be required to record an additional valuation allowance, which would reduce our earnings. Such adjustments could cause a material effect on our results of operations for the period of the adjustment. The change in our valuation allowance has no effect on our cash flows. For a further discussion of our benefit (provision) for income taxes, see *"Item 7. MD&A—Results of Operations"* and note 10 to our consolidated financial statements.

Accounting Pronouncements

Recently Adopted Accounting Pronouncements. See note 2 to our consolidated financial statements.

Recent Accounting Pronouncements Not Yet Adopted. See note 2 to our consolidated financial statements.

Non-GAAP and Segment Financial Measures

In addition to the non-GAAP financial measures used herein and as discussed in note 15 to our consolidated financial statements, we also provide (1) segment site rental gross margin, (2) segment services and other gross margin, and (3) segment operating profit, which are key measures used by management to evaluate the performance of our operating segments . These segment measures are provided pursuant to GAAP requirements related to segment reporting.

We define segment site rental gross margin as segment site rental revenues less segment site rental cost of operations, which excludes stock-based compensation expense and prepaid lease purchase price adjustments recorded in consolidated site rental cost of operations. We define segment services and other gross margin as segment services and other revenues less segment services and other cost of operations, which excludes stock-based compensation expense recorded in consolidated services and other cost of operations. We define segment operating profit as segment site rental gross margin plus segment services and other gross margin, less selling, general and administrative expenses attributable to the respective segment. All of these measurements of profit or loss are exclusive of depreciation, amortization and accretion, which are shown separately.

We use earnings before interest, taxes, depreciation, amortization, and accretion, as adjusted ("Adjusted EBITDA"), which is a non-GAAP financial measure, as an indicator of consolidated financial performance. Our measure of Adjusted EBITDA may not be comparable to similarly titled measures of other companies, including companies in the communications infrastructure sector or other REITs, and is not a measure of performance calculated in accordance with GAAP. Adjusted EBITDA should not be considered in isolation or as a substitute for operating income (loss), net income (loss), net cash provided by (used for) operating, investing and financing activities or other income statement or cash flow statement data prepared in accordance with GAAP and should be considered only as a supplement to net income (loss) computed in accordance with GAAP as a measure of our performance. There are material limitations to using a measure such as Adjusted EBITDA, including the difficulty associated with comparing results among more than one company, including our competitors, and the inability to analyze certain significant items, including depreciation and interest expense, that directly affect our net income or loss. Management compensates for these limitations by considering the economic effect of the excluded expense items independently as well as in connection with their analysis of net income (loss).

We define Adjusted EBITDA as net income (loss) plus restructuring charges (credits), asset write-down charges, acquisition and integration costs, depreciation, amortization and accretion, amortization of prepaid lease purchase price adjustments, interest expense and amortization of deferred financing costs, (gains) losses on retirement of long-term obligations, net (gain) loss on interest rate swaps, (gains) losses on foreign currency swaps, impairment of available-for-sale securities, interest income, other (income) expense, (benefit) provision for income taxes, cumulative effect of a change in accounting principle, (income) loss from discontinued operations and stock-based compensation expense. The reconciliation of Adjusted EBITDA to our net income (loss) is set forth below and excludes items in our Adjusted EBITDA definition which are not applicable to the periods shown.

	Year Ended December 31,		
(dollars in millions)	**2018**	**2017**	**2016**
Net income (loss)	$ 671	$ 445	$ 357
Adjustments to increase (decrease) net income (loss):			
Asset write-down charges	26	17	34
Acquisition and integration costs	27	61	17
Depreciation, amortization and accretion	1,528	1,242	1,109
Amortization of prepaid lease purchase price adjustments	20	20	22
Interest expense and amortization of deferred financing costs	642	591	515
(Gains) losses on retirement of long-term obligations	106	4	52
Interest income	(5)	(19)	(1)
Other (income) expense	(1)	(1)	9
(Benefit) provision for income taxes	19	26	17
Stock-based compensation expense	108	96	97
Adjusted EBITDA[(a)]	$ 3,141	$ 2,482	$ 2,228

(a) The above reconciliation excludes the items included in our Adjusted EBITDA definition which are not applicable to the periods shown.

We believe Adjusted EBITDA is useful to investors or other interested parties in evaluating our financial performance because:

- it is the primary measure used by our management to evaluate (1) the economic productivity of our operations and (2) for purposes of making decisions about allocating resources to, and assessing the performance of, our operations;
- although specific definitions may vary, it is widely used by investors or other interested parties in evaluation of the communications infrastructure sector and other REITs to measure financial performance without regard to items such as depreciation, amortization and accretion which can vary depending upon accounting methods and the book value of assets;

- we believe it helps investors and other interested parties meaningfully evaluate and compare the results of our operations (1) from period to period and (2) to our competitors by removing the impact of our capital structure (primarily interest charges from our outstanding debt) and asset base (primarily depreciation, amortization and accretion) from our financial results; and
- it is similar to the measure of current financial performance generally used in our debt covenant calculations.

Our management uses Adjusted EBITDA:

- as a performance goal in employee annual incentive compensation;
- as a measurement of financial performance because it assists us in comparing our financial performance on a consistent basis as it removes the impact of our capital structure (primarily interest charges from our outstanding debt) and asset base (primarily depreciation, amortization, and accretion) from our operating results;
- in presentations to our board of directors to enable it to have the same measurement of financial performance used by management;
- for planning purposes, including preparation of our annual operating budget;
- as a valuation measure in strategic analyses in connection with the purchase and sale of assets;
- in determining self-imposed limits on our debt levels, including the evaluation of our leverage ratio and interest coverage ratio; and
- with respect to compliance with our debt covenants, which require us to maintain certain financial ratios that incorporate concepts such as, or similar to, Adjusted EBITDA.

Item 7A. *Quantitative and Qualitative Disclosures About Market Risk*

Our primary exposures to market risks are related to changes in interest rates, which may adversely affect our results of operations and financial position. We seek to manage exposure to changes in interest rates where economically prudent to do so by utilizing fixed rate debt.

Our interest rate risk relates primarily to the impact of interest rate movements on the following, after giving effect to our February 2019 Senior Notes offering and the application of the net proceeds therefrom:

- the potential refinancing of our $16.7 billion in existing debt, compared to $16.2 billion in the prior year;
- our $2.4 billion of floating rate debt representing approximately 15% of total debt, compared to 21% in the prior year; and
- potential future borrowings of incremental debt, including borrowings under our 2016 Credit Facility.

Potential Refinancing of Existing Debt

We have no debt maturities, other than principal payments on amortizing debt, or anticipated repayment dates over the next 12 months. As of December 31, 2018 and December 31, 2017, we had no interest rate swaps hedging any refinancings. See below for a tabular presentation of our scheduled contractual debt maturities as of December 31, 2018 and a discussion of anticipated repayment dates.

Floating Rate Debt

We manage our exposure to market interest rates on our existing debt by controlling the mix of fixed and floating rate debt. As of December 31, 2018, after giving effect to our February 2019 Senior Notes offering and the application of the net proceeds therefrom, we had $2.4 billion of floating rate debt, none of which had LIBOR floors. As a result, a hypothetical unfavorable fluctuation in market interest rates on our existing debt of 1/8 of a percent point over a 12-month period would increase our interest expense by approximately $3 million. As of December 31, 2017, we had approximately $3.0 billion of floating rate debt, none of which had LIBOR floors.

Potential Future Borrowings of Incremental Debt

We typically do not hedge our exposure to interest rates on potential future borrowings of incremental debt for a substantial period prior to issuance. See *"Item 7. MD&A—Liquidity and Capital Resources"* regarding our liquidity strategy.

The following table provides information about our market risk related to changes in interest rates, after giving effect to our February 2019 Senior Notes Offering and the application of the net proceeds therefrom. The future principal payments and weighted-average interest rates are presented as of December 31, 2018. These debt maturities reflect contractual maturity dates, and do not consider the impact of the principal payments that will commence following the anticipated repayment dates of certain debt (see footnotes (b) and (d)). See notes 8 and 18 to our consolidated financial statements for additional information regarding our debt.

	Future Principal Payments and Interest Rates by the Debt Instruments' Contractual Year of Maturity							
	2019	**2020**	**2021**	**2022**	**2023**	**Thereafter**	**Total**	**Fair Value[(a)]**
	(Dollars in millions)							
Fixed rate debt[(b)]	$ 48	$ 38	$ 1,583	$ 878	$ 3,424	$ 8,390	$ 14,361	$ 14,131
Average interest rate[(b)(c)(d)]	4.4%	4.5%	2.9%	5.2%	4.2%	5.2%	4.7%	
Variable rate debt[(e)]	$ 59	$ 104	$ 119	$ 209	$ 1,954	$ —	$ 2,445	$ 2,446
Average interest rate[(e)]	3.8%	3.8%	3.8%	3.8%	3.8%	—%	3.8%	

(a) The fair value of our debt is based on indicative quotes (that is, non-binding quotes) from brokers that require judgment to interpret market information, including implied credit spreads for similar borrowings on recent trades or bid/ask offers. These fair values are not necessarily indicative of the amount, which could be realized in a current market exchange.
(b) The impact of principal payments that will commence following the anticipated repayment dates is not considered. The tower revenue notes have principal amounts of $300 million, $250 million, $700 million and $750 million, with anticipated repayment dates in 2022, 2023, 2025 and 2028, respectively.
(c) The average interest rate represents the weighted-average stated coupon rate (see also footnote (d)).
(d) If the tower revenue notes are not repaid in full by the applicable anticipated repayment dates, the applicable interest rate increases by approximately 5% per annum and monthly principal payments commence using the Excess Cash Flow (as defined in the indenture governing the applicable tower revenue notes) of the issuers of the tower revenue notes. The tower revenue notes are presented based on their contractual maturity dates ranging from 2042 to 2048 and include the impact of an assumed 5% increase in interest rate that would occur following the anticipated repayment dates but exclude the impact of monthly principal payments that would commence using Excess Cash Flow of the issuers of the tower revenue notes. The full year 2018 Excess Cash Flow of the issuers of the tower revenue notes was approximately $720 million. We currently expect to refinance these notes on or prior to the respective anticipated repayment dates.
(e) Predominantly consists of our 2016 Term Loan A and 2016 Revolver borrowings, each of which matures in 2023.

Item 8. ***Financial Statements and Supplementary Data***

Crown Castle International Corp. and Subsidiaries
Index to Consolidated Financial Statements and Financial Statement Schedules

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of
Crown Castle International Corp.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Crown Castle International Corp. and its subsidiaries (the "Company") as of December 31, 2018 and 2017, and the related consolidated statements of operations and comprehensive income (loss), of cash flows, and of equity for each of the three years in the period ended December 31, 2018, including the related notes and financial statement schedules listed in the accompanying index (collectively referred to as the "consolidated financial statements"). We also have audited 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 (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, 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 accounting principles generally accepted in the United States of America. Also 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 the COSO.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (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 audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated 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 consolidated 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 consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) 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 (iii) 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/ PricewaterhouseCoopers LLP
Pittsburgh, Pennsylvania
February 25, 2019

We have served as the Company’s auditor since 2011.

CROWN CASTLE INTERNATIONAL CORP. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEET
(In millions of dollars, except par values)

	December 31, 2018	December 31, 2017
ASSETS		
Current assets:		
Cash and cash equivalents	$ 277	$ 314
Restricted cash	131	121
Receivables, net of allowance of $14 and $14, respectively	501	398
Prepaid expenses	172	162
Other current assets	148	139
Total current assets	1,229	1,134
Deferred site rental receivables	1,366	1,300
Property and equipment, net	13,676	12,933
Goodwill	10,078	10,021
Site rental contracts and tenant relationships, net	5,209	5,626
Other intangible assets, net	307	336
Long-term prepaid rent and other assets, net	920	879
Total assets	$ 32,785	$ 32,229
LIABILITIES AND EQUITY		
Current liabilities:		
Accounts payable	$ 313	$ 249
Accrued interest	148	132
Deferred revenues	498	457
Other accrued liabilities	351	339
Current maturities of debt and other obligations	107	115
Total current liabilities	1,417	1,292
Debt and other long-term obligations	16,575	16,044
Other long-term liabilities	2,759	2,554
Total liabilities	20,751	19,890
Commitments and contingencies (see note 13)		
CCIC stockholders' equity:		
Common stock, $0.01 par value; 600 shares authorized; shares issued and outstanding: December 31, 2018—415 and December 31, 2017—406	4	4
6.875% Mandatory Convertible Preferred Stock, Series A, $0.01 par value; 20 shares authorized; shares issued and outstanding: December 31, 2018—2 and December 31, 2017—2; aggregate liquidation value: December 31, 2018—$1,650 and December 31, 2017—$1,650	—	—
Additional paid-in capital	17,767	16,844
Accumulated other comprehensive income (loss)	(5)	(4)
Dividends/distributions in excess of earnings	(5,732)	(4,505)
Total equity	12,034	12,339
Total liabilities and equity	$ 32,785	$ 32,229

See accompanying notes to consolidated financial statements.

CROWN CASTLE INTERNATIONAL CORP. AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF OPERATIONS AND COMPREHENSIVE INCOME (LOSS)
(In millions of dollars, except per share amounts)

	Years Ended December 31,		
	2018	2017	2016
Net revenues:			
Site rental	$ 4,716	$ 3,669	$ 3,233
Services and other	707	687	688
Net revenues	5,423	4,356	3,921
Operating expenses:			
Costs of operations[(a)]:			
Site rental	1,410	1,144	1,024
Services and other	437	420	417
Selling, general and administrative	563	426	371
Asset write-down charges	26	17	34
Acquisition and integration costs	27	61	17
Depreciation, amortization and accretion	1,528	1,242	1,109
Total operating expenses	3,991	3,310	2,972
Operating income (loss)	1,432	1,046	949
Interest expense and amortization of deferred financing costs	(642)	(591)	(515)
Gains (losses) on retirement of long-term obligations	(106)	(4)	(52)
Interest income	5	19	1
Other income (expense)	1	1	(9)
Income (loss) before income taxes	690	471	374
Benefit (provision) for income taxes	(19)	(26)	(17)
Net income (loss)	671	445	357
Dividends on preferred stock	(113)	(58)	(33)
Net income (loss) attributable to CCIC common stockholders	$ 558	$ 387	$ 324
Net income (loss)	$ 671	$ 445	$ 357
Other comprehensive income (loss):			
Foreign currency translation adjustments	(1)	2	(2)
Total other comprehensive income (loss)	(1)	2	(2)
Comprehensive income (loss) attributable to CCIC stockholders	$ 670	$ 447	$ 355
Net income (loss) attributable to CCIC common stockholders, per common share:			
Net income (loss) attributable to CCIC common stockholders—basic	$ 1.35	$ 1.01	$ 0.95
Net income (loss) attributable to CCIC common stockholders—diluted	$ 1.34	$ 1.01	$ 0.95
Weighted-average common shares outstanding:			
Basic	413	382	340
Diluted	415	383	341

(a) Exclusive of depreciation, amortization and accretion shown separately.

See accompanying notes to consolidated financial statements.

CROWN CASTLE INTERNATIONAL CORP. AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF CASH FLOWS
(In millions of dollars)

	Years Ended December 31,		
	2018 [a]	2017 [a]	2016 [a]
Cash flows from operating activities:			
Net income (loss)	$ 671	$ 445	$ 357
Adjustments to reconcile net income (loss) to net cash provided by (used for) operating activities:			
Depreciation, amortization and accretion	1,528	1,242	1,109
(Gains) losses on retirement of long-term obligations	106	4	52
(Gains) losses on settled swaps	—	—	3
Amortization of deferred financing costs and other non-cash interest	7	9	14
Stock-based compensation expense	103	92	79
Asset write-down charges	26	17	34
Deferred income tax (benefit) provision	2	15	9
Other non-cash adjustments, net	2	(2)	10
Changes in assets and liabilities, excluding the effects of acquisitions:			
Increase (decrease) in accrued interest	16	35	30
Increase (decrease) in accounts payable	37	(34)	11
Increase (decrease) in deferred revenues, deferred ground lease payables, other accrued liabilities and other liabilities	223	175	196
Decrease (increase) in receivables	(105)	61	(59)
Decrease (increase) in prepaid expenses, deferred site rental receivables, long-term prepaid rent and other assets	(114)	(16)	(58)
Net cash provided by (used for) operating activities	2,502	2,043	1,787
Cash flows from investing activities:			
Payments for acquisitions, net of cash acquired	(42)	(9,260)	(557)
Capital expenditures	(1,741)	(1,228)	(874)
Net (payments) receipts from settled swaps	—	—	8 [b]
Other investing activities, net	(12)	(5)	(6)
Net cash provided by (used for) investing activities	(1,795)	(10,493)	(1,429)
Cash flows from financing activities:			
Proceeds from issuance of long-term debt	2,742	3,093	5,201
Principal payments on debt and other long-term obligations	(105)	(119)	(96)
Purchases and redemptions of long-term debt	(2,346)	—	(4,045)
Borrowings under revolving credit facility	1,820	2,820	3,440
Payments under revolving credit facility	(1,725)	(1,840)	(4,565)
Payments for financing costs	(31)	(29)	(42)
Net proceeds from issuance of common stock	841	4,221	1,326
Net proceeds from issuance of preferred stock	—	1,608	—
Purchases of common stock	(34)	(23)	(25)
Dividends/distributions paid on common stock	(1,782)	(1,509)	(1,239)
Dividends paid on preferred stock	(113)	(30)	(44)
Net cash provided by (used for) financing activities	(733)	8,192	(89)
Net increase (decrease) in cash, cash equivalents, and restricted cash from continuing operations	(26)	(258)	269
Discontinued operations:			
Net cash provided by (used for) investing activities	—	—	113 [b]
Net increase (decrease) in cash and cash equivalents - discontinued operations	—	—	113
Effect of exchange rate changes on cash	(1)	1	—
Cash, cash equivalents, and restricted cash at beginning of period[a]	440	697	315
Cash, cash equivalents, and restricted cash at end of period[a]	$ 413	$ 440	$ 697

(a) See "*Recently Adopted Accounting Pronouncements*" in note 2 to the financial statements for a discussion of recently adopted restricted cash guidance, which impacted certain presentations on the consolidated statement of cash flows.
(b) In January 2016, the Company received a note receivable payment and settled a corresponding foreign currency swap related to its 2015 sale of CCAL.

See accompanying notes to consolidated financial statements.

CROWN CASTLE INTERNATIONAL CORP. AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF EQUITY
(Amounts in millions)

	Common Stock		6.875% Mandatory Convertible Preferred Stock		4.50% Mandatory Convertible Preferred Stock						
	Shares	($0.01 Par)	Shares	($0.01 Par)	Shares		($0.01 Par)	Additional Paid-In Capital	Accumulated Other Comprehensive Income (Loss) ("AOCI")	Dividends/Distributions in Excess of Earnings	Total
Balance, December 31, 2015	334	$ 4	—	—	10	—	$ —	$ 9,549	$ (4)	$ (2,458)	$ 7,091
Stock-based compensation related activity, net of forfeitures	—	—	—	—	—	—	—	86	—	—	86
Purchases and retirement of common stock	—	—	—	—	—	—	—	(25)	—	—	(25)
Net proceeds from issuance of Common Stock	15	—	—	—	—		—	1,326	—	—	1,326
Net proceeds from issuance of preferred stock	—	—	—	—	—		—	—	—	—	—
Other comprehensive income (loss)[a]	—	—	—	—	—	—	—	—	(2)	—	(2)
Recognition of excess tax benefit	—	—	—	—	—		—	2	—	—	2
Common stock dividends/distributions	—	—	—	—	—		—	—	—	(1,245)	(1,245)
Preferred stock dividends	—	—	—	—	—	—	—	—	—	(33)	(33)
Conversion of preferred stock to common stock (see note 11)	12	—	—	—	(10)	—	—	—	—	—	—
Net income (loss)	—	—	—	—	—	—	—		—	357	357
Balance, December 31, 2016	361	$ 4	—	—	—		$ —	$ 10,938	$ (6)	$ (3,379)	$ 7,557

(a) See the consolidated statement of operations and comprehensive income (loss) for the components of "total other comprehensive income (loss)".

CROWN CASTLE INTERNATIONAL CORP. AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF EQUITY
(Amounts in millions)

	Common Stock		6.875% Mandatory Convertible Preferred Stock		4.50% Mandatory Convertible Preferred Stock					
	Shares	($0.01 Par)	Shares	($0.01 Par)	Shares	($0.01 Par)	Additional Paid-In Capital	AOCI	Dividends/Distributions in Excess of Earnings	Total
Balance, December 31, 2016	361	$ 4	—	—	—	$ —	$ 10,938	$ (6)	$ (3,379)	$ 7,557
Stock-based compensation related activity, net of forfeitures	1	—	—	—	—	—	100	—	—	100
Purchases and retirement of common stock	—	—	—	—	—	—	(23)	—	—	(23)
Net proceeds from issuance of common stock	44	—	—	—	—	—	4,221	—	—	4,221
Net proceeds from issuance of preferred stock	—	—	2	—	—	—	1,608	—	—	1,608
Other comprehensive income (loss)[(a)]	—	—	—	—	—	—	—	2	—	2
Common stock dividends/distributions	—	—	—	—	—	—	—	—	(1,513)	(1,513)
Preferred stock dividends	—	—	—	—	—	—	—	—	(58)	(58)
Net income (loss)	—	—	—	—	—	—	—	—	445	445
Balance, December 31, 2017	406	$ 4	2	—	—	$ —	$ 16,844	$ (4)	$ (4,505)	$ 12,339

(a) See the consolidated statement of operations and comprehensive income (loss) for the components of "total other comprehensive income (loss)."

See accompanying notes to consolidated financial statements.

CROWN CASTLE INTERNATIONAL CORP. AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF EQUITY
(Amounts in millions)

	Common Stock		6.875% Mandatory Convertible Preferred Stock		4.50% Mandatory Convertible Preferred Stock					
	Shares	**($0.01 Par)**	**Shares**	**($0.01 Par)**	**Shares**	**($0.01 Par)**	**Additional Paid-In Capital**	**AOCI**	**Dividends/Distributions in Excess of Earnings**	**Total**
Balance, December 31, 2017	406	$ 4	2	—	—	$ —	$ 16,844	$ (4)	$ (4,505)	$ 12,339
Stock-based compensation related activity, net of forfeitures	1	—	—	—	— —	—	116	—	—	116
Purchases and retirement of common stock	—	—	—	—	— —	—	(34)	—	—	(34)
Net proceeds from issuances of common stock (see note 11)	8	—	—	—	—	—	841	—	—	841
Other comprehensive income (loss)[a]	—	—	—	—	— —	—	—	(1)	—	(1)
Common stock dividends/distributions	—	—	—	—	—	—	—	—	(1,785)	(1,785)
Preferred stock dividends	—	—	—	—	— —	—	—	—	(113)	(113)
Net income (loss)	—	—	—	—	— —	—	—	—	671	671
Balance, December 31, 2018	415	$ 4	2	—	—	$ —	$ 17,767	$ (5)	$ (5,732)	$ 12,034

(a) See the consolidated statement of operations and comprehensive income (loss) for the components of "total other comprehensive income (loss)."

See accompanying notes to consolidated financial statements.

1. Basis of Presentation

The consolidated financial statements include the accounts of Crown Castle International Corp. and its predecessor, as applicable (together, "CCIC"), and their subsidiaries, collectively referred to herein as the "Company." All significant intercompany balances and transactions have been eliminated in consolidation. As used herein, the term "including," and any variation thereof, means "including without limitation." The use of the word "or" herein is not exclusive. Unless the context suggests otherwise, references to "U.S." are to the United States of America and Puerto Rico, collectively.

The Company owns, operates and leases shared communications infrastructure that is geographically dispersed throughout the U.S, including (1) towers and other structures, such as rooftops (collectively, "towers"), and (2) fiber primarily supporting small cell networks ("small cells") and fiber solutions. The Company's towers, fiber and small cells assets are collectively referred to herein as "communications infrastructure," and the Company's customers on its communications infrastructure are referred to herein as "tenants."

The Company's core business is providing access, including space or capacity, to its shared communications infrastructure via long-term contracts in various forms, including lease, license, sublease and service agreements (collectively, "contracts").

53% of the Company's towers are leased or subleased or operated and managed under master leases, subleases, or other agreements with AT&T, Sprint, and T-Mobile. The Company has the option to purchase these towers at the end of their respective lease terms. The Company has no obligation to exercise such purchase options. Additional information concerning these towers is as follows:

- 22% of the Company's towers are leased or subleased or operated and managed under a master prepaid lease or other related agreements with AT&T for a weighted-average initial term of approximately 28 years, weighted on Towers site rental gross margin. The Company has the option to purchase the leased and subleased towers from AT&T at the end of the respective lease or sublease terms for aggregate option payments of approximately $4.2 billion, which payments, if exercised, would be due between 2032 and 2048.

- 16% of the Company's towers are leased or subleased or operated and managed for an initial period of 32 years (through May 2037) under master leases, subleases, or other agreements with Sprint. The Company has the option to purchase in 2037 all (but not less than all) of the leased and subleased Sprint towers from Sprint for approximately $2.3 billion.

- 15% of the Company's towers are leased or subleased or operated and managed under a master prepaid lease or other related agreements with T-Mobile for a weighted-average initial term of approximately 28 years, weighted on Towers site rental gross margin. The Company has the option to purchase the leased and subleased towers from T-Mobile at the end of the respective lease or sublease terms for aggregate option payments of approximately $2.0 billion, which payments, if exercised would be due between 2035 and 2049. In addition, through the acquisition of the rights to approximately 7,100 towers ("T-Mobile Acquisition"), there are another 1% of the Company's towers subject to a lease and sublease or other related arrangements with AT&T. The Company has the option to purchase these towers that it does not otherwise already own at the end of their respective lease terms for aggregate option payments of up to approximately $405 million, which payments, if exercised, would be due prior to 2032 (less than $10 million would be due before 2025).

As part of the Company's effort to provide comprehensive communications infrastructure solutions, the Company also offers certain services primarily relating to the Company's towers and small cells, predominately consisting of (1) site development services primarily relating to existing or new tenant equipment installations, including: site acquisition, architectural and engineering, or zoning and permitting (collectively, "site development services") and (2) tenant equipment installation or subsequent augmentations (collectively, "installation services"). The vast majority of the Company's services relate to its Towers segment.

The Company operates as a real estate investment trust ("REIT") for U.S. federal income tax purposes. In addition, the Company has certain taxable REIT subsidiaries ("TRSs"). See note 10.

The preparation of financial statements in conformity with U.S. generally accepted accounting principles ("GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities as of the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

The Company has changed its presentation from thousands to millions and, as a result, any necessary rounding adjustments have been made to prior year disclosed amounts.

2. Summary of Significant Accounting Policies

The following is a discussion of the Company's significant accounting policies in effect for the year ended December 31, 2018.

Restricted Cash

Restricted cash represents (1) the cash held in reserve by the indenture trustees pursuant to the indenture governing certain of the Company's debt instruments, (2) cash securing performance obligations such as letters of credit, as well as (3) any other cash whose use is limited by contractual provisions. The restriction of rental cash receipts is a critical feature of certain of the Company's debt instruments, due to the applicable indenture trustee's ability to utilize the restricted cash for the payment of (1) debt service costs, (2) ground rents, (3) real estate or personal property taxes, (4) insurance premiums related to towers, (5) other assessments by governmental authorities and potential environmental remediation costs, or (6) a portion of advance rents from tenants. The restricted cash in excess of required reserve balances is subsequently released to the Company in accordance with the terms of the indentures. See note 16 for a reconciliation of cash, cash equivalents and restricted cash.

Receivables Allowance

An allowance for doubtful accounts is recorded as an offset to accounts receivable. The Company uses judgment in estimating this allowance and considers historical collections, current credit status, or contractual provisions. Additions to the allowance for doubtful accounts are charged either to "site rental costs of operations" or to "services and other costs of operations," as appropriate; and deductions from the allowance are recorded when specific accounts receivable are written off as uncollectible.

Lease Accounting

General. The Company classifies its leases at inception as either operating leases or capital leases. A lease is classified as a capital lease if at least one of the following criteria is met, subject to certain exceptions noted below: (1) the lease transfers ownership of the leased assets to the lessee, (2) there is a bargain purchase option, (3) the lease term is equal to 75% or more of the economic life of the leased assets, or (4) the present value of the minimum lease payments equals or exceeds 90% of the fair value of the leased assets.

Lessee. Leases for land are evaluated for capital lease treatment if at least one of the first two criteria mentioned in the immediately preceding paragraph is present relating to the leased assets. When the Company, as lessee, classifies a lease as a capital lease, it records an asset in an amount equal to the present value of the minimum lease payments under the lease at the beginning of the lease term. Applicable operating leases are recognized on a straight-line basis as discussed under "costs of operations" below.

Lessor. If the Company is the lessor of leased property that is part of a larger whole (including a portion of space on a tower) and for which fair value is not objectively determinable, then such a lease is accounted for as an operating lease. As applicable, operating leases are recognized on a straight-line basis as discussed under "Revenue Recognition."

Effective January 1, 2019, the Company adopted new lease accounting guidance on the recognition, measurement, presentation and disclosure of leases. See also "*Recent Accounting Pronouncements Not Yet Adopted*" below for further discussion.

Property and Equipment

Property and equipment is stated at cost, net of accumulated depreciation. Property and equipment includes land owned in fee and perpetual easements for land, which have no definite life. When the Company purchases fee ownership or perpetual easements for the land previously subject to ground lease, the Company reduces the value recorded as land by the amount of any associated deferred ground lease payable or unamortized above-market leases. Depreciation is computed utilizing the straight-line method at rates based upon the estimated useful lives of the various classes of assets. Depreciation of communications infrastructure is computed with a useful life equal to the shorter of 20 years or the term of the underlying ground lease (including optional renewal periods). Additions, renewals, and improvements are capitalized, while maintenance and repairs are expensed. Labor and interest costs incurred directly related to the construction of certain property and equipment are capitalized during the construction phase of projects. For the years ended December 31, 2018, 2017, and 2016, the Company had $212 million, $92 million, and $86 million in capitalized labor costs, respectively. The carrying value of property and equipment is reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the assets may not be recoverable.

Abandonments and write-offs of property and equipment are recorded to "asset write-down charges" on the Company's consolidated statement of operations and comprehensive income (loss) and were $22 million, $14 million, and $27 million for the years ended December 31, 2018, 2017, and 2016, respectively.

Asset Retirement Obligations

Pursuant to its ground lease, easement and leased facility agreements, the Company records obligations to perform asset retirement activities, including requirements to remove communications infrastructure or remediate the space upon which certain of the Company's communications infrastructure resides. Asset retirement obligations are included in "other long-term liabilities" on the Company's consolidated balance sheet. The liability accretes as a result of the passage of time and the related accretion expense is included in "depreciation, amortization and accretion" on the Company's consolidated statement of operations and comprehensive income (loss). The associated asset retirement costs are capitalized as an additional carrying amount of the related long-lived asset and depreciated over the useful life of such asset.

Goodwill

Goodwill represents the excess of the purchase price for an acquired business over the allocated value of the related net assets. The Company tests goodwill for impairment on an annual basis, regardless of whether adverse events or changes in circumstances have occurred. The annual test begins with goodwill and all intangible assets being allocated to applicable reporting units. The Company's reporting units are the same as its operating segments (Towers and Fiber). The Company then performs a qualitative assessment to determine whether it is "more likely than not" that the fair value of the reporting units is less than its carrying amount. If it is concluded that it is "more likely than not" that the fair value of a reporting unit is less than its carrying amount, it is necessary to perform the two-step goodwill impairment test. The two-step goodwill impairment test begins with a comparison of the estimated fair value of the reporting unit and the carrying value of the reporting unit. The first step, commonly referred to as a "step-one impairment test," is a screen for potential impairment while the second step measures the amount of impairment if there is an indication from the first step that one exists. The Company's measurement of the fair value for goodwill is based on an estimate of discounted expected future cash flows of the reporting unit. The Company performed its most recent annual goodwill impairment test as of October 1, 2018, which resulted in no impairments.

Intangible Assets

Intangible assets are included in "site rental contracts and tenant relationships, net" and "other intangible assets, net" on the Company's consolidated balance sheet and predominately consist of the estimated fair value of the following items recorded in conjunction with acquisitions: (1) site rental contracts and tenant relationships, (2) below-market leases for land interest under the acquired communications infrastructure, or (3) other contractual rights such as trademarks. The site rental contracts and tenant relationships intangible assets are comprised of (1) the current term of the existing leases, (2) the expected exercise of the renewal provisions contained within the existing leases, which automatically occur under contractual provisions, or (3) any associated relationships that are expected to generate value following the expiration of all renewal periods under existing leases.

The useful lives of intangible assets are estimated based on the period over which the intangible asset is expected to benefit the Company and gives consideration to the expected useful life of other assets to which the useful life may relate. Amortization expense for intangible assets is computed using the straight-line method over the estimated useful life of each of the intangible assets. The useful life of the site rental contracts and tenant relationships intangible asset is limited by the maximum depreciable life of the communications infrastructure (20 years), as a result of the interdependency of the communications infrastructure and site rental leases. In contrast, the site rental contracts and tenant relationships are estimated to provide economic benefits for several decades because of the low rate of tenant cancellations and high rate of renewals experienced to date. Thus, while site rental contracts and tenant relationships are valued based upon the fair value, which includes assumptions regarding both (1) tenants' exercise of optional renewals contained in the acquired leases and (2) renewals of the acquired leases past the contractual term including exercisable options, the site rental contracts and tenant relationships are amortized over a period not to exceed 20 years as a result of the useful life being limited by the depreciable life of the communications infrastructure.

The carrying value of other intangible assets with finite useful lives will be reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the assets may not be recoverable. The Company has a dual grouping policy for purposes of determining the unit of account for testing impairment of the site rental contracts and tenant relationships intangible assets. First, the Company pools the site rental contracts and tenant relationships with the related communications infrastructure assets into portfolio groups for purposes of determining the unit of account for impairment testing. Second and separately, the Company evaluates the site rental contracts and tenant relationships by significant tenant or by tenant grouping for individually insignificant tenants, as appropriate. If the sum of the estimated future cash flows (undiscounted) expected to result from the use or eventual disposition of an asset is less than the carrying amount of the asset, an impairment loss is recognized. Measurement of an impairment loss is based on the fair value of the asset.

Deferred Credits

Deferred credits are included in "deferred revenues" and "other long-term liabilities" on the Company's consolidated balance sheet and consist of the estimated fair value of the following items recorded in conjunction with acquisitions: (1) below-market tenant leases for contractual interests with tenants on acquired communications infrastructure, which are amortized to site rental revenues and (2) above-market leases for land interests under the Company's communications infrastructure, which are amortized to site rental cost of operations.

Fair value for these deferred credits represents the difference between (1) the stated contractual payments to be made pursuant to the in-place lease and (2) management's estimate of fair market lease rates for each corresponding lease. Deferred credits are measured over a period equal to the estimated remaining economic lease term considering renewal provisions or economics associated with those renewal provisions, to the extent applicable. Deferred credits are amortized over their respected estimated lease terms at the time of acquisition.

Deferred Financing Costs

Third-party costs incurred to obtain financing, with the exception of costs incurred related to revolving lines of credit, are deferred and are included as a direct deduction from the carrying amount of the related debt liability in "debt and other long-term obligations" on the Company's consolidated balance sheet. Third party costs incurred to obtain financing through a revolving line of credit are deferred and are included in "long-term prepaid rent and other assets, net" on the Company's consolidated balance sheet.

Revenue Recognition

The Company generates site rental revenues from its core business by providing tenants with access, including space or capacity, to its shared communications infrastructure via long-term contracts in various forms, including lease, license, sublease and service agreements. Providing such access over the length of the contract term represents the Company's sole performance obligation under its site rental contracts.

Site rental revenues. Site rental revenues from the Company's contracts are recognized on a straight-line, ratable basis over the fixed, non-cancelable term of the relevant contract, which generally ranges from five to 15 years for wireless tenants and three to 20 years related to the Company's fiber solutions tenants (including from organizations with high-bandwidth and multi-location demands), regardless of whether the payments from the tenant are received in equal monthly amounts during the life of the contract. Certain of the Company's contracts contain fixed escalation clauses (such as fixed dollar or fixed percentage increases) or inflation-based escalation clauses (such as those tied to the consumer price index ("CPI")). If the payment terms call for fixed escalations, upfront payments, or rent free periods, the revenue is recognized on a straight-line basis over the fixed, non-cancelable term of the agreement. When calculating straight-line rental revenues, the Company considers all fixed elements of tenant contractual escalation provisions, even if such escalation provisions contain a variable element in addition to a minimum. The Company's assets related to straight-line site rental revenues include current amounts of $92 million and $86 million included in "other current assets" and non-current amounts of $1.4 billion and $1.3 billion included in "deferred site rental receivables" for the years ended December 31, 2018 and 2017, respectively. Amounts billed or received prior to being earned are deferred and reflected in "deferred revenues" and "other long-term liabilities." Amounts to which the Company has an unconditional right to payment, which are related to both satisfied or partially satisfied performance obligations, are recorded within "receivables, net" on the Company's consolidated balance sheet.

Services and other revenues. As part of the Company's effort to provide comprehensive communications infrastructure solutions, the Company offers certain services, primarily relating to its towers and small cells, predominately consisting of (1) site development services and (2) installation services. Upon contract commencement, the Company assesses its services to tenants and identifies performance obligations for each promise to provide a distinct service.

The Company may have multiple performance obligations for site development services, which primarily include: structural analysis, zoning, permitting and construction drawings. For each of the above performance obligations, services revenues are recognized at completion of the applicable performance obligation, which represents the point at which the Company believes it has transferred goods or services to the tenant. The revenue recognized is based on an allocation of the transaction price among the performance obligations in a respective contract based on estimated standalone selling price. The volume and mix of site development services may vary among contracts and may include a combination of some or all of the above performance obligations. Payments generally are due within 45 to 60 days and generally do not contain variable-consideration provisions. The Company has one performance obligation for installation services, which is satisfied at the time of the respective installation or augmentation.

Since performance obligations are typically satisfied prior to receiving payment from tenants, the unconditional right to payment is recorded within "receivables, net" on the Company’s consolidated balance sheet. The vast majority of the Company’s services relates to the Company’s Towers segment, and generally have a duration of one year or less.

Additional information on revenues. As of January 1, 2018 and December 31, 2018, $2.1 billion and $2.3 billion of unrecognized revenue, respectively, was reported in "deferred revenues" and "other non-current liabilities" on our consolidated balance sheet. During the year ended December 31, 2018, approximately $400 million of the January 1, 2018 unrecognized revenue balance was recognized as revenue.

See also "*Recently Adopted Accounting Pronouncements*" below for further discussion.

Costs of Operations

Approximately half of the Company's site rental costs of operations expenses consist of Towers ground lease expenses, and the remainder includes fiber access expenses, property taxes, repairs and maintenance expenses, employee compensation or related benefit costs, or utilities. Generally, the ground leases for land are specific to each site and are for an initial term of five years and are renewable for pre-determined periods. The Company also enters into term easements and ground leases in which it prepays the entire term in advance. Fiber access expenses primarily consist of leases of fiber assets and other access agreements to facilitate the Company's communications infrastructure.

Ground lease and fiber access expenses are recognized on a ratable basis, regardless of whether the payment terms require the Company to make payments annually, quarterly, monthly, or for the entire term in advance. Certain of the Company's ground lease and fiber access agreements contain fixed escalation clauses (such as fixed dollar or fixed percentage increases) or inflation-based escalation clauses (such as those tied to the CPI). If the payment terms include fixed escalation provisions, the effect of such increases is recognized on a straight-line basis. The Company calculates the straight-line expense using a time period that equals or exceeds the remaining depreciable life of the communications infrastructure asset. Further, when a tenant has exercisable renewal options that would compel the Company to exercise existing renewal options, the Company has straight-lined the expense over a sufficient portion of such renewals to coincide with the final termination of the tenant's renewal options. The Company's non-current liability related to straight-line expense is included in "other long-term liabilities" on the Company's consolidated balance sheet. The Company's assets related to prepaid agreements is included in "prepaid expenses" and "long-term prepaid rent and other assets, net" on the Company's consolidated balance sheet.

Services and other costs of operations predominately consist of third-party service providers such as contractors and professional services firms and, to a lesser extent, internal labor costs.

Acquisition and Integration Costs

Direct or incremental costs related to a business combination transaction are expensed as incurred. Such costs are predominately comprised of severance, retention bonuses payable to employees of an acquired enterprise, temporary employees to assist with the integration of the acquired operations, fees paid for services (such as consulting, accounting, legal, or engineering reviews), and any other costs directly associated with the transaction. These business combination costs are included in "acquisition and integration costs" on the Company's consolidated statement of operations and comprehensive income (loss). For those transactions accounted for as asset acquisitions, these costs are capitalized as part of the purchase price. See note 3 for a discussion of the Company's recent acquisitions.

Stock-Based Compensation

Restricted Stock Units. The Company records stock-based compensation expense only for those unvested restricted stock units ("RSUs") for which the requisite service is expected to be rendered. The cumulative effect of a change in the estimated number of RSUs for which the requisite service is expected to be or has been rendered is recognized in the period of the change in the estimate. To the extent that the requisite service is rendered, compensation cost for accounting purposes is not reversed; rather, it is recognized regardless of whether or not the awards vest. A discussion of the Company's valuation techniques and related assumptions and estimates used to measure the Company's stock-based compensation is as follows:

(Tabular dollars in millions, except per share amounts)

Valuation. The fair value of RSUs without market conditions is determined based on the number of shares relating to such RSUs and the quoted price of the Company's common stock at the date of grant. The Company estimates the fair value of RSUs with market conditions granted using a Monte Carlo simulation. The Company's determination of the fair value of RSUs with market conditions on the date of grant is affected by its common stock price as well as assumptions regarding a number of highly complex or subjective variables. The determination of fair value using a Monte Carlo simulation requires the input of subjective assumptions, and other reasonable assumptions could provide differing results.

Amortization Method. The Company amortizes the fair value of all RSUs on a straight-line basis for each separately vesting tranche of the award (graded vesting schedule) over the requisite service periods.

Expected Volatility. The Company estimates the volatility of its common stock at the date of grant based on the historical volatility of its common stock.

Expected Dividend Rate. The expected dividend rate at the date of grant is based on the then-current dividend yield.

Risk-Free Rate. The Company bases the risk-free rate on the implied yield currently available on U.S. Treasury issues with an equivalent remaining term equal to the expected life of the award.

Forfeitures. The Company uses historical data and management's judgment about the future employee turnover rates to estimate the number of shares for which the requisite service period will not be rendered.

Interest Expense and Amortization of Deferred Financing Costs

The components of interest expense and amortization of deferred financing costs are as follows:

	Years Ended December 31,		
	2018	2017	2016
Interest expense on debt obligations	$ 635	$ 582	$ 501
Amortization of deferred financing costs and adjustments on long-term debt, net	21	19	19
Capitalized interest	(15)	(12)	(7)
Other	1	2	2
Total	$ 642	$ 591	$ 515

The Company amortizes deferred financing costs, discounts, premiums, and purchase price adjustments on long-term debt over the estimated term of the related borrowing using the effective interest yield method. Deferred financing costs, discounts or purchase price adjustments are generally presented as a direct reduction to the related debt obligation on the Company's consolidated balance sheet.

Income Taxes

The Company operates as a REIT for U.S. federal income tax purposes. As a REIT, the Company is generally entitled to a deduction for dividends that it pays and therefore is not subject to U.S. federal corporate income tax on its taxable income that is currently distributed to its stockholders. The Company also may be subject to certain federal, state, local, and foreign taxes on its income and assets, including (1) taxes on any undistributed income, (2) taxes related to the TRSs, (3) franchise taxes, (4) property taxes, and (5) transfer taxes. In addition, the Company could in certain circumstances be required to pay an excise or penalty tax, which could be significant in amount, in order to utilize one or more relief provisions under the Internal Revenue Code of 1986, as amended ("Code"), to maintain qualification for taxation as a REIT.

Additionally, the Company has included in TRSs certain other assets and operations. Those TRS assets and operations will continue to be subject, as applicable, to federal and state corporate income taxes or to foreign taxes in the jurisdictions in which such assets and operations are located. The Company's foreign assets and operations (including its tower operations in Puerto Rico) are subject to foreign income taxes in the jurisdictions in which such assets and operations are located, regardless of whether they are included in a TRS or not. For its REIT conversion and certain subsequent acquisitions into the REIT, the Company will be subject to a federal corporate level tax rate (currently 21%) on any gain recognized from the sale of assets occurring within a specified period (generally 5 years) after the transfer date up to the amount of the built in gain that existed on the transfer date, which is based upon the fair market value of those assets in excess of the Company's tax basis on the transfer date. This gain can be offset by any remaining federal net operating loss carryforwards ("NOLs").

For the Company's TRSs, the Company accounts for income taxes using an asset and liability approach, which requires the recognition of deferred income tax assets and liabilities for the expected future tax consequences of events that have been recognized in the Company's financial statements or tax returns. Deferred income tax assets and liabilities are determined based on the temporary differences between the financial statement and tax bases of assets and liabilities using enacted tax rates. A valuation allowance is provided on deferred tax assets if it is determined that it is "more likely than not" that the asset will not be realized. The Company records a valuation allowance against deferred tax assets when it is "more likely than not" that some portion or all of the deferred tax asset will not be realized. The Company reviews the recoverability of deferred tax assets each quarter and based upon projections of future taxable income, reversing deferred tax liabilities or other known events that are expected to affect future taxable income, records a valuation allowance for assets that do not meet the "more likely than not" realization threshold. Valuation allowances may be reversed if related deferred tax assets are deemed realizable based upon changes in facts and circumstances that impact the recoverability of the asset.

The Company recognizes a tax position if it is "more likely than not" that it will be sustained upon examination. The tax position is measured at the largest amount that is greater than 50 percent likely of being realized upon ultimate settlement. The Company reports penalties and tax-related interest expense as a component of the benefit (provision) for income taxes. As of December 31, 2018 and 2017, the Company has not recorded any material penalties related to its income tax positions.

See note 10.

Per Share Information

Basic net income (loss) attributable to CCIC common stockholders, per common share excludes dilution and is computed by dividing net income (loss) attributable to CCIC common stockholders by the weighted-average number of common shares outstanding during the period. For the years ended December 31, 2018 and 2017 diluted net income (loss) attributable to CCIC common stockholders, per common share is computed by dividing net income (loss) attributable to CCIC common stockholders by the weighted-average number of common shares outstanding during the period plus any potential dilutive common share equivalents, including shares issuable upon (1) the vesting of RSUs as determined under the treasury stock method and (2) conversion of the Company's 6.875% Mandatory Convertible Preferred Stock, Series A, par value $0.01 per share ("6.875% Convertible Preferred Stock"), as determined under the if-converted method. For the year ended December 31, 2016, diluted income (loss) attributable to CCIC common stockholders, per common share is computed by dividing net income (loss) attributable to CCIC common stockholders by the weighted-average number of common shares outstanding during the period plus any potential dilutive common share equivalents, including shares issuable upon (1) the vesting of RSUs as determined under the treasury stock method and (2) conversion of the Company's then outstanding 4.50% Mandatory Convertible Preferred Stock, Series A, par value $0.01 per share ("4.50% Convertible Preferred Stock"), as determined under the if-converted method.

A reconciliation of the numerators and denominators of the basic and diluted per share computations is as follows:

	Years Ended December 31,		
	2018	2017	2016
Net income (loss) attributable to CCIC stockholders	$ 671	$ 445	$ 357
Dividends on preferred stock	(113)	(58)	(33)
Net income (loss) attributable to CCIC common stockholders for basic and diluted computations	$ 558	$ 387	$ 324
Weighted-average number of common shares outstanding (in millions):			
Basic weighted-average number of common stock outstanding	413	382	340
Effect of assumed dilution from potential issuance of common shares relating to RSUs	2	1	1
Diluted weighted-average number of common shares outstanding	415	383	341
Net income (loss) attributable to CCIC common stockholders, per common share:			
Basic	$ 1.35	$ 1.01	$ 0.95
Diluted	$ 1.34	$ 1.01	$ 0.95
Dividends/distributions declared per share of common stock	$ 4.28	$ 3.90	$ 3.61

For each of the years ended December 31, 2018 and 2017, 15 million common share equivalents related to the 6.875% Convertible Preferred Stock were excluded from the dilutive common shares because the impact of the conversion of such preferred stock would be anti-dilutive based on the Company's common stock price at the end of each respective year. See notes 11 and 12.

Fair Values

The Company's assets and liabilities recorded at fair value are categorized based upon a fair value hierarchy that ranks the quality and reliability of the information used to determine fair value. The three levels of the fair value hierarchy are (1) Level 1 — quoted prices (unadjusted) in active and accessible markets, (2) Level 2 — observable prices that are based on inputs not quoted in active markets but corroborated by market data, and (3) Level 3 — unobservable inputs and are not corroborated by market data. The Company evaluates fair value hierarchy level classifications quarterly, and transfers between levels are effective at the end of the quarterly period.

The fair value of cash and cash equivalents and restricted cash approximate the carrying value. The Company determines the fair value of its debt securities based on indicative quotes (that is non-binding quotes) from brokers that require judgment to interpret market information including implied credit spreads for similar borrowings on recent trades or bid/ask prices or quotes from active markets if applicable. Foreign currency swaps are valued at settlement amounts using observable exchange rates and, if material, reflect an adjustment for the Company's and contract counterparty's credit risk. There were no changes since December 31, 2017 in the Company's valuation techniques used to measure fair values. See note 9 for a further discussion of fair values.

Recently Adopted Accounting Pronouncements

In May 2014, the FASB released updated guidance regarding the recognition of revenue from contracts with customers not otherwise addressed by specific guidance (commonly referred to as "ASC 606" or "the revenue recognition standard"). The core principle of the guidance is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. To achieve that core principle, an entity should apply the following steps: (1) identify the contracts with the customer; (2) identify the performance obligations in the contract; (3) determine the contract price; (4) allocate the transaction price to the performance obligations in the contract; and (5) recognize revenue when (or as) the entity satisfies a performance obligation. This guidance was effective for the Company on January 1, 2018. This guidance was required to be applied, at the Company's election, either (1) retrospectively to each prior reporting period presented or (2) under the modified retrospective method, with the cumulative effect being recognized at the date of initial application.

Given the nature of the Company’s contracts with tenants, the Company’s pattern of revenue recognition was not impacted by the adoption of the revenue recognition standard. The Company adopted the revenue recognition standard under the modified retrospective method, and the Company's adoption of the revenue recognition standard did not result in any adjustment to the balance of dividends/distributions in excess of earnings as of January 1, 2018.

See "*Revenue Recognition*" above and note 4 for further discussion regarding the Company’s revenues.

In November 2016, the FASB issued new guidance which requires an entity's statement of cash flows to explain the change in restricted cash and restricted cash equivalents in addition to the change in cash and cash equivalents. This new guidance also requires an entity that includes cash, cash equivalents, restricted cash and restricted cash equivalents on multiple lines on its balance sheet to present a reconciliation of those line items between its statement of cash flows and its balance sheet. The Company adopted this guidance retrospectively, on January 1, 2018, and the impact of the new guidance is limited to certain changes in presentation on the consolidated statement of cash flows and certain disclosures. See note 16.

In January 2017, the FASB issued new guidance which clarifies the definition of a business in order to assist companies in evaluating whether transactions should be accounted for as acquisitions or disposals of assets or businesses. The Company adopted the guidance on January 1, 2018, and the adoption of this guidance did not have a material impact on its consolidated financial statements.

Recent Accounting Pronouncements Not Yet Adopted

In February 2016, the FASB issued new guidance on the recognition, measurement, presentation and disclosure of leases. The new guidance requires lessees to recognize a right-of-use asset and a lease liability, initially measured at the present value of the lease payments for all leases with a term greater than 12 months. The accounting for lessors remains largely unchanged from existing guidance.

(Tabular dollars in millions, except per share amounts)

This guidance was effective for, and adopted by, the Company as of January 1, 2019, and was required to be adopted using a modified retrospective approach, which after certain additional updates in July 2018, allowed the Company to apply the new guidance either (1) as of the beginning of the earliest period presented, or (2) as of the effective date (i.e., January 1, 2019), without adjusting the comparative periods.

The Company adopted the new guidance using a modified retrospective approach as of the effective date (i.e., January 1, 2019), without adjusting the comparative periods. The Company's adoption of the new guidance did not result in a cumulative-effect adjustment being recognized to the opening balance of retained earnings. The Company elected the package of practical expedients upon adoption and thus did not reassess the classification or lease term of leases existing prior to January 1, 2019.

When its first quarter 2019 results are reported, the Company expects that (1) the vast majority of its lessor and lessee arrangements will continue to be classified as operating leases under the new guidance; (2) this guidance will result in a lease liability as of March 31, 2019 ranging between $5 billion and $7 billion (which primarily consist of ground leases under the Company's towers and fiber-related leases) and a corresponding right-of-use asset; and (3) there will not be a material impact to its consolidated statement of operations and consolidated statement of cash flows. The Company is in the process of updating certain of its existing information technology systems for both the Towers and Fiber segments to integrate the new lease guidance requirements.

3. Acquisitions

2016 TDC Acquisition

In April 2016, the Company acquired Tower Development Corporation ("TDC"), a portfolio of approximately 330 towers, for approximately $461 million in cash ("TDC Acquisition"). The Company financed the acquisition with cash on hand, cash from borrowings under the Company's senior unsecured revolving credit facility ("2016 Revolver"), and cash from equity issuances under the 2015 ATM Program (see note 11). The final purchase price allocation was primarily comprised of tenant relationships of approximately $140 million, property and equipment of approximately $107 million, and goodwill of approximately $211 million.

2017 FiberNet Acquisition

On November 1, 2016, the Company announced that it had entered into a definitive agreement to acquire FPL FiberNet Holdings, LLC and certain other subsidiaries of NextEra Energy, Inc. (collectively, "FiberNet") for approximately $1.5 billion in cash, subject to certain limited adjustments ("FiberNet Acquisition"). FiberNet is a fiber services provider in Florida and Texas that, as of the agreement date, owned or had rights to approximately 11,500 route miles of fiber installed or under construction, inclusive of approximately 6,000 route miles in top metro markets. On January 17, 2017, the Company closed the FiberNet Acquisition, which was financed using proceeds from its November 2016 Common Stock Offering (as defined in note 11) and borrowings under the 2016 Revolver (see note 8).

The final purchase price allocation for the FiberNet Acquisition is shown below.

Final Purchase Price Allocation		
Current assets	$	52
Property and equipment		438
Goodwill[(a)]		778
Other intangible assets, net[(b)]		327
Other non-current assets		2
Current liabilities		(41)
Other non-current liabilities		(35)
Net assets acquired[(c)]	$	1,521

(a) The final purchase price allocation for the FiberNet Acquisition resulted in the recognition of goodwill based on:
- the Company's expectation to leverage the FiberNet fiber footprint to support new small cells and fiber solutions,
- the complementary nature of the FiberNet fiber to the Company's existing fiber assets and its location in top metro markets where the Company expects to see wireless carrier network investments,
- the Company's belief that the acquired fiber assets are well-positioned to benefit from the continued growth trends in the demand for data, and
- other intangibles not qualified for separate recognition, including the assembled workforce.

(b) Predominantly comprised of site rental contracts and tenant relationships.

(Tabular dollars in millions, except per share amounts)

(c) The vast majority of the assets have been included in the Company's REIT. As such, no deferred taxes were recorded in connection with the FiberNet Acquisition.

2017 Wilcon Acquisition

On April 17, 2017, the Company announced that it had entered into a definitive agreement to acquire Wilcon Holdings LLC ("Wilcon") from Pamlico Holdings and other unit holders of Wilcon for approximately $600 million in cash, subject to certain limited adjustments ("Wilcon Acquisition"). Wilcon is a fiber services provider that owns approximately 1,900 route miles of fiber, primarily in Los Angeles and San Diego. On June 26, 2017, the Company closed the Wilcon Acquisition, which was financed using proceeds from the May 2017 Common Stock Offering (as defined in note 11) and the 4.750% Senior Notes (as defined in note 8) offering.

The final purchase price of approximately $600 million was primarily comprised of other intangible assets (predominantly comprised of site rental contracts and tenant relationships) of approximately $140 million, property and equipment of approximately $150 million, goodwill of approximately $360 million, offset by deferred revenues of approximately $40 million.

The final purchase price allocation for the Wilcon Acquisition resulted in the recognition of goodwill based on (1) the Company's expectation to leverage the Wilcon fiber footprint to support new small cells and fiber solutions, (2) the complementary nature of the Wilcon fiber to the Company's existing fiber assets and its location primarily in Los Angeles and San Diego, where the Company expects to see wireless carrier network investments, (3) the Company's belief that the acquired fiber assets are well positioned to benefit from the continued growth trends in the demand for data, and (4) other intangibles not qualified for separate recognition, including the assembled workforce.

2017 Lightower Acquisition

On July 18, 2017, the Company announced that it had entered into a definitive agreement to acquire LTS Group Holdings LLC ("Lightower") from Berkshire Partners, Pamlico Capital and other investors for approximately $7.1 billion in cash, subject to certain limited adjustments ("Lightower Acquisition"). Lightower owns or has rights to approximately 32,000 route miles of fiber located primarily in top metro markets in the Northeast, including Boston, New York and Philadelphia. On November 1, 2017, the Company closed the Lightower Acquisition, which was financed using (1) cash on hand, including proceeds from the July 2017 Equity Offerings (as defined in note 11) and the August 2017 Senior Notes (as defined in note 8) offering, and (2) borrowings under the 2016 Revolver.

The final purchase price allocation for the Lightower Acquisition is shown below.

Final Purchase Price Allocation		
Current assets	$	99
Property and equipment		2,194
Goodwill[(a)]		3,171
Other intangible assets, net[(b)]		2,177
Other non-current assets		27
Current liabilities		(176)
Other non-current liabilities		(342)
Net assets acquired[(c)]	$	7,150

(a) The final purchase price allocation for the Lightower Acquisition resulted in the recognition of goodwill based on:
- the Company's expectation to leverage the Lightower fiber footprint to support new small cells and fiber solutions,
- the complementary nature of the Lightower fiber to the Company's existing fiber assets and its location where the Company expects to see wireless carrier network investments,
- the Company's belief that the acquired fiber assets are well-positioned to benefit from the continued growth trends in the demand for data, and
- other intangibles not qualified for separate recognition, including the assembled workforce.

(b) Predominantly comprised of site rental contracts and tenant relationships.
(c) The vast majority of the assets have been included in the Company's REIT. As such, no deferred taxes were recorded in connection with the Lightower Acquisition.

Actual and Pro Forma Financial Information

Net revenues and net income (loss) attributable to acquisitions completed during the year ended December 31, 2017 are included in the Company's consolidated statements of operations and comprehensive income (loss), since the respective date each acquisition was completed. For the year ended December 31, 2017, the FiberNet Acquisition, Wilcon Acquisition and Lightower Acquisition (collectively, "2017 Acquisitions") resulted in an increase to consolidated net revenues of $314 million.

(Tabular dollars in millions, except per share amounts)

The unaudited pro forma financial results for the years ended December 31, 2017 and 2016 combine the historical results of the Company, along with the historical results of the 2017 Acquisitions for the respective periods. The following table presents the unaudited pro forma consolidated results of operations of the Company as if each acquisition was completed as of January 1, 2016 for the periods presented below. The unaudited pro forma amounts are presented for illustrative purposes only and are not necessarily indicative of future consolidated results of operations.

	Twelve Months Ended December 31,	
	2017	2016
Net revenues	$ 5,050	$ 4,865
Income (loss) before income taxes	$ 541 (b)(c)	$ 367 (b)(c)(d)
Benefit (provision) for income taxes	$ (29) (a)	$ (21) (a)
Net income (loss)	$ 512 (b)(c)	$ 346 (b)(c)(d)
Basic net income (loss) attributable to CCIC common stockholders, per common share	$ 0.89 (c)(e)	$ 0.51 (c)(e)
Diluted net income (loss) attributable to CCIC common stockholders, per common share	$ 0.88 (c)(e)	$ 0.51 (c)(e)

(a) For the years ended December 31, 2017 and 2016, amounts are inclusive of pro forma adjustments to the benefit (provision) for income tax as a result of the Company's REIT status. The vast majority of the assets and related income from the FiberNet Acquisition, the Wilcon Acquisition, and the Lightower Acquisition are included in the Company's REIT. The remaining assets are included in the Company's TRS. For purposes of the unaudited pro forma financial results, an adjustment has been made to reflect the additional tax impact of the income related to the TRS assets.
(b) For the years ended December 31, 2017 and 2016, amounts are inclusive of pro forma adjustments to depreciation and amortization of $247 million and $316 million, respectively, related to property and equipment and intangibles recorded as a result of the 2017 Acquisitions.
(c) Pro forma amounts include the impact of the interest expense and common stock share issuances associated with the related debt and equity financings for the 2017 Acquisitions (see above and notes 8 and 11).
(d) Amounts are inclusive of a total of $120 million of Lightower stock-based compensation expense and acquisition and integration costs.
(e) Pro forma amounts include the impact of the preferred stock dividends related to the Mandatory Convertible Preferred Stock Offering (as defined in note 11) for the Lightower Acquisition (see above and note 11).

4. Revenues

The following table is a summary of the contracted amounts owed to the Company by tenants pursuant to site rental contracts in effect as of December 31, 2018. As of December 31, 2018, the weighted-average remaining term of tenant contracts is approximately five years, exclusive of renewals at the tenant's option.

	Years ending December 31,						
	2019	2020	2021	2022	2023	Thereafter	Total
Contracted amounts	$ 3,968	$ 3,761	$ 3,552	$ 3,317	$ 2,587	$ 6,229	$ 23,414

5. Property and Equipment

The major classes of property and equipment are as follows:

		As of December 31,	
	Estimated Useful Lives	2018	2017
Land[a]	—	$ 1,981	$ 1,859
Buildings	40 years	134	119
Communications infrastructure assets	1-20 years	18,709	17,184
Information technology assets and other	2-7 years	443	372
Construction in process	—	975	899
Total gross property and equipment		22,242	20,433
Less: accumulated depreciation		(8,566)	(7,500)
Total property and equipment, net		$ 13,676	$ 12,933

(a) Includes land owned in fee and perpetual easements.

(Tabular dollars in millions, except per share amounts)

Depreciation expense for the years ended December 31, 2018, 2017 and 2016 was $1.1 billion, $915 million and $833 million, respectively. Capital leases and associated leasehold improvements related to gross property and equipment, and accumulated depreciation was $4.4 billion and $1.9 billion, respectively, as of December 31, 2018. See notes 1 and 2, including discussion of the Company's prepaid master lease agreements.

6. Goodwill and Intangible Assets

Goodwill

The changes in the carrying value of goodwill for the years ended December 31, 2018 and December 31, 2017 were as follows:

Balance as of December 31, 2016	$	5,758
Additions due to FiberNet Acquisition[a]		778
Additions due to Wilcon Acquisition[a]		358
Additions due to Lightower Acquisition[a]		3,115
Adjustments due to other acquisitions, purchase price allocations and other, net		12
Balance as of December 31, 2017	$	10,021
Adjustments due to other acquisitions, purchase price allocations and other, net		57
Balance as of December 31, 2018	$	10,078

(a) The final purchase price allocations for the FiberNet Acquisition, Wilcon Acquisition and Lightower Acquisition resulted in the recognition of goodwill in the Fiber segment based on:
- the Company's expectation to leverage the FiberNet, Wilcon and Lightower fiber footprint to support new small cells and fiber solutions,
- the complementary nature of the FiberNet, Wilcon and Lightower fiber to the Company's existing fiber assets and its location where the Company expects to see wireless carrier network investments,
- the Company's belief that the acquired fiber assets are well-positioned to benefit from the continued growth trends in the demand for data, and
- other intangibles not qualified for separate recognition, including the assembled workforce. See note 3.

Intangibles

The following is a summary of the Company's intangible assets. See note 3 for further discussion of the Company's acquisitions.

	As of December 31, 2018						As of December 31, 2017					
	Gross Carrying Value[a]		Accumulated Amortization		Net Book Value		Gross Carrying Value		Accumulated Amortization		Net Book Value	
Site rental contracts and tenant relationships	$	7,787	$	(2,578)	$	5,209	$	7,782	$	(2,156)	$	5,626
Other intangible assets		494		(187)		307		504		(168)		336
Total	$	8,281	$	(2,765)	$	5,516	$	8,286	$	(2,324)	$	5,962

(a) During the year ended December 31, 2018, intangible assets additions (primarily site rental contracts and tenant relationships) from acquisitions had a weighted average amortization period of approximately 20 years.

Amortization expense related to intangible assets is classified as follows on the Company's consolidated statement of operations and comprehensive income (loss):

	For Years Ended December 31,					
Classification	2018		2017		2016	
Depreciation, amortization and accretion	$	428	$	314	$	265
Site rental costs of operations		17		18		19
Total amortization expense	$	445	$	332	$	284

(Tabular dollars in millions, except per share amounts)

The estimated annual amortization expense related to intangible assets (inclusive of those recorded as an increase to "site rental costs of operations") for the years ending December 31, 2019 to 2023 is as follows:

	Years Ending December 31,				
	2019	2020	2021	2022	2023
Estimated annual amortization	$ 445	$ 444	$ 444	$ 443	$ 443

7. Other Liabilities

Other long-term liabilities

The following is a summary of the components of "other long-term liabilities" as presented on the Company's consolidated balance sheet. See also note 2.

	December 31,	
	2018	2017
Deferred rental revenues	$ 1,267	$ 1,077
Deferred ground lease payable	603	560
Above market leases for land interests, net	181	202
Deferred credits, net	499	532
Asset retirement obligation	192	174
Deferred income tax liabilities	7	5
Other long-term liabilities	10	4
Total	$ 2,759	$ 2,554

Pursuant to its ground lease, easement and leased facility agreements, the Company has the obligation to perform certain asset retirement activities, including requirements upon contract termination to remove communications infrastructure or remediate the space upon which its communications infrastructure resides. Accretion expense related to liabilities for retirement obligations amounted to $14 million, $13 million and $11 million for the years ended December 31, 2018, 2017, and 2016, respectively. As of December 31, 2018 and 2017, liabilities for retirement obligations were $192 million and $174 million, respectively, representing the net present value of the estimated expected future cash outlay. As of December 31, 2018, the estimated undiscounted future cash outlay for asset retirement obligations was approximately $1.1 billion. See note 2.

For the years ended December 31, 2018, 2017 and 2016, the Company recorded $18 million, $19 million and $21 million, respectively, as a decrease to "site rental costs of operations" for the amortization of above-market leases for land interests under the Company's towers. The estimated amortization expense related to above-market leases for land interests under the Company's towers recorded to site rental costs of operations for the years ending December 31, 2019 to 2023 is as follows:

	Years Ending December 31,				
	2019	2020	2021	2022	2023
Above-market leases for land interests	$ 17	$ 16	$ 15	$ 14	$ 13

For the years ended December 31, 2018, 2017 and 2016, the Company recognized $69 million, $37 million and $34 million, respectively, in "site rental revenues" related to the amortization of below market tenant leases. The following table summarizes the estimated annual amounts related to below-market tenant leases expected to be amortized into site rental revenues for the years ending December 31, 2019 to 2023 are as follows:

	Years Ending December 31,				
	2019	2020	2021	2022	2023
Below-market tenant leases	$ 62	$ 55	$ 52	$ 47	$ 43

Other accrued liabilities

Other accrued liabilities included accrued payroll and other accrued compensation of $157 million and $141 million, respectively, as of December 31, 2018 and 2017.

(Tabular dollars in millions, except per share amounts)

8. Debt and Other Obligations

See note 18 for a discussion of the Company's issuance of the February 2019 Senior Notes (as defined in note 18) and the application of the net proceeds therefrom.

The table below sets forth the Company's debt and other obligations as of December 31, 2018.

	Original Issue Date	Contractual Maturity Date		Outstanding Balance as of December 31, 2018		Outstanding Balance as of December 31, 2017	Stated Interest Rate as of December 31, 2018 [(a)]
Tower Revenue Notes, Series 2010-3	Jan. 2010	Jan. 2040	(b)(c)	—		1,246	N/A
Tower Revenue Notes, Series 2010-6	Aug. 2010	Aug. 2040	(b)(c)	—		995	N/A
Tower Revenue Notes, Series 2015-1	May 2015	May 2042	(b)(c)	298		297	3.2%
Tower Revenue Notes, Series 2015-2	May 2015	May 2045	(b)(c)	693		692	3.7%
Tower Revenue Notes, Series 2018-1	July 2018	July 2043	(b)(c)	247		—	3.7%
Tower Revenue Notes, Series 2018-2	July 2018	July 2048	(b)(c)	742		—	4.2%
3.849% Secured Notes	Dec. 2012	Apr. 2023		994		993	3.9%
Secured Notes, Series 2009-1, Class A-1	Jul. 2009	Aug. 2019	(d)	12		32	6.3%
Secured Notes, Series 2009-1, Class A-2	Jul. 2009	Aug. 2029	(d)	70		70	9.0%
Capital leases and other obligations	Various	Various	(e)	227		227	Various
Total secured debt				$ 3,283		$ 4,552	
2016 Revolver	Jan. 2016	June 2023		1,075	(f)	980	3.8% (g)
2016 Term Loan A	Jan. 2016	June 2023		2,354		2,397	3.8% (g)
5.250% Senior Notes	Oct. 2012	Jan. 2023		1,641		1,639	5.3%
4.875% Senior Notes	Apr. 2014	Apr. 2022		844		842	4.9%
3.400% Senior Notes	Feb./May 2016	Feb. 2021		850		850	3.4%
4.450% Senior Notes	Feb. 2016	Feb. 2026		892		891	4.5%
3.700% Senior Notes	May 2016	June 2026		744		743	3.7%
2.250% Senior Notes	Sept. 2016	Sept. 2021		697		695	2.3%
4.000% Senior Notes	Feb. 2017	Mar. 2027		494		494	4.0%
4.750% Senior Notes	May 2017	May 2047		343		343	4.8%
3.200% Senior Notes	Aug. 2017	Sept. 2024		743		742	3.2%
3.650% Senior Notes	Aug. 2017	Sept. 2027		992		991	3.7%
3.150% Senior Notes	Jan. 2018	July 2023		742		—	3.2%
3.800% Senior Notes	Jan. 2018	Feb. 2028		988		—	3.8%
Total unsecured debt				$ 13,399		$ 11,607	
Total debt and other obligations				16,682		16,159	
Less: current maturities and short-term debt and other current obligations				107		115	
Non-current portion of long-term debt and other long-term obligations				$ 16,575		$ 16,044	

(a) Represents the weighted-average stated interest rate.
(b) The Tower Revenue Notes, Series 2010-3 ("January 2010 Tower Revenue Notes"), Tower Revenue Notes, Series 2010-6 ("August 2010 Tower Revenue Notes"), Tower Revenue Notes, Series 2015-1 and 2015-2 ("May 2015 Tower Revenue Notes") and Tower Revenue Notes, Series 2018-1 and 2018-2 ("July 2018 Tower Revenue Notes") are collectively referred to herein as "Tower Revenue Notes."
(c) If the respective series of Tower Revenue Notes are not paid in full on or prior to an applicable anticipated repayment date, then Excess Cash Flow (as defined in the indenture) of the issuers of such notes will be used to repay principal of the applicable series and class of the Tower Revenue Notes, and additional interest (of an additional approximately 5% per annum) will accrue on the respective Tower Revenue Notes. As of December 31, 2018, the Tower Revenue Notes have principal amounts of $300 million, $250 million, $700 million and $750 million, with anticipated repayment dates in 2022, 2023, 2025 and 2028, respectively.
(d) The Secured Notes, Series 2009-1, Class A-1 and Secured Notes, Series 2009-1, Class A-2 are collectively referred to herein as "2009 Securitized Notes."
(e) The Company's capital leases and other obligations relate to land, fiber, vehicles, and other assets and bear interest rates ranging up to 10% and mature in periods ranging from less than one year to approximately 30 years.
(f) As of December 31, 2018, the undrawn availability under the 2016 Revolver was $3.2 billion. See note 18.
(g) The 2016 Revolver and senior unsecured term loan A facility ("2016 Term Loan A") bear interest at a rate per annum equal to LIBOR plus a credit spread ranging from 1.000% to 1.750%, based on the Company's senior unsecured debt rating. The Company pays a commitment fee ranging from 0.125% to 0.350%, based on the Company's senior unsecured debt rating, per annum on the undrawn available amount under the 2016 Revolver.

The credit agreement governing the Company's 2016 Credit Facility contains financial maintenance covenants. The Company is currently in compliance with these financial maintenance covenants, and based upon current expectations, the Company believes it will continue to comply with its financial maintenance covenants. In addition, certain of the Company's debt agreements also contain restrictive covenants that place restrictions on CCIC or its subsidiaries and may limit the Company's ability to, among other things, incur additional debt and liens, purchase the Company's securities, make capital expenditures, dispose of assets, undertake transactions with affiliates, make other investments, pay dividends or distribute excess cash flow.

Bank Debt

In January 2016, the Company completed the 2016 Credit Facility, which was originally comprised of (1) a $2.5 billion 2016 Revolver maturing in January 2021, (2) a $2.0 billion 2016 Term Loan A maturing in January 2021 and (3) a $1.0 billion senior unsecured 364-day revolving credit facility ("364-Day Facility") maturing in January 2017. The Company used the net proceeds from the 2016 Credit Facility (1) to repay the then outstanding 2012 Credit Facility and (2) for general corporate purposes. In February 2016, the Company used a portion of the net proceeds from the February 2016 Senior Notes (as defined below) offering to repay in full all outstanding borrowings under the then outstanding 364-Day Facility.

In February 2017, the Company entered into an amendment to the 2016 Credit Facility to (1) incur additional term loans in an aggregate principal amount of $500 million and (2) extend the maturity of both the 2016 Term Loan A and the 2016 Revolver to January 2022.

In August 2017, the Company entered into an amendment to the 2016 Credit Facility to (1) increase the commitments under the 2016 Revolver by $1.0 billion, for total commitments of $3.5 billion and (2) extend the maturity of the Credit Facility to August 2022.

In June 2018, the Company entered into an amendment to the 2016 Credit Facility to (1) increase the commitments under the 2016 Revolver by $750 million for total commitments of $4.25 billion and (2) extend the maturity of the 2016 Credit Facility from August 2022 to June 2023.

Securitized Debt

The Tower Revenue Notes and the 2009 Securitized Notes (collectively, "Securitized Debt") are obligations of special purpose entities and their direct and indirect subsidiaries (each an "issuer"), all of which are wholly-owned, indirect subsidiaries of CCIC. The Tower Revenue Notes and 2009 Securitized Notes are governed by separate indentures. The May 2015 Tower Revenue Notes and July 2018 Tower Revenue Notes are governed by one indenture and consist of multiple series of notes, each with its own anticipated repayment date.

The net proceeds of the January 2010 Tower Revenue Notes and August 2010 Tower Revenue Notes were primarily used to repay the portion of the 2005 Tower Revenue Notes and 2006 Tower Revenue Notes not previously purchased. In April 2014, the Company utilized a portion of the net proceeds from the 4.875% Senior Notes (as defined below) offering to repay $300 million of the January 2010 Tower Revenue Notes which had an anticipated repayment date of January 2015.

The net proceeds of the May 2015 Tower Revenue Notes, together with proceeds received from the Company's sale of CCAL, were primarily used to (1) repay $250 million aggregate principal amount of August 2010 Tower Revenue Notes which had an anticipated repayment date of August 2015, (2) repay all of the then outstanding WCP Secured Wireless Site Contracts Revenue Notes, Series 2010-1 ("WCP Securitized Notes"), (3) repay portions of outstanding borrowings under the 2012 Credit Facility and (4) pay related fees and expenses.

In July 2018, the Company issued $1.0 billion aggregate principal amount of Senior Secured Tower Revenue Notes ("July 2018 Tower Revenue Notes"), which were issued pursuant to the existing indenture and have similar terms and security as the Company's existing Tower Revenue Notes. The July 2018 Tower Revenue Notes consist of (1) $250 million aggregate principal amount of 3.720% senior secured tower revenue notes ("3.72% Notes") with an anticipated repayment date of July 2023 and a final maturity of July 2043 and (2) $750 million aggregate principal amount of 4.241% senior secured tower revenue notes ("4.241% Notes") with an anticipated repayment date of July 2028 and a final maturity of July 2048. The Company used the net proceeds of the July 2018 Tower Revenue Notes, together with cash on hand, to repay all of the previously outstanding Tower Revenue Notes, Series 2010-6 and to pay related fees and expenses. In addition to the July 2018 Tower Revenue Notes described above, in connection with Exchange Act risk retention requirements ("Risk Retention Rules"), an indirect subsidiary of the Company issued and a majority-owned affiliate of the Company purchased approximately $53 million of the Senior Secured Tower Revenue Notes, Series 2018-1, Class R-2028 to retain an eligible horizontal residual interest (as defined in the Risk Retention Rules) in an amount equal to at least 5% of the fair value of the July 2018 Tower Revenue Notes.

The Securitized Debt is paid solely from the cash flows generated by the operation of the towers held directly and indirectly by the issuers of the respective Securitized Debt. The Securitized Debt is secured by, among other things, (1) a security interest in substantially all of the applicable issuers' assignable personal property, (2) a pledge of the equity interests in each applicable issuer and (3) a security interest in the applicable issuers' leases with tenants to lease tower space (space licenses). The governing instruments of two indirect subsidiaries ("Crown Atlantic" and "Crown GT") of the issuers of the Tower Revenue Notes generally prevent them from issuing debt and granting liens on their assets without the approval of a subsidiary of Verizon Communications. Consequently, while distributions paid by Crown Atlantic and Crown GT will service the Tower Revenue Notes, the Tower Revenue Notes are not obligations of, nor are the Tower Revenue Notes secured by the cash flows or any other assets of, Crown Atlantic and Crown GT. As of December 31, 2018, the Securitized Debt was collateralized with personal property and equipment with an aggregate net book value of approximately $1.0 billion, exclusive of Crown Atlantic and Crown GT personal property and equipment.

The excess cash flows from the issuers of the Securitized Debt, after the payment of principal, interest, reserves, expenses and management fees, are distributed to the Company in accordance with the terms of the indentures. If the Debt Service Coverage Ratio ("DSCR") (as defined in the applicable governing loan agreement) as of the end of any calendar quarter falls to a certain level, then all excess cash flow of the issuers of the applicable debt instrument will be deposited into a reserve account instead of being released to the Company. The funds in the reserve account will not be released to the Company until the DSCR exceeds a certain level for two consecutive calendar quarters. If the DSCR falls below a certain level as of the end of any calendar quarter, then all cash on deposit in the reserve account along with future excess cash flows of the issuers will be applied to prepay the debt with applicable prepayment consideration.

The Company may repay the May 2015 Tower Revenue Notes or the 2009 Securitized Notes in whole or in part at any time after the second anniversary of the applicable issuance date and the July 2018 Tower Revenue Notes from the date of issuance, provided in each case that such prepayment is accompanied by any applicable prepayment consideration. The Securitized Debt has covenants and restrictions customary for rated securitizations, including provisions prohibiting the issuers from incurring additional indebtedness or further encumbering their assets.

Bonds—Senior Notes

In January 2018, the Company issued $750 million aggregate principal amount of 3.150% senior unsecured notes due July 2023 and $1.0 billion aggregate principal amount of 3.800% senior unsecured notes due February 2028 (collectively, "January 2018 Senior Notes"). The Company used the net proceeds of the January 2018 Senior Notes offering to repay (1) in full the January 2010 Tower Revenue Notes and (2) a portion of the outstanding borrowings under the 2016 Revolver.

In February 2017, the Company issued $500 million aggregate principal amount of 4.000% senior unsecured notes due March 2027 ("4.000% Senior Notes"). The Company used the net proceeds from the 4.000% Senior Notes offering to repay a portion of the outstanding borrowings under the 2016 Revolver.

In May 2017, the Company issued $350 million aggregate principal amount of 4.750% senior unsecured notes due May 2047 ("4.750% Senior Notes"). The Company used the net proceeds from the 4.750% Senior Notes offering to partially fund the Wilcon Acquisition and to repay a portion of the outstanding borrowings under the 2016 Revolver.

In August 2017, the Company issued $1.75 billion aggregate principal amount of senior unsecured notes ("August 2017 Senior Notes"), which consisted of (1) $750 million aggregate principal amount of 3.200% senior unsecured notes due September 2024 ("3.200% Senior Notes") and (2) $1.0 billion aggregate principal amount of 3.650% senior unsecured notes due September 2027 ("3.650% Senior Notes"). The Company used the net proceeds from the August 2017 Senior Notes offering to partially fund the Lightower Acquisition and pay related fees and expenses.

In February 2016, the Company issued $1.5 billion aggregate principal amount of senior unsecured notes ("February 2016 Senior Notes"), which consisted of (1) $600 million aggregate principal amount of 3.400% senior notes due February 2021 ("3.400% Senior Notes") and (2) $900 million aggregate principal amount of 4.450% senior unsecured notes due February 2026 ("4.450% Senior Notes"). The Company used the net proceeds from the February 2016 Senior Notes offering, together with cash on hand, to (1) repay in full all outstanding borrowings under the then outstanding 364-Day Facility and (2) repay $500 million of outstanding borrowings under the 2016 Revolver.

In May 2016, the Company issued $1.0 billion aggregate principal amount of senior unsecured notes ("May 2016 Senior Notes"), which consisted of (1) $250 million aggregate principal amount of additional 3.400% Senior Notes pursuant to the same indenture as the 3.400% Senior Notes issued in the February 2016 Senior Notes offering and (2) $750 million aggregate principal amount of 3.700% senior unsecured notes due June 2026 ("3.700% Senior Notes"). The Company used the net proceeds from the May 2016 Senior Notes offering to repay in full the Tower Revenue Notes, Series 2010-2 and Series 2010-5, each issued by certain of its subsidiaries, and to repay a portion of the outstanding borrowings under the 2016 Revolver.

In September 2016, the Company issued $700 million aggregate principal amount of 2.250% senior unsecured notes ("2.250% Senior Notes") due September 2021. The Company used the net proceeds from the 2.250% Senior Notes offering to (1) repay $500 million aggregate principal amount of 2.381% secured notes due 2017 ("2.381% Secured Notes") issued by certain of its subsidiaries and (2) repay a portion of the outstanding borrowings under the 2016 Revolver.

In April 2014, the Company issued $850 million aggregate principal amount of 4.875% senior unsecured notes due April 2022 ("4.875% Senior Notes"). The net proceeds from the offering were approximately $839 million, after the deduction of associated fees. The Company utilized the net proceeds from the 4.875% Senior Notes offering (1) to repay $300 million of the January 2010 Tower Revenue Notes with an anticipated repayment date of January 2015 and (2) to redeem all of the then outstanding 7.125% senior unsecured notes due 2019.

In October 2012, the Company issued $1.65 billion aggregate principal amount of 5.250% senior unsecured notes due 2023 ("5.250% Senior Notes"). The Company used the net proceeds from the 5.250% Senior Notes offering to partially fund the T-Mobile Acquisition.

Each of the February 2016 Senior Notes, May 2016 Senior Notes, 2.250% Senior Notes, 4.875% Senior Notes, 5.250% Senior Notes, 4.000% Senior Notes, 4.750% Senior Notes, August 2017 Senior Notes and January 2018 Senior Notes (collectively, "Senior Notes") are senior unsecured obligations of the Company and rank equally with all of the Company's existing and future senior unsecured indebtedness, including obligations under the 2016 Credit Facility, and senior to all of the Company's future subordinated indebtedness. The Senior Notes are structurally subordinated to all existing and future liabilities and obligations of the Company's subsidiaries. The Company's subsidiaries are not guarantors of the Senior Notes.

CCIC may redeem any of the Senior Notes in whole or in part at any time at a price equal to 100% of the principal amount to be redeemed, plus a make whole premium, if applicable, and accrued and unpaid interest, if any, to the date of redemption.

Bonds—Secured Notes

In December 2012, the Company issued $1.0 billion aggregate principal amount of 3.849% secured notes due 2023 ("3.849% Secured Notes"). The 2012 Secured Notes were issued and are guaranteed by the same subsidiaries of CCIC that had previously issued and guaranteed the 7.750% senior unsecured notes due 2017 ("7.750% Secured Notes"). The 3.849% Secured Notes are secured by a pledge of the equity interests of such subsidiaries. The 3.849% Secured Notes are not guaranteed by and are not obligations of CCIC or any of its subsidiaries other than the issuers and guarantors of the 3.849% Secured Notes. The 3.849% Secured Notes will be paid solely from the cash flows generated from operations of the towers held directly and indirectly by the issuers and the guarantors of such notes. The Company used the net proceeds from the issuance of the 3.849% Secured Notes to repurchase and redeem the then outstanding 7.750% Secured Notes and a portion of the then outstanding 9.000% senior notes due 2011. The 3.849% Secured Notes may be redeemed at any time at a price equal to 100% of the principal amount, plus a make whole premium, and accrued and unpaid interest, if any to the redemption date.

Previously Outstanding Indebtedness

See above for a discussion of the Company's recent redemptions and repayments of debt.

(Tabular dollars in millions, except per share amounts)

Contractual Maturities

The following are the scheduled contractual maturities of the total debt or other long-term obligations outstanding at December 31, 2018. These maturities reflect contractual maturity dates and do not consider the principal payments that will commence following the anticipated repayment dates on the Tower Revenue Notes. If the Tower Revenue Notes are not paid in full on or prior to their respective anticipated repayment dates, as applicable, then the Excess Cash Flow (as defined in the indenture) of the issuers of such notes will be used to repay principal of the applicable series and class of the Tower Revenue Notes and additional interest (of an additional approximately 5% per annum) will accrue on the Tower Revenue Notes.

	Years Ending December 31,								
	2019	2020	2021	2022	2023	Thereafter	Total Cash Obligations	Unamortized Adjustments, Net	Total Debt and Other Obligations Outstanding
Scheduled contractual maturities	$ 107	$ 142	$ 1,702	$ 1,087	$ 6,363	$ 7,390	$ 16,791	$ (109)	$ 16,682

Debt Purchases and Redemptions

The following is a summary of the purchases and redemptions of debt during the years ended December 31, 2018, 2017 and 2016.

	Year Ending December 31, 2018		
	Principal Amount	Cash Paid[(a)]	Gains (losses)[(b)]
Tower Revenue Notes, Series 2010-3	$ 1,250	$ 1,318	$ (71)
2016 Term Loan A	—	—	(3)
Tower Revenues Notes, Series 2010-6	1,000	1,028	(32)
Total	$ 2,250	$ 2,346	$ (106)

(a) Exclusive of accrued interest.
(b) Inclusive of the write off of the respective deferred financing costs.

	Year Ending December 31, 2017		
	Principal Amount	Cash Paid	Gains (losses)[(a)]
2016 Term Loan A	$ —	$ —	$ (4)
Total	$ —	$ —	$ (4)

(a) The losses related to write off of deferred financing costs.

	Year Ending December 31, 2016		
	Principal Amount	Cash Paid[(a)]	Gains (losses)[(b)]
Revolving Credit Facility under 2012 Credit Facility	$ —	$ —	$ (2)
Tranche A Term Loans under 2012 Credit Facility	629	629	(2)
Tranche B Term Loans under 2012 Credit Facility	2,247	2,247	(27)
Tower Revenue Notes, Series 2010-2	350	353	(3)
Tower Revenue Notes, Series 2010-5	300	307	(8)
2.381% Secured Notes	500	509	(10)
Total	$ 4,026	$ 4,045	$ (52)

(a) Exclusive of accrued interest.
(b) Inclusive of the write off of the respective deferred financing costs.

(Tabular dollars in millions, except per share amounts)

9. Fair Value Disclosures

The following table shows the estimated fair values of the Company's financial instruments, along with the carrying amounts of the related assets (liabilities). See also note 2.

		December 31, 2018		December 31, 2017	
	Level in Fair Value Hierarchy	Carrying Amount	Fair Value	Carrying Amount	Fair Value
Assets:					
Cash and cash equivalents	1	$ 277	$ 277	$ 314	$ 314
Restricted cash	1	136	136	126	126
Liabilities:					
Debt and other obligations	2	$ 16,682	$ 16,562	$ 16,159	$ 16,644

10. Income Taxes

Income (loss) from continuing operations before income taxes by geographic area is as follows:

	Years Ended December 31,		
	2018	2017	2016
Domestic	$ 667	$ 451	$ 349
Foreign[(a)]	23	20	25
Total	$ 690	$ 471	$ 374

(a) Inclusive of income (loss) before income taxes from Puerto Rico.

The benefit (provision) for income taxes consists of the following:

	Years Ended December 31,		
	2018	2017	2016
Current:			
Federal	$ (5)	$ (3)	$ —
Foreign	(7)	(6)	(7)
State	(5)	(2)	(1)
Total current	(17)	(11)	(8)
Deferred:			
Federal	—	(18)	(8)
Foreign	(2)	3	(1)
Total deferred	(2)	(15)	(9)
Total tax benefit (provision)	$ (19)	$ (26)	$ (17)

A reconciliation between the benefit (provision) for income taxes and the amount computed by applying the federal statutory income tax rate to the income (loss) before income taxes is as follows:

	Years Ended December 31,		
	2018	2017	2016
Benefit (provision) for income taxes at statutory rate	$ (145)	$ (165)	$ (131)
Tax effect of foreign income (losses)	1	—	1
Tax adjustment related to REIT operations	138	159	121
State tax (provision) benefit, net of federal	(4)	(2)	(1)
Foreign tax	(9)	(3)	(7)
Effects of tax law change[(a)]	—	(15)	—
Total	$ (19)	$ (26)	$ (17)

(a) Pursuant to the Tax Cuts and Jobs Act, which was signed into law in December 2017, the Company was required to write down its net federal deferred tax asset in the amount of $17 million as a result of the reduction in the federal corporate tax rate offset by a benefit of $2 million related to the refund of the Company's alternative minimum tax credit carryforward.

(Tabular dollars in millions, except per share amounts)

The components of the net deferred income tax assets and liabilities are as follows:

	December 31,	
	2018	2017
Deferred income tax liabilities:		
Property and equipment	$ 5	$ 5
Deferred site rental receivable	7	7
Total deferred income tax liabilities	12	12
Deferred income tax assets:		
Intangible assets	4	5
Net operating loss carryforwards[(a)]	18	21
Deferred ground lease payable	2	2
Accrued liabilities	5	5
Other	3	1
Valuation allowances	(1)	(1)
Total deferred income tax assets, net	31	33
Net deferred income tax asset (liabilities)	$ 19	$ 21

(a) Balance results from the Company's foreign NOLs. Due to the Company's REIT status, no federal or state NOLs result in the Company recording a deferred income tax asset. See further discussion surrounding the Company's NOL balances below.

The Company operates as a REIT for U.S. federal income tax purposes.

The components of the net deferred income tax assets (liabilities) are as follows:

	December 31, 2018			December 31, 2017		
Classification	Gross	Valuation Allowance	Net	Gross	Valuation Allowance	Net
Federal	$ 25	$ —	$ 25	$ 25	$ —	$ 25
State	1	—	1	1	—	1
Foreign	(6)	(1)	(7)	(4)	(1)	(5)
Total	$ 20	$ (1)	$ 19	$ 22	$ (1)	$ 21

At December 31, 2018, the Company had U.S. federal and state NOLs of approximately $1.5 billion and $0.6 billion, respectively, which are available to offset future taxable income. These amounts include approximately $237 million of losses related to stock-based compensation. The Company also has foreign NOLs of $50 million. If not utilized, the Company's U.S. federal NOLs expire starting in 2025 and ending in 2036, the state NOLs expire starting in 2019 and ending in 2036, and the foreign NOLs expire starting in 2022 and ending in 2037. The utilization of the NOLs is subject to certain limitations. The Company's U.S. federal and state income tax returns generally remain open to examination by taxing authorities until three years after the applicable NOLs have been used or expired. The remaining valuation allowance relates to certain foreign net deferred tax assets (primarily NOLs).

As of December 31, 2018, there were no unrecognized tax benefits that would impact the effective tax rate, if recognized.

From time to time, the Company is subject to examinations by various tax authorities in jurisdictions in which the Company has business operations. At this time, the Company is not subject to an Internal Revenue Service examination. The Australian Taxation Office is conducting an audit of the tax consequences for Australian tax purposes of the Company's sale of CCAL. The Company regularly assesses the likelihood of additional assessments in each of the tax jurisdictions. The Company has no uncertain tax positions as of December 31, 2018. Additionally, the Company does not believe assessments, if any, arising from current or future examination or audits will have a material effect on the Company's financial statements.

As of December 31, 2018, the Company's deferred tax assets are included in "long-term prepaid rent and other assets, net" and the Company's deferred tax liabilities are included in "other long-term liabilities" on the Company's consolidated balance sheet.

11. Equity

2015 "At-the-Market" Stock Offering Program

The Company previously maintained an "at-the-market" stock offering program through which it had the right to issue and sell shares of its common stock having an aggregate gross sales price of up to $500 million to or through sales agents ("2015 ATM Program"). The Company sold shares of its common stock under the 2015 ATM Program generating aggregate gross proceeds of approximately $350 million. The Company terminated the 2015 ATM Program in March 2018 with shares of its common stock having an aggregate offering price of approximately $150 million remaining unsold.

2018 "At-The-Market" Stock Offering Program

In April 2018, the Company established a new "at-the-market" stock offering program through which it may issue and sell shares of its common stock having an aggregate gross sales price of up to $750 million ("2018 ATM Program"). Sales under the 2018 ATM Program may be made by means of ordinary brokers' transactions on the NYSE or otherwise at market prices prevailing at the time of sale, at prices related to prevailing market prices or, subject to our specific instructions, at negotiated prices. The Company intends to use the net proceeds from any sales under the 2018 ATM Program for general corporate purposes, which (1) may include the funding of future acquisitions or investments or (2) the repayment or repurchase of any outstanding indebtedness. As of December 31, 2018, the Company had $750 million of gross sales of common stock availability remaining under the 2018 ATM Program.

May 2017 Common Stock Offering

On May 1, 2017, the Company completed an offering of 4.75 million shares of its common stock, which generated net proceeds of approximately $442 million ("May 2017 Common Stock Offering"). The Company used the net proceeds of the May 2017 Common Stock Offering to partially fund the Wilcon Acquisition.

July 2017 Equity Offerings

On July 26, 2017, the Company completed an offering of 40.15 million shares of common stock, including certain additional shares sold pursuant to the underwriters' option, which generated net proceeds of approximately $3.8 billion ("July 2017 Common Stock Offering"). The Company used the net proceeds of the July 2017 Common Stock Offering to partially fund the Lightower Acquisition and pay related fees and expenses.

On July 26, 2017, the Company completed an offering of 1.65 million shares of the Company's 6.875% Convertible Preferred Stock, at $1,000 per share, including certain additional shares sold pursuant to the underwriters' option, which generated net proceeds of approximately $1.6 billion ("Mandatory Convertible Preferred Stock Offering"). The Company used the net proceeds from the Mandatory Convertible Preferred Stock Offering to partially fund the Lightower Acquisition and pay related fees and expenses.

The holders of the 6.875% Convertible Preferred Stock are entitled to receive cumulative dividends, when and if declared by the Company's board of directors, at the rate of 6.875% on the liquidation preference of $1,000 per share. The dividends may be paid in cash or, subject to certain limitations, in shares of the Company's common stock or any combination of cash and shares of common stock on February 1, May 1, August 1 and November 1 of each year, commencing on November 1, 2017 and to, and including, August 1, 2020. The terms of the 6.875% Convertible Preferred Stock provide that, unless accumulated dividends have been paid or set aside for payment on all outstanding shares of 6.875% Convertible Preferred Stock for all past dividend periods, no dividends may be declared or paid on common stock.

Unless converted earlier, each outstanding share of the 6.875% Convertible Preferred Stock will automatically convert into shares of the Company's common stock on August 1, 2020 into between 8.7260 and 10.4712 shares of the Company's common stock, depending on the applicable market value of the common stock and subject to certain anti-dilution adjustments. At any time prior to August 1, 2020, holders of the 6.875% Convertible Preferred Stock may elect to convert all or a portion of their shares into common stock at the minimum conversion rate of 8.7260, subject to certain anti-dilution adjustments.

The July 2017 Common Stock Offering and Mandatory Convertible Preferred Stock Offering are collectively referred to herein as "July 2017 Equity Offerings."

March 2018 Common Stock Offering

In March 2018, the Company completed an offering of 8 million shares of its common stock, which generated net proceeds of $841 million ("March 2018 Equity Financing"). The Company used the net proceeds from the March 2018 Equity Financing for general corporate purposes, including repayment of outstanding indebtedness.

Declaration and Payment of Dividends

During the year ended December 31, 2018, the following dividends were declared or paid:

Equity Type	Declaration Date	Record Date	Payment Date	Dividends Per Share	Aggregate Payment Amount (In millions)
Common Stock	February 21, 2018	March 16, 2018	March 30, 2018	$ 1.05	$ 439 (a)
Common Stock	May 17, 2018	June 15, 2018	June 29, 2018	$ 1.05	$ 438 (a)
Common Stock	August 2, 2018	September 14, 2018	September 28, 2018	$ 1.05	$ 438 (a)
Common Stock	October 15, 2018	December 14, 2018	December 31, 2018	$ 1.125	$ 467 (a)
6.875% Convertible Preferred Stock	December 15, 2017	January 15, 2018	February 1, 2018	$ 17.1875	$ 28
6.875% Convertible Preferred Stock	March 19, 2018	April 15, 2018	May 1, 2018	$ 17.1875	$ 28
6.875% Convertible Preferred Stock	June 22, 2018	July 15, 2018	August 1, 2018	$ 17.1875	$ 28
6.875% Convertible Preferred Stock	September 19, 2018	October 15, 2018	November 1, 2018	$ 17.1875	$ 28
6.875% Convertible Preferred Stock	December 11, 2018	January 15, 2019	February 1, 2019	$ 17.1875	$ 28

(a) Inclusive of dividends accrued for holders of unvested RSUs, which will be paid when and if the RSUs vest.

See note 18 for further discussion of common stock dividends.

Tax Treatment of Dividends

The following table summarizes, for income tax purposes, the nature of dividends paid during 2018 on the Company's common stock and 6.875% Convertible Preferred Stock.

Equity Type	Payment Date	Cash Distribution (per share)	Ordinary Taxable Dividend (per share)	Qualified Taxable Dividend (per share)(a)	Section 199A Dividend (per share)	Non-Taxable Distribution (per share)
Common Stock	March 30, 2018	$ 1.05	$ 0.689	$ 0.005	$ 0.684	$ 0.361
Common Stock	June 29, 2018	$ 1.05	$ 0.689	$ 0.005	$ 0.684	$ 0.361
Common Stock	September 28, 2018	$ 1.05	$ 0.689	$ 0.005	$ 0.684	$ 0.361
Common Stock	December 31, 2018	$ 1.125	$ 0.738	$ 0.005	$ 0.733	$ 0.387
6.875% Convertible Preferred Stock	February 1, 2018	$ 17.1875	$ 17.1875	$ 0.1269	$ 17.0606	$ —
6.875% Convertible Preferred Stock	May 1, 2018	$ 17.1875	$ 17.1875	$ 0.1269	$ 17.0606	$ —
6.875% Convertible Preferred Stock	August 1, 2018	$ 17.1875	$ 17.1875	$ 0.1269	$ 17.0606	$ —
6.875% Convertible Preferred Stock	November 1, 2018	$ 17.1875	$ 17.1875	$ 0.1269	$ 17.0606	$ —

(a) Qualified taxable dividend and section 199A dividend amounts are included in ordinary taxable dividend amounts.

Purchases of the Company's Common Stock

During each of the years ended December 31, 2018, 2017 and 2016, the Company purchased 0.3 million shares of common stock utilizing $34 million, $23 million and $25 million in cash, respectively.

12. Stock-based Compensation

Stock Compensation Plans

Pursuant to a stockholder approved plan, the Company has and is permitted to grant stock-based awards to certain employees, consultants or non-employee directors of the Company and its subsidiaries or affiliates. As of December 31, 2018, the Company has 10 million shares available for future issuance pursuant to its 2013 Long-Term Incentive Plan ("LTI Plan"). Of these shares remaining available for future issuance, approximately 3 million may be issued pursuant to outstanding RSUs granted under the LTI Plan.

Restricted Stock Units

The Company issues RSUs to certain executives and employees; each RSU represents a contingent right to receive one share of common stock subject to satisfaction of the applicable vesting terms. The RSUs granted to certain executives and employees include (1) annual performance awards that often include provisions for forfeiture by the employee if certain market performance of the Company's common stock is not achieved, (2) new hire or promotional awards that generally contain only service conditions, or (3) other awards related to specific business initiatives or compensation objectives including retention and merger integration. Generally, such awards vest over periods of approximately 3 years.

The following is a summary of the RSU activity during the year ended December 31, 2018.

	RSUs (In millions)
Outstanding at the beginning of year	3
Granted	1
Vested	(1)
Forfeited	—
Outstanding at end of year	3

The Company granted approximately 1 million RSUs to the Company's executives and certain other employees for each of the years ended December 31, 2018, 2017 and 2016. The weighted-average grant-date fair value per share of the grants for the years ended December 31, 2018, 2017 and 2016 was $91.52, $73.52 and $68.53 per share, respectively. The weighted-average requisite service period for the RSUs granted during 2018 was approximately 2.4 years.

The approximately 1 million RSUs granted during the year ended December 31, 2018, were comprised of (1) approximately 0.8 million RSUs that time vest over a three-year period and (2) approximately 0.4 million RSUs to the Company's executives and certain other employees which may vest on the third anniversary of the grant date based upon (1) the Company's total shareholder returns (defined as share price appreciation plus the value of dividends paid during the performance period) and (2) the Company's total shareholder return compared to that of the companies in the Standard & Poor's 500 Index. Certain RSU agreements contain provisions that result in forfeiture by the employee of any unvested shares in the event that the Company's common stock does not achieve certain performance targets. To the extent that the requisite service is rendered, compensation cost for accounting purposes is not reversed; rather, it is recognized regardless of whether or not the market performance target is achieved.

The following table summarizes the assumptions used in the Monte Carlo simulation to determine the grant-date fair value for the awards granted during the years ended December 31, 2018, 2017 and 2016, respectively, with market conditions.

	Years Ended December 31,		
	2018	2017	2016
Risk-free rate	2.4%	1.5%	0.9%
Expected volatility	18%	18%	19%
Expected dividend rate	3.8%	4.4%	4.2%

The Company recognized aggregate stock-based compensation expense related to RSUs of $90 million, $89 million and $76 million for the years ended December 31, 2018, 2017 and 2016, respectively. The aggregate unrecognized compensation (net of estimated forfeitures) related to RSUs at December 31, 2018 is $82 million and is estimated to be recognized over a weighted-average period of less than one year.

The following table is a summary of the awards vested during the years ended December 31, 2018, 2017 and 2016.

Years Ended December 31,	Total Shares Vested	Fair Value on Vesting Date
	(In millions of shares)	
2018	1.0	$ 107
2017	0.7	67
2016	0.8	71

Stock-based Compensation

The following table discloses the components of stock-based compensation expense.

	Years Ended December 31,		
	2018	2017	2016
Stock-based compensation expense:			
Site rental costs of operations	$ 17	$ 15	$ 14
Services and other costs of operations	8	5	8
Selling, general and administrative expenses	83	76	75
Total stock-based compensation	$ 108	$ 96	$ 97

13. Commitments and Contingencies

The Company is involved in various claims, lawsuits, or proceedings arising in the ordinary course of business. While there are uncertainties inherent in the ultimate outcome of such matters and it is impossible to presently determine the ultimate costs or losses that may be incurred, if any, management believes the resolution of such uncertainties and the incurrence of such costs should not have a material adverse effect on the Company's consolidated financial position or results of operations. Additionally, the Company and certain of its subsidiaries are contingently liable for commitments or performance guarantees arising in the ordinary course of business, including certain letters of credit or surety bonds. See note 14 for a discussion of the operating lease commitments. In addition, see note 1 for a discussion of the Company's option to purchase approximately 53% of its towers at the end of their respective lease terms. The Company has no obligation to exercise such purchase options.

14. Operating Leases

Tenant Leases

See note 4 for further information regarding the contractual amounts (including tenant leases) owed to the Company pursuant to agreements in effect as of December 31, 2018.

Operating Leases

The following table is a summary of rental cash payments owed by the Company, as lessee, to landlords pursuant to contractual agreements in effect as of December 31, 2018. The Company is obligated under non-cancelable operating leases for land interests under 74% of its towers. The majority of these lease agreements have (1) certain termination rights that provide for cancellation after a notice period, (2) multiple renewal options at the Company's option, and (3) annual escalations. Lease agreements may also contain provisions for a contingent payment based on revenues or the gross margin derived from the communications infrastructure located on the leased land interest. Approximately 90% of our Towers site rental gross margin and more than 75% of our Towers site rental gross margin is derived from towers that reside on land that we own or control for greater than 10 and 20 years, respectively. The operating lease payments included in the table below include payments for certain renewal periods at the Company's option that are reasonably assured to be exercised and an estimate of contingent payments based on revenues and gross margins derived from existing tenant leases.

	Years Ending December 31,						
	2019	2020	2021	2022	2023	Thereafter	Total
Operating leases	$ 640	$ 631	$ 628	$ 623	$ 619	$ 8,054	$ 11,195

Rental expense from operating leases was $751 million, $710 million, and $678 million, respectively, for the years ended December 31, 2018, 2017, and 2016. The rental expense was inclusive of contingent payments based on revenues or gross margin derived from the communications infrastructure located on the leased land interests of $108 million, $100 million, and $97 million, respectively, for the years ended December 31, 2018, 2017, and 2016.

Effective January 1, 2019, the Company adopted new lease accounting guidance on the recognition, measurement, presentation and disclosure of leases. See note 2 for further discussion.

15. Operating Segments and Concentrations of Credit Risk

Operating Segments

The Company's operating segments consists of (1) Towers and (2) Fiber. The Towers segment provides access, including space or capacity, to the Company's approximately 40,000 towers geographically dispersed throughout the U.S. The Towers segment also reflects certain services relating to the Company's towers, consisting of site development services and installation services. The Fiber segment provides access, including space or capacity, to the Company's approximately 65,000 route miles of fiber primarily supporting small cells and fiber solutions geographically dispersed through out the U.S.

The measurement of profit or loss used by the Company's chief operating decision maker ("CODM") to evaluate the performance of its operating segments are (1) segment site rental gross margin, (2) segment services and other gross margin and (3) segment operating profit. The Company defines segment site rental gross margin as segment site rental revenues less segment site rental cost of operations, which excludes stock-based compensation expense and prepaid lease purchase price adjustments recorded in consolidated cost of operations. The Company defines segment services and other gross margin as segment services and other revenues less segment services and other cost of operations, which excludes stock-based compensation expense recorded in consolidated cost of operations. The Company defines segment operating profit as segment site rental gross margin plus segment services and other gross margin, less selling, general and administrative expenses attributable to the respective segment. All of these measurements of profit or loss are exclusive of depreciation, amortization and accretion, which are shown separately.

Costs that are directly attributable to Towers and Fiber are assigned to those respective segments. The "Other" column (1) represents amounts excluded from specific segments, such as asset write-down charges, acquisition and integration costs, depreciation, amortization and accretion, amortization of prepaid lease purchase price adjustments, interest expense and amortization of deferred financing costs, gains (losses) on retirement of long-term obligations, net gain (loss) on interest rate swaps, gains (losses) on foreign currency swaps, interest income, other income (expense), income (loss) from discontinued operations, and stock-based compensation expense and (2) reconciles segment operating profit to income (loss) before income taxes, as the amounts are not utilized in assessing each segment's performance. The "Other" total assets balance includes corporate assets such as cash and cash equivalents which have not been allocated to specific segments. There are no significant revenues resulting from transactions between the Company's operating segments.

(Tabular dollars in millions, except per share amounts)

	Year Ended December 31, 2018			
	Towers	Fiber	Other	Consolidated Total
Segment site rental revenues	$ 3,116	$ 1,600		$ 4,716
Segment services and other revenues	691	16		707
Segment revenues	3,807	1,616		5,423
Segment site rental cost of operations	848	525		1,373
Segment services and other cost of operations	418	11		429
Segment cost of operations[(a)(b)]	1,266	536		1,802
Segment site rental gross margin	2,268	1,075		3,343
Segment services and other gross margin	273	5		278
Segment selling, general and administrative expenses[(b)]	110	179		289
Segment operating profit (loss)	2,431	901		3,332
Other selling, general and administrative expenses[(b)]			$ 191	191
Stock-based compensation expense			108	108
Depreciation, amortization and accretion			1,528	1,528
Interest expense and amortization of deferred financing costs			642	642
Other (income) expenses to reconcile to income (loss) before income taxes[(c)]			173	173
Income (loss) before income taxes				$ 690
Capital expenditures	$ 442	$ 1,264	$ 35	$ 1,741
Total assets (at year end)	$ 17,667	$ 14,512	$ 606	$ 32,785
Total goodwill (at year end)	$ 5,127	$ 4,951	$ —	$ 10,078

(a) Exclusive of depreciation, amortization and accretion shown separately
(b) Segment cost of operations for the year ended December 31, 2018 excludes (1) stock-based compensation expense of $25 million and (2) prepaid lease purchase price adjustments of $20 million For the year ended December 31, 2018, Segment selling, general and administrative expenses exclude stock-based compensation expense of $83 million.
(c) See consolidated statement of operations for further information.

	Year Ended December 31, 2017			
	Towers	Fiber	Other	Consolidated Total
Segment site rental revenues	$ 2,900	$ 769		$ 3,669
Segment services and other revenues	637	50		687
Segment revenues	3,537	819		4,356
Segment site rental cost of operations	845	264		1,109
Segment services and other cost of operations	374	41		415
Segment cost of operations[(a)(b)]	1,219	305		1,524
Segment site rental gross margin	2,055	505		2,560
Segment services and other gross margin	263	9		272
Segment selling, general and administrative expenses[(b)]	94	89		183
Segment operating profit (loss)	2,224	425		2,649
Other selling, general and administrative expenses[(b)]			$ 167	167
Stock-based compensation expense			96	96
Depreciation, amortization and accretion			1,242	1,242
Interest expense and amortization of deferred financing costs			591	591
Other (income) expenses to reconcile to income (loss) before income taxes[(c)]			82	82
Income (loss) before income taxes				$ 471
Capital expenditures	$ 418	$ 782	$ 28	$ 1,228
Total assets (at year end)	$ 17,941	$ 13,669	$ 619	$ 32,229
Total goodwill (at year end)	$ 5,127	$ 4,894	$ —	$ 10,021

(a) Exclusive of depreciation, amortization and accretion shown separately

(Tabular dollars in millions, except per share amounts)

(b) Segment cost of operations for the year ended December 31, 2017 excludes (1) stock-based compensation expense of $20 million and (2) prepaid lease purchase price adjustments of $20 million. For the year ended December 31, 2017. Segment selling, general and administrative expenses exclude stock-based compensation expense of $76 million.
(c) See consolidated statement of operations for further information.

	Year Ended December 31, 2016			
	Towers	Fiber	Other	Consolidated Total
Segment site rental revenues	$ 2,831	$ 402		$ 3,233
Segment services and other revenues	604	84		688
Segment revenues	3,435	486		3,921
Segment site rental cost of operations	840	147		987
Segment services and other cost of operations	345	65		410
Segment cost of operations[(a)(b)]	1,185	212		1,397
Segment site rental gross margin	1,991	255		2,246
Segment services and other gross margin	259	19		278
Segment selling, general and administrative expenses[(b)]	93	60		153
Segment operating profit (loss)	2,157	214		2,371
Other selling, general and administrative expenses[(b)]			$ 143	143
Stock-based compensation expense			97	97
Depreciation, amortization and accretion			1,109	1,109
Interest expense and amortization of deferred financing costs			515	515
Other (income) expenses to reconcile to income (loss) before income taxes[(c)]			133	133
Income (loss) before income taxes				$ 374
Capital expenditures	$ 430	$ 409	$ 35	$ 874
Total assets (at year end)	$ 18,395	$ 3,441	$ 839	$ 22,675
Total goodwill (at year end)	$ 5,115	$ 643	$ —	$ 5,758

(a) Exclusive of depreciation, amortization and accretion shown separately
(b) Segment cost of operations for the year ended December 31, 2016 excludes (1) stock-based compensation expense of $22 million and (2) prepaid lease purchase price adjustments of $22 million. For the year ended December 31, 2016, Segment selling, general and administrative expenses exclude stock-based compensation expense of $75 million for the year ended .
(c) See consolidated statement of operations for further information.

Major Tenants

The following table summarizes the percentage of the consolidated revenues for those tenants accounting for more than 10% of the consolidated revenues.

	Years Ended December 31,		
	2018	2017	2016
AT&T	20%	25%	27%
T-Mobile	20%	22%	23%
Verizon Wireless	20%	22%	22%
Sprint	15%	17%	16%
Total	75%	86%	88%

Concentrations of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk are primarily cash and cash equivalents, restricted cash and trade receivables. The Company mitigates its risk with respect to cash and cash equivalents by maintaining such deposits at high credit quality financial institutions and monitoring the credit ratings of those institutions. The Company's restricted cash is predominately held and directed by a trustee (see note 2).

(Tabular dollars in millions, except per share amounts)

The Company derives the largest portion of its revenues from tenants in the wireless industry. The Company also has a concentration in its volume of business with AT&T, T-Mobile, Verizon Wireless and Sprint or their agents that accounts for a significant portion of the Company's revenues, receivables and deferred site rental receivables. The Company mitigates its concentrations of credit risk with respect to trade receivables by actively monitoring the creditworthiness of its tenants, the use of tenant leases with contractually determinable payment terms or proactive management of past due balances.

16. Supplemental Cash Flow Information

The following table is a summary of the supplemental cash flow information during the years ended December 31, 2018, 2017 and 2016.

	Years Ended December 31,		
	2018	2017	2016
Supplemental disclosure of cash flow information:			
Interest paid	$ 619	$ 547	$ 471
Income taxes paid	17	16	14
Supplemental disclosure of non-cash investing and financing activities:			
Increase in accounts payable for purchases of property and equipment	29	2	18
Purchase of property and equipment under capital leases and installment land purchases	40	32	52
Increase in preferred stock dividends accrued but not paid (see note 11)	—	28	—

The reconciliation of cash, cash equivalents, and restricted cash reported within various lines on the consolidated balance sheet to amounts reported in the consolidated statement of cash flows is shown below.

	As of December 31,		
	2018	2017	2016
Cash and cash equivalents	$ 277	$ 314	$ 568
Restricted cash, current	131	121	125
Restricted cash reported within long-term prepaid rent and other assets, net	5	5	5
Cash, cash equivalents and restricted cash	$ 413	$ 440	$ 698

(Tabular dollars in millions, except per share amounts)

17. Quarterly Financial Information (Unaudited)

Summary quarterly financial information for the years ended December 31, 2018 and 2017 is as follows:

	Three Months Ended[a]			
	March 31	June 30	September 30	December 31
2018:				
Net revenues	$ 1,299	$ 1,330	$ 1,375	$ 1,419
Operating income (loss)	349	345	359	379
Gains (losses) on retirement of long-term obligations	(71)	(3)	(32)	—
Benefit (provision) for income taxes	(4)	(5)	(5)	(5)
Net income (loss) attributable to CCIC stockholders	86	152	136	185
Net income (loss) attributable to CCIC common stockholders, per common share:				
Basic	$ 0.21	$ 0.37	$ 0.33	$ 0.45
Diluted	$ 0.21	$ 0.36	$ 0.33	$ 0.44

	Three Months Ended[a]			
	March 31	June 30	September 30	December 31
2017:				
Net revenues	$ 1,016	$ 1,038	$ 1,063	$ 1,238
Operating income (loss)	257	259	261	267
Gains (losses) on retirement of long-term obligations	(4)	—	—	—
Benefit (provision) for income taxes	(4)	(5)	(2)	(15)
Net income (loss) attributable to CCIC stockholders	119	112	115	98
Net income (loss) attributable to CCIC common stockholders, per common share:				
Basic	$ 0.33	$ 0.31	$ 0.22	$ 0.17
Diluted	$ 0.33	$ 0.31	$ 0.21	$ 0.17

(a) The sum of quarterly information may not agree to year to date information due to rounding.

18. Subsequent Events

February 2019 Senior Notes Offering

On February 11, 2019, the Company issued $1.0 billion aggregate principal amount of senior unsecured notes ("February 2019 Senior Notes"), which consisted of (1) $600 million aggregate principal amount of 4.300% senior unsecured notes due February 2029 and (2) $400 million aggregate principal amount of 5.200% senior unsecured notes due February 2049. The Company used the net proceeds of the February 2019 Senior Notes offering to repay a portion of the outstanding borrowings under the 2016 Revolver.

Common Stock Dividend

On February 21, 2019, the Company's board of directors declared a quarterly cash dividend of $1.125 per common share. The quarterly dividend will be paid on March 29, 2019 to common stockholders of record as of March 15, 2019.

Item 9. ***Changes in and Disagreements With Accountants on Accounting and Financial Disclosure***

None.

Item 9A. ***Controls and Procedures***

(a) Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures

In connection with the preparation of this Annual Report on Form 10-K, as of December 31, 2018, the Company's management conducted an evaluation, under the supervision and with the participation of the Company's Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO"), of the effectiveness of the Company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934 ("Exchange Act")). Based upon their evaluation, the CEO and CFO concluded that the Company's disclosure controls and procedures, as of December 31, 2018, were effective to provide reasonable assurance that information required to be disclosed by the Company in the reports filed or submitted by it under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms, and to provide reasonable assurance that information required to be disclosed by the Company in such reports is accumulated and communicated to the Company's management, including its CEO and CFO, as appropriate to allow timely decisions regarding required disclosure.

(b) Management's Report on Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) for the Company. Under the supervision and with the participation of the Company's CEO and CFO, management assessed the effectiveness of the Company's internal control over financial reporting based on the framework described in *"Internal Control – Integrated Framework (2013),"* issued by the Committee of Sponsoring Organizations of the Treadway Commission. The 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 U.S. generally accepted accounting principles. The Company's internal control over financial reporting includes those policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company;
- 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 of the Company are being made only in accordance with authorization of management and directors of the Company; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisitions, use or disposition of the Company's assets that could have a material effect on the financial statements.

Management has assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2018. Based on the Company's assessment, management has concluded that the Company's internal control over financial reporting was effective as of December 31, 2018 to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external reporting purposes in accordance with U.S. generally accepted accounting principles.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2018 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which appears herein.

(c) Changes in Internal Control Over Financial Reporting

There have not been any changes in the Company's internal control over financial reporting (as such term is defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act) during the most recent fiscal quarter that have materially affected or are reasonably likely to materially affect the Company's internal control over financial reporting.

(d) Limitations on the Effectiveness of Controls

Because of its inherent limitations, the Company's 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 and procedures may deteriorate.

Item 9B. *Other Information*

On February 21, 2019, the Company's board of directors adopted amended and restated by-laws for the Company, which amend the proxy access provision in Article II, Section 2.10 to provide that any group of two or more funds that are (i) under common management or investment control, (ii) under common management and funded primarily by the same employer or (iii) a "group of investment companies," as defined in the Investment Company Act of 1940, will be treated as one stockholder for purposes of complying with the 20-stockholder limit on the number of stockholders who may aggregate their stock ownership to satisfy the 3% ownership requirement to include director nominees in the Company's proxy materials for annual meetings of its stockholders. The by-laws also include related clarifications.

The foregoing summary of the by-laws does not purport to be complete and is qualified in its entirety by reference to the full text of the by-laws, which are filed herewith as Exhibit 3.3 and incorporated herein by reference.

PART III

Item 10. *Directors and Executive Officers of the Registrant*

The information required to be furnished pursuant to this item will be set forth in the 2019 Proxy Statement and is incorporated herein by reference.

Item 11. *Executive Compensation*

The information required to be furnished pursuant to this item will be set forth in the 2019 Proxy Statement and is incorporated herein by reference.

Item 12. *Security Ownership of Certain Beneficial Owners and Management*

The information required to be furnished pursuant to this item will be set forth in the 2019 Proxy Statement and is incorporated herein by reference.

The following table summarizes information with respect to equity compensation plans under which equity securities of the registrant are authorized for issuance as of December 31, 2018:

Plan category[(a)]	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance
	(In shares)	(In dollars per share)	(In shares)
Equity compensation plans approved by security holders	—	$ —	10,239,481 [(b)]
Equity compensation plans not approved by security holders	—	—	—
Total	—	$ —	10,239,481

(a) See note 12 to the consolidated financial statements for more detailed information regarding the registrant's equity compensation plan.
(b) Of these shares remaining available for future issuance, 3 million may be issued pursuant to outstanding RSUs granted under the LTI Plan.

Item 13. *Certain Relationships and Related Transactions*

The information required to be furnished pursuant to this item will be set forth in the 2019 Proxy Statement and is incorporated herein by reference.

Item 14. *Principal Accounting Fees and Services*

The information required to be furnished pursuant to this item will be set forth in the 2019 Proxy Statement and is incorporated herein by reference.

PART IV

Item 15. *Exhibits, Financial Statement Schedules*

(a)(1) Financial Statements:

The list of financial statements filed as part of this report is submitted as a separate section, the index to which is located on page 44.

(a)(2) Financial Statement Schedules:

Schedule II—Valuation and Qualifying Accounts.

Schedule III—Schedule of Real Estate and Accumulated Depreciation.

All other schedules are omitted because they are not applicable or because the required information is contained in the financial statements or notes thereto included in this Form 10-K.

(a)(3) Exhibits:

Exhibit Index

Exhibit Number	Exhibit Description	Incorporated by Reference Form	File Number	Date of Filing	Exhibit Number
1.1	Form of Sales Agreement, dated April 6, 2018, between Crown Castle International Corp. and each of Merrill Lynch, Pierce, Fenner & Smith Incorporated, Barclays Capital Inc., Citigroup Global Markets Inc., Credit Agricole Securities (USA) Inc., Fifth Third Securities, Inc., Jefferies LLC, J.P. Morgan Securities LLC, Mizuho Securities USA LLC, Morgan Stanley & Co. LLC, MUFG Securities Americas Inc., RBC Capital Markets, LLC, SG Americas Securities, LLC, SMBC Nikko Securities America, Inc., SunTrust Robinson Humphrey, Inc., TD Securities (USA) LLC and Wells Fargo Securities, LLC	8-K	001-16441	April 6, 2018	1.1
2.1	Agreement and Plan of Merger by and between Crown Castle International Corp. and Crown Castle REIT Inc., dated September 19, 2014	8-K	001-16441	September 23, 2014	2.1
2.2	Agreement and Plan of Merger, dated as of July 18, 2017, by and among Crown Castle International Corp., LTS Group Holdings, LLC, Berkshire Fund VII-A (LTS) Acquisition Partners, Berkshire Fund VIII-A (LTS) Acquisition Partners, LTS Berkshire Fund VII-A Blocker Corporation, LTS Berkshire Fund VIII-A Blocker Corporation, LTS Co-Invest Blocker LLC, LTS Co-Invest Blocker II LLC, LTS Rollover Blocker LLC, LTS BF VII-A Blocker Merger Sub, Inc., LTS BF VIII-A Blocker Merger Sub, Inc., LTS Co-Invest Blocker Merger Sub, Inc., LTS Co-Invest Blocker II Merger Sub, Inc., LTS Rollover Blocker Merger Sub, Inc., LTS Group Holdings Merger Sub, Inc. and BSR LLC, as equityholders' representative	8-K	001-16441	July 19, 2017	2.1
3.1	Restated Certificate of Incorporation of Crown Castle International Corp., dated July 20, 2017	8-K	001-16441	July 26, 2017	3.1
3.2	Certificate of Designations of 6.875% Mandatory Convertible Preferred Stock, Series A, of Crown Castle International Corp., filed with the Secretary of State of the State of Delaware and effective July 26, 2017	8-K	001-16441	July 26, 2017	3.2
3.3*	Amended and Restated By-Laws of Crown Castle International Corp. dated February 21, 2019	—	—	—	—
4.1	Specimen of Common Stock Certificate	8-K	001-16441	December 16, 2014	4.2
4.2	Specimen Certificate of 6.875% Mandatory Convertible Preferred Stock, Series A (included as Exhibit A to Exhibit 3.2)	8-K	001-16441	July 26, 2017	3.2

Exhibit Number	Exhibit Description	Incorporated by Reference			
		Form	File Number	Date of Filing	Exhibit Number
4.3	Indenture, dated as of June 1, 2005, relating to the Senior Secured Tower Revenue Notes, by and among JPMorgan Chase Bank, N.A., as Indenture Trustee, and Crown Castle Towers LLC, Crown Castle South LLC, Crown Communications Inc., Crown Castle PT Inc., Crown Communication New York, Inc. and Crown Castle International Corp. de Puerto Rico, collectively as Issuers	8-K	001-16441	June 9, 2005	4.1
4.5	Indenture Supplement, dated as of June 30, 2014, by and among The Bank of New York Mellon (as successor to The Bank of New York as successor to JPMorgan Chase Bank, N.A.), as Indenture Trustee, and Crown Castle Towers LLC, Crown Castle South LLC, Crown Communication LLC, Crown Castle PT Inc., Crown Communication New York, Inc., Crown Castle International Corp. de Puerto Rico, Crown Castle Towers 05 LLC, Crown Castle PR LLC, Crown Castle MU LLC and Crown Castle MUPA LLC	8-K	001-16441	July 1, 2014	4.1
4.6	Indenture Supplement, dated as of May 15, 2015, by and among The Bank of New York Mellon (as successor to The Bank of New York as successor to JPMorgan Chase Bank, N.A.), as Indenture Trustee, and Crown Castle Towers LLC, Crown Castle South LLC, Crown Communication LLC, Crown Castle Towers 05 LLC, Crown Castle PR LLC, Crown Castle MU LLC and Crown Castle MUPA LLC, collectively as Issuers, relating to the Senior Secured Tower Revenue Notes, Series 2015-1	8-K	001-16441	May 21, 2015	4.1
4.7	Indenture Supplement, dated as of May 15, 2015, by and among The Bank of New York Mellon (as successor to The Bank of New York as successor to JPMorgan Chase Bank, N.A.), as Indenture Trustee, and Crown Castle Towers LLC, Crown Castle South LLC, Crown Communication LLC, Crown Castle Towers 05 LLC, Crown Castle PR LLC, Crown Castle MU LLC and Crown Castle MUPA LLC, collectively as Issuers, relating to the Senior Secured Tower Revenue Notes, Series 2015-2	8-K	001-16441	May 21, 2015	4.2
4.8	Indenture Supplement, dated as of July 11, 2018, relating to the Senior Secured Tower Revenue Notes, Series 2018-1, Class C-2023, by and among The Bank of New York Mellon (as successor to The Bank of New York as successor to JPMorgan Chase Bank, N.A.), as Indenture Trustee, and Crown Castle Towers LLC, Crown Castle South LLC, Crown Communication LLC, Crown Castle Towers 05 LLC, Crown Castle PR LLC, Crown Castle MU LLC and Crown Castle MUPA LLC, collectively as Issuers	8-K	001-16441	July 16, 2018	4.1
4.9	Indenture Supplement, dated as of July 11, 2018, relating to the Senior Secured Tower Revenue Notes, Series 2018-2, Class C-2028, by and among The Bank of New York Mellon (as successor to The Bank of New York as successor to JPMorgan Chase Bank, N.A.), as Indenture Trustee, and Crown Castle Towers LLC, Crown Castle South LLC, Crown Communication LLC, Crown Castle Towers 05 LLC, Crown Castle PR LLC, Crown Castle MU LLC and Crown Castle MUPA LLC, collectively as Issuers	8-K	001-16441	July 16, 2018	4.2
4.10	Indenture Supplement, dated as of July 11, 2018, relating to the Senior Secured Tower Revenue Notes, Series 2018-1, Class R-2028, by and among The Bank of New York Mellon (as successor to The Bank of New York as successor to JPMorgan Chase Bank, N.A.), as Indenture Trustee, and Crown Castle Towers LLC, Crown Castle South LLC, Crown Communication LLC, Crown Castle Towers 05 LLC, Crown Castle PR LLC, Crown Castle MU LLC and Crown Castle MUPA LLC, collectively as Issuers	8-K	001-16441	July 16, 2018	4.3

Exhibit Number	Exhibit Description	Incorporated by Reference Form	File Number	Date of Filing	Exhibit Number
4.11	Indenture dated July 31, 2009, between Pinnacle Towers Acquisition Holdings LLC, GS Savings Inc., GoldenState Towers, LLC, Pinnacle Towers Acquisition LLC, Tower Ventures III, LLC and TVHT, LLC, as Issuers, Global Signal Holdings III, LLC, as Guarantor, and The Bank of New York Mellon Trust Company, N.A., as Indenture Trustee, relating to Senior Secured Notes	8-K	001-16441	August 4, 2009	4.1
4.12	Indenture Supplement dated July 31, 2009, between Pinnacle Towers Acquisition Holdings LLC, GS Savings Inc., GoldenState Towers, LLC, Pinnacle Towers Acquisition LLC, Tower Ventures III, LLC and TVHT, LLC, as Issuers, Global Signal Holdings III, LLC, as Guarantor, and The Bank of New York Mellon Trust Company, N.A., as Indenture Trustee, relating to Senior Secured Notes, Series 2009-1	8-K	001-16441	August 4, 2009	4.2
4.13	Indenture dated as of October 15, 2012, between Crown Castle International Corp. and The Bank of New York Mellon Trust Company, N.A., as Trustee, relating to 5.25% Senior Notes due 2023	8-K	001-16441	October 16, 2012	4.1
4.14	First Supplemental Indenture dated as of December 15, 2014, among Crown Castle REIT Inc., Crown Castle International Corp. and The Bank of New York Mellon Trust Company, N.A., as Trustee, relating to 5.25% Senior Notes due 2023	8-K	001-16441	December 16, 2014	4.4
4.15	Indenture dated as of December 24, 2012, by and among CC Holdings GS V LLC, Crown Castle GS III Corp., each of the guarantors party thereto and The Bank of New York Mellon Trust Company, N.A., as Trustee, relating to the 3.849% Senior Secured Notes due 2023	8-K	001-16441	December 28, 2012	4.1
4.16	Indenture dated April 15, 2014, between Crown Castle International Corp. and The Bank of New York Mellon Trust Company, N.A., as trustee	8-K	001-16441	April 15, 2014	4.1
4.17	First Supplemental Indenture dated April 15, 2014, between Crown Castle International Corp. and The Bank of New York Mellon Trust Company, N.A., as trustee, relating to 4.875% Senior Notes due 2022	8-K	001-16441	April 15, 2014	4.2
4.18	Second Supplemental Indenture dated December 15, 2014, between Crown Castle REIT Inc., Crown Castle International Corp. and The Bank of New York Mellon Trust Company, N.A., as trustee	8-K	001-16441	December 16, 2014	4.5
4.19	Third Supplemental Indenture dated December 15, 2014, between Crown Castle REIT Inc., Crown Castle International Corp. and The Bank of New York Mellon Trust Company, N.A., as trustee	8-K	001-16441	December 16, 2014	4.6
4.20	Fourth Supplemental Indenture dated February 8, 2016 between Crown Castle International Corp. and The Bank of New York Mellon Trust Company, N.A., as trustee, to the Indenture dated April 15, 2014, between Crown Castle International Corp. and The Bank of New York Mellon Trust Company, N.A., as trustee, relating to 3.400% Senior Notes due 2021 and 4.450% Senior Notes due 2026	8-K	001-16441	February 8, 2016	4.1
4.21	Fifth Supplemental Indenture dated May 6, 2016, between Crown Castle International Corp. and The Bank of New York Mellon Trust Company, N.A., as trustee, to the Indenture dated April 15, 2014, between Crown Castle International Corp. and The Bank of New York Mellon Trust Company, N.A., as trustee, relating to 3.400% Senior Notes due 2021 and 3.700% Senior Notes due 2026	8-K	001-16441	May 6, 2016	4.1

Exhibit Number	Exhibit Description	Incorporated by Reference Form	File Number	Date of Filing	Exhibit Number
4.22	Sixth Supplemental Indenture dated September 1, 2016, between Crown Castle International Corp. and The Bank of New York Mellon Trust Company, N.A., as trustee, to the Indenture dated April 15, 2014, between Crown Castle International Corp. and The Bank of New York Mellon Trust Company, N.A., as trustee, relating to 2.250% Senior Notes due 2021	8-K	001-16441	September 1, 2016	4.1
4.23	Seventh Supplemental Indenture dated February 2, 2017, between Crown Castle International Corp. and The Bank of New York Mellon Trust Company, N.A., as trustee, to the Indenture dated April 15, 2014, between Crown Castle International Corp. and The Bank of New York Mellon Trust Company, N.A., as trustee, relating to 4.000% Senior Notes due 2027	8-K	001-16441	February 2, 2017	4.1
4.24	Eighth Supplemental Indenture dated May 1, 2017, between Crown Castle International Corp. and The Bank of New York Mellon Trust Company, N.A., as trustee, to the Indenture dated April 15, 2014, between Crown Castle International Corp. and The Bank of New York Mellon Trust Company, N.A., as trustee, relating to 4.750% Senior Notes due 2047	8-K	001-16441	May 1, 2017	4.1
4.25	Ninth Supplemental Indenture dated August 1, 2017, between Crown Castle International Corp. and The Bank of New York Mellon Trust Company, N.A., as trustee, to the Indenture dated April 15, 2014, between Crown Castle International Corp. and The Bank of New York Mellon Trust Company, N.A., as trustee, relating to 3.200% Senior Notes due 2024 and 3.650% Senior Notes due 2027	8-K	001-16441	August 1, 2017	4.1
4.26	Tenth Supplemental Indenture dated January 16, 2018, between Crown Castle International Corp. and The Bank of New York Mellon Trust Company, N.A., as trustee, to the Indenture dated April 15, 2014, between Crown Castle International Corp. and The Bank of New York Mellon Trust Company, N.A., as trustee	8-K	001-16441	January 17, 2018	4.1
4.27	Indenture dated February 11, 2019, between Crown Castle International Corp. and The Bank of New York Mellon Trust Company, N.A., as trustee	8-K	001-16441	February 11, 2019	4.1
4.28	First Supplemental Indenture dated February 11, 2019, between Crown Castle International Corp. and The Bank of New York Mellon Trust Company, N.A., as trustee, to the Indenture dated February 11, 2019, between Crown Castle International Corp. and The Bank of New York Mellon Trust Company, N.A., as trustee	8-K	001-16441	February 11, 2019	4.2
10.1†	Amended and Restated Severance Agreement between Crown Castle International Corp. and Jay A. Brown, effective as of June 1, 2016	8-K	001-16441	February 24, 2016	10.3
10.2†	Amended and Restated Severance Agreement between Crown Castle International Corp. and W. Benjamin Moreland, effective as of June 1, 2016	8-K	001-16441	February 24, 2016	10.4
10.3†	Form of Severance Agreement between Crown Castle International Corp. and Philip M. Kelley	8-K	001-16441	July 15, 2008	10.1
10.4†	Form of Severance Agreement between Crown Castle International Corp. and James D. Young	8-K	001-16441	March 2, 2005	10.4
10.5†	Form of First Amendment to Severance Agreement between Crown Castle International Corp and certain senior officers, including James D. Young	8-K	001-16441	December 7, 2007	10.2
10.6†	Form of Amendment to Severance Agreement between Crown Castle International Corp. and certain senior officers, including James D. Young and Philip M. Kelley, effective April 6, 2009	8-K	001-16441	April 8, 2009	10.2
10.7†	Form of Amendment to Severance Agreement between Crown Castle International Corp. and certain executive officers, including James D. Young and Philip M. Kelley	8-K	001-16441	February 24, 2016	10.5

Exhibit Number	Exhibit Description	Incorporated by Reference			
		Form	File Number	Date of Filing	Exhibit Number
10.8†	Form of Severance Agreement between Crown Castle International Corp. and each of Kenneth J. Simon, Daniel K. Schlanger, Michael J. Kavanagh and Robert C. Ackerman	10-K	001-16441	February 22, 2016	10.47
10.9†	Crown Castle International Corp. 2013 Long-Term Incentive Plan	DEF 14A	001-16441	April 8, 2013	App. A
10.10†	First Amendment to Crown Castle International Corp. 2013 Long-Term Incentive Plan, as amended	10-Q	001-16441	August 4, 2016	10.1
10.11†	Form of 2013 Long-Term Incentive Plan Restricted Stock Units Agreement (effective as of February 20, 2014)	8-K	001-16441	February 26, 2014	10.2
10.12†	Form of 2013 Long-Term Incentive Plan Restricted Stock Units Agreement (effective as of February 18, 2016)	8-K	001-16441	February 24, 2016	10.2
10.13†	Form of 2013 Long-Term Incentive Plan Restricted Stock Units Agreement (effective as of August 3, 2017)	10-Q	001-16441	August 7, 2017	10.1
10.14†	Form of 2013 Long-Term Incentive Plan Restricted Stock Units Agreement (effective as of February 21, 2018)	8-K	001-16441	February 27, 2018	10.2
10.15†	Amended and Restated Crown Castle International Corp. Extended Service Separation Program	10-Q	001-16441	August 6, 2018	10.2
10.16†	Crown Castle International Corp. 2018 Executive Management Team Annual Incentive Plan	8-K	001-16441	February 27, 2018	10.1
10.17†	Crown Castle International Corp. Summary of Non-Employee Director Compensation	8-K	001-16441	February 27, 2018	10.3
10.18	Formation Agreement, dated December 8, 1998, relating to the formation of Crown Atlantic Company LLC, Crown Atlantic Holding Sub LLC, and Crown Atlantic Holding Company LLC	8-K	000-24737	December 10, 1998	99.3
10.19	Amendment Number 1 to Formation Agreement, dated March 31, 1999, by and among Crown Castle International Corp., Cellco Partnership, certain Transferring Partnerships (as defined therein) and CCA Investment Corp.	8-K	000-24737	April 12, 1999	2.2
10.20	Crown Atlantic Holding Company LLC Amended and Restated Operating Agreement, dated May 1, 2003, by and between Bell Atlantic Mobile, Inc. and CCA Investment Corp.	10-K	001-16441	March 10, 2004	2.3
10.21	Global Lease Agreement dated March 31, 1999 between Crown Atlantic Company, LLC and Cellco Partnership	8-K	000-24737	April 12, 1999	99.6
10.22	Crown Atlantic Company LLC Operating Agreement entered into as of March 31, 1999 by and between Cellco Partnerships and Crown Atlantic Holding Sub LLC	8-K	000-24737	April 12, 1999	99.1
10.23	Crown Atlantic Company LLC First Amendment to Operating Agreement, dated May 1, 2003, by Crown Atlantic Company LLC, and each of Bell Atlantic Mobile Inc. and Crown Atlantic Holding Sub LLC	10-K	001-16441	March 10, 2004	2.5
10.24	Agreement to Sublease dated June 1, 1999 by and among BellSouth Mobility Inc., BellSouth Telecommunications Inc., the Transferring Entities (as defined therein), Crown Castle International Corp. and Crown Castle South Inc.	8-K	000-24737	June 9, 1999	99.1
10.25	Sublease dated June 1, 1999 by and among BellSouth Mobility Inc., Certain BMI Affiliates, Crown Castle International Corp. and Crown Castle South Inc.	8-K	000-24737	June 9, 1999	99.3
10.26	Agreement to Sublease dated August 1, 1999 by and among BellSouth Personal Communications, Inc., BellSouth Carolinas PCS, L.P., Crown Castle International Corp. and Crown Castle South Inc.	10-K	000-24737	March 30, 2000	2.7
10.27	Sublease dated August 1, 1999 by and among BellSouth Personal Communications, Inc., BellSouth Carolinas PCS, L.P., Crown Castle International Corp. and Crown Castle South Inc.	10-K	000-24737	March 30, 2000	2.8

Exhibit Number	Exhibit Description	Incorporated by Reference Form	File Number	Date of Filing	Exhibit Number
10.28	Formation Agreement dated November 7, 1999 relating to the formation of Crown Castle GT Company LLC, Crown Castle GT Holding Sub LLC and Crown Castle GT Holding Company LLC	8-K	000-24737	November 12, 1999	99.2
10.29	Operating Agreement, dated January 31, 2000 by and between Crown Castle GT Corp. and affiliates of GTE Wireless Incorporated	10-K	000-24737	March 30, 2000	2.11
10.30	Management Agreement, dated as of June 8, 2005, by and among Crown Castle USA Inc., as Manager, and Crown Castle Towers LLC, Crown Castle South LLC, Crown Communication Inc., Crown Castle PT Inc., Crown Communication New York, Inc., Crown Castle International Corp. de Puerto Rico, Crown Castle GT Holding Sub LLC and Crown Castle Atlantic LLC, collectively as Owners	8-K	001-16441	June 9, 2005	10.1
10.31	Series 2005-1 Management Agreement Amendment, dated September 26, 2006, by and among Crown Castle USA Inc., as Manager, and Crown Castle Towers LLC, Crown Castle South LLC, Crown Communication Inc., Crown Castle PT Inc., Crown Communication New York, Inc., Crown Castle International Corp. de Puerto Rico, Crown Castle GT Holding Sub LLC and Crown Castle Atlantic LLC, collectively, as Owners	8-K	001-16441	September 29, 2006	10.2
10.32	Joinder and Amendment to Management Agreement, dated as of November 29, 2006, by and among Crown Castle USA Inc., as Manager, and Crown Castle Towers LLC, Crown Castle South LLC, Crown Communication Inc., Crown Castle PT Inc., Crown Communication New York, Inc., Crown Castle International Corp. de Puerto Rico, Crown Castle Towers 05 LLC, Crown Castle PR LLC, Crown Castle MU LLC, Crown Castle MUPA LLC, Crown Castle GT Holding Sub LLC and Crown Castle Atlantic LLC, collectively as Owners	8-K	001-16441	December 5, 2006	10.1
10.33	Cash Management Agreement, dated as of June 8, 2005, by and among Crown Castle Towers LLC, Crown Castle South LLC, Crown Communication Inc., Crown Castle PT Inc., Crown Communication New York, Inc. and Crown Castle International Corp. de Puerto Rico, as Issuers, JPMorgan Chase Bank, N.A., as Indenture Trustee, Crown Castle USA Inc., as Manager, Crown Castle GT Holding Sub LLC, as Member of Crown Castle GT Company LLC, and Crown Castle Atlantic LLC, as Member of Crown Atlantic Company LLC	8-K	001-16441	June 9, 2005	10.2
10.34	Joinder to Cash Management Agreement, dated as of November 29, 2006, by and among Crown Castle Towers LLC, Crown Castle South LLC, Crown Communication Inc., Crown Castle PT Inc., Crown Communication New York, Inc. and Crown Castle International Corp. de Puerto Rico, Crown Castle Towers 05 LLC, Crown Castle PR LLC, Crown Castle MU LLC, Crown Castle MUPA LLC, as Issuers, The Bank of New York (as successor to JPMorgan Chase Bank, N.A.), as Indenture Trustee, Crown Castle USA Inc., as Manager, Crown Castle GT Holding Sub LLC, as Member of Crown Castle GT Company LLC, and Crown Castle Atlantic LLC, as Member of Crown Atlantic Company LLC	8-K	001-16441	December 5, 2006	10.2
10.35	Servicing Agreement, dated as of June 8, 2005, by and among Midland Loan Services, Inc., as Servicer, and JPMorgan Chase Bank, N.A., as Indenture Trustee	8-K	001-16441	June 9, 2005	10.3
10.36	Agreement to Contribute, Lease and Sublease, dated as of February 14, 2005 among Sprint Corporation, the Sprint subsidiaries named therein and Global Signal Inc.	8-K	001-32168	February 17, 2005	10.1
10.37	Master Lease and Sublease, dated as of May 26, 2005, by and among STC One LLC, as lessor, Sprint Telephony PCS L.P., as Sprint Collocator, Global Signal Acquisitions II LLC, as lessee, and Global Signal Inc.	8-K	001-32168	May 27, 2005	10.1

Exhibit Number	Exhibit Description	Incorporated by Reference Form	File Number	Date of Filing	Exhibit Number
10.38	Master Lease and Sublease, dated as of May 26, 2005, by and among STC Two LLC, as lessor, SprintCom, Inc., as Sprint Collocator, Global Signal Acquisitions II LLC, as lessee, and Global Signal Inc.	8-K	001-32168	May 27, 2005	10.2
10.39	Master Lease and Sublease, dated as of May 26, 2005, by and among STC Three LLC, as lessor, American PCS Communications, LLC, as Sprint Collocator, Global Signal Acquisitions II LLC, as lessee, and Global Signal Inc.	8-K	001-32168	May 27, 2005	10.3
10.40	Master Lease and Sublease, dated as of May 26, 2005, by and among STC Four LLC, as lessor, PhillieCo, L.P., as Sprint Collocator, Global Signal Acquisitions II LLC, as lessee, and Global Signal Inc.	8-K	001-32168	May 27, 2005	10.4
10.41	Master Lease and Sublease, dated as of May 26, 2005, by and among STC Five LLC, as lessor, Sprint Spectrum L.P., as Sprint Collocator, Global Signal Acquisitions II LLC, as lessee, and Global Signal Inc.	8-K	001-32168	May 27, 2005	10.5
10.42	Master Lease and Sublease, dated as of May 26, 2005, by and among STC Six Company, Sprint Spectrum L.P., as Sprint Collocator, Global Signal Acquisitions II LLC, as lessee, and Global Signal Inc.	8-K	001-32168	May 27, 2005	10.6
10.43	Management Agreement, dated as of July 31, 2009, by and among Crown Castle USA Inc., as Manager, and Pinnacle Towers Acquisition Holdings LLC, and the direct and indirect subsidiaries of Pinnacle Towers Acquisition Holdings LLC, collectively, as Owners	8-K	001-16441	August 4, 2009	10.1
10.44	Cash Management Agreement, dated as of July 31, 2009, by and among Pinnacle Towers Acquisition Holdings LLC, Pinnacle Towers Acquisition LLC, GS Savings Inc., GoldenState Towers, LLC, Tower Ventures III, LLC and TVHT, LLC, as Issuers, The Bank of New York Mellon Trust Company, N.A., as Indenture Trustee, and Crown Castle USA Inc., as Manager	8-K	001-16441	August 4, 2009	10.2
10.45	Servicing Agreement, dated as of July 31, 2009, by and among Midland Loan Services, Inc., as Servicer, and The Bank of New York Mellon Trust Company, N.A., as Indenture Trustee	8-K	001-16441	August 4, 2009	10.3
10.46	Master Agreement dated as of September 28, 2012, among T-Mobile USA, Inc., SunCom Wireless Operating Company, L.L.C., Cook Inlet/VS GSM IV PCS Holdings, LLC, T-Mobile Central LLC, T-Mobile South LLC, Powertel/Memphis, Inc., VoiceStream Pittsburgh, L.P., T-Mobile West LLC, T-Mobile Northeast LLC, Wireless Alliance, LLC, SunCom Wireless Property Company, L.L.C. and Crown Castle International Corp.	8-K	001-16441	October 2, 2012	10.1
10.47	Management Agreement, dated as of December 24, 2012, by and among Crown Castle USA Inc., as Manager, and CC Holdings GS V LLC, Global Signal Acquisitions LLC, Global Signal Acquisitions II LLC, Pinnacle Towers LLC and the direct and indirect subsidiaries of Pinnacle Towers LLC, collectively, as Owners	8-K	001-16441	December 28, 2012	10.1
10.48	Master Prepaid Lease, dated as of November 30, 2012, by and among T-Mobile USA Tower LLC, T-Mobile West Tower LLC, T-Mobile USA, Inc. and CCTMO LLC	10-K	001-16441	February 12, 2013	10.40
10.49	MPL Site Master Lease Agreement, dated as of November 30, 2012, by and among T-Mobile Central LLC, T-Mobile South LLC, Powertel/Memphis, Inc., VoiceStream Pittsburgh, L.P., T-Mobile West LLC, T-Mobile Northeast LLC, Wireless Alliance, LLC, SunCom Wireless Operating Company, L.L.C., T-Mobile USA, Inc. and CCTMO LLC	10-K	001-16441	February 12, 2013	10.41

Exhibit Number	Exhibit Description	Incorporated by Reference			
		Form	File Number	Date of Filing	Exhibit Number
10.50	Sale Site Master Lease Agreement, dated as of November 30, 2012, by and among T-Mobile Central LLC, T-Mobile South LLC, Powertel/Memphis, Inc., VoiceStream Pittsburgh, L.P., T-Mobile West LLC, T-Mobile Northeast LLC, Wireless Alliance, LLC, SunCom Wireless Operating Company, L.L.C., T-Mobile USA, Inc., T3 Tower 1 LLC and T3 Tower 2 LLC	10-K	001-16441	February 12, 2013	10.42
10.51	Management Agreement, dated as of November 30, 2012, by and among SunCom Wireless Operating Company, L.L.C., Cook Inlet/VS GSM IV PCS Holdings, LLC, T-Mobile Central LLC, T-Mobile South LLC, Powertel/Memphis, Inc., VoiceStream Pittsburgh, L.P., T-Mobile West LLC, T-Mobile Northeast LLC, Wireless Alliance, LLC, SunCom Wireless Property Company, L.L.C., T-Mobile USA Tower LLC, T-Mobile West Tower LLC, CCTMO LLC, T3 Tower 1 LLC and T3 Tower 2 LLC	10-K	001-16441	February 12, 2013	10.43
10.52	Master Agreement dated as of October 18, 2013, among AT&T Inc. and Crown Castle International Corp.	8-K	001-16441	October 21, 2013	10.1
10.53	Master Prepaid Lease, dated as of December 16, 2013, by and among CCATT LLC, AT&T Mobility LLC and the AT&T Lessors party thereto	10-K	001-16441	February 24, 2014	10.49
10.54	MPL Site Master Lease Agreement, dated as of December 16, 2013, by and among CCATT LLC, AT&T Mobility LLC and the AT&T Collocators party thereto	10-K	001-16441	February 24, 2014	10.50
10.55	Sale Site Master Lease Agreement, dated as of December 16, 2013, by and among AT&T Mobility LLC, the AT&T Collocators party thereto and the Tower Operators party thereto	10-K	001-16441	February 24, 2014	10.51
10.56	Management Agreement, dated as of December 16, 2013, by and among CCATT LLC, the Sale Site Subsidiaries party thereto, the AT&T Newcos party thereto and the AT&T Contributors party thereto	10-K	001-16441	February 24, 2014	10.52
10.57	Stock Purchase Agreement, dated as of April 29, 2015, by and among Quanta Services, Inc., Crown Castle International Corp. and CC SCN Fiber LLC	10-Q	001-16441	May 8, 2015	10.5
10.58	Agreement for the Sale and Purchase of the Shares of Crown Castle Australia Holdings Pty Ltd, dated May 14, 2015, by and among Crown Castle International Corp., Crown Castle Operating LLC, The Trust Company (Nominees) Limited, Todd International Investments Limited, Oceania Capital Limited, Birdsong Capital Limited, Baytown Investments Limited, Heritage PTC LLC, David Lloyd CCA Limited, Turri Finance Pty Ltd and Turri Bidco Pty Ltd	10-Q	001-16441	August 7, 2015	10.2
10.59	Credit Agreement dated as of January 21, 2016, among Crown Castle International Corp., the lenders and issuing banks party thereto and JPMorgan Chase Bank, N.A., as administrative agent	8-K	001-16441	January 22, 2016	10.1
10.60	Amendment No. 1 dated as of February 13, 2017, among Crown Castle International Corp., the lenders and issuing banks party thereto, and JPMorgan Chase Bank, N.A., as administrative agent, to the Credit Agreement dated as of January 21, 2016, by and among Crown Castle International Corp., the lenders and issuing banks from time to time party thereto and JPMorgan Chase Bank, N.A., as administrative agent.	8-K	001-16441	February 13, 2017	10.1
10.61	Amendment No. 2 dated as of August 29, 2017, among Crown Castle International Corp., the lenders and issuing banks party thereto, and JPMorgan Chase Bank, N.A., as administrative agent, to the Credit Agreement dated as of January 21, 2016, by and among Crown Castle International Corp., the lenders and issuing banks from time to time party thereto and JPMorgan Chase Bank, N.A., as administrative agent	8-K	001-16441	August 29, 2017	10.1

Exhibit Number	Exhibit Description	Incorporated by Reference			
		Form	File Number	Date of Filing	Exhibit Number
10.62	Amendment No. 3 dated as of June 14, 2018, among Crown Castle International Corp., the lenders and issuing banks party thereto, and JPMorgan Chase Bank, N.A., as administrative agent, to the Credit Agreement dated as of January 21, 2016, by and among Crown Castle International Corp., the lenders and issuing banks from time to time party thereto and JPMorgan Chase Bank, N.A., as administrative agent	8-K	001-16441	June 14, 2018	10.1
21*	Schedule of Subsidiaries of Crown Castle International Corp.	—	—	—	—
23*	Consent of PricewaterhouseCoopers LLP	—	—	—	—
24*	Power of Attorney (included on signature page of this annual report)	—	—	—	—
31.1*	Certification of Chief Executive Officer pursuant to Section 302 of Sarbanes-Oxley Act of 2002	—	—	—	—
31.2*	Certification of Chief Financial Officer pursuant to Section 302 of Sarbanes-Oxley Act of 2002	—	—	—	—
32.1**	Certification of Chief Executive Officer and Chief Financial Officer pursuant to Section 906 of Sarbanes-Oxley Act of 2002	—	—	—	—
101.INS*	XBRL Instance Document	—	—	—	—
101.SCH*	XBRL Taxonomy Extension Schema Document	—	—	—	—
101.DEF*	XBRL Taxonomy Extension Definition Linkbase	—	—	—	—
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document	—	—	—	—
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document	—	—	—	—
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document	—	—	—	—

* Filed herewith.
** Furnished herewith.
† Indicates management contract or compensatory plan or arrangement.

Item 16. ***Form 10-K Summary***

N/A

CROWN CASTLE INTERNATIONAL CORP. AND SUBSIDIARIES

SCHEDULE II—VALUATION AND QUALIFYING ACCOUNTS

YEARS ENDED DECEMBER 31, 2018, 2017 AND 2016
(In millions of dollars)

		Additions	Deductions				
	Balance at Beginning of Year	Charged to Operations	Credited to Operations	Written Off	Effect of Exchange Rate Changes	Other Adjustments	Balance at End of Year
Allowance for Doubtful Accounts Receivable:							
2018	$ 14	$ 4	$ —	$ (4)	$ —	$ —	$ 14
2017	$ 11	$ 4	$ —	$ (5)	$ —	$ 4 (a)	$ 14
2016	$ 10	$ 5	$ —	$ (4)	$ —	$ —	$ 11

(a) Represents the allowance for doubtful accounts reflected in the preliminary purchase price allocations for the 2017 Acquisitions. See note 3.

		Additions		Deductions			
	Balance at Beginning of Year	Charged to Operations	Charged to Additional Paid-in Capital and Other Comprehensive Income	Credited to Operations	Credited to Additional Paid-in Capital and Other Comprehensive Income	Other Adjustments(a)	Balance at End of Year
Deferred Tax Valuation Allowance:							
2018	$ 1	$ —	$ —	$ —	$ —	$ —	$ 1
2017	$ 7	$ —	$ —	$ (6)	$ —	$ —	$ 1
2016	$ 2	$ 1	$ —	$ (2)	$ —	$ 6	$ 7

(a) Inclusive of (1) the effects of acquisitions and (2) the inclusion of small cells in the REIT in January 2016.

CROWN CASTLE INTERNATIONAL CORP. AND SUBSIDIARIES

SCHEDULE III—SCHEDULE OF REAL ESTATE AND ACCUMULATED DEPRECIATION

YEARS ENDED DECEMBER 31, 2018 AND 2017
(In millions of dollars)

Description	Encumbrances	Initial Cost to Company	Cost Capitalized Subsequent to Acquisition	Gross Amount Carried at Close of Current Period	Accumulated Depreciation at Close of Current Period	Date of Construction	Date Acquired	Life on Which Depreciation in Latest Income Statement is Computed
Communications infrastructure(1)	$ 3,311 (2)	(3)	(3)	$ 21,866	$ (8,341)	Various	Various	Up to 20 years

(1) Includes approximately 40,000 towers and 65,000 route miles of fiber. No single asset exceeds 5% of the aggregate gross amounts at which the assets were carried at the close of the period set forth in the table above.
(2) Encumbrances are reported at face value, without contemplating the effect of deferred financing costs, discounts or premiums. Certain of the Company's debt is secured by (1) a security interest in substantially all of the applicable issuers' assignable personal property, (2) a pledge of the equity interests in each applicable issuer and (3) a security interest in the applicable issuers' leases with tenants to lease tower space (space licenses).
(3) The Company has omitted this information, as it would be impracticable to compile such information on an asset-by-asset basis.

	2018	2017
Gross amount at beginning	$ 20,110	$ 16,121
Additions during period:		
Acquisitions through foreclosure	—	—
Other acquisitions(1)(2)	5	2,788
Communications infrastructure construction and improvements	1,567	1,063
Purchase of land interests	56	81
Sustaining capital expenditures	85	56
Other(3)	64	46
Total additions	1,777	4,034
Deductions during period:		
Cost of real estate sold or disposed	(21)	(45)
Other	—	—
Total deductions:	(21)	(45)
Balance at end	$ 21,866	$ 20,110

(1) Inclusive of changes between the final purchase price allocation and the preliminary purchase price allocations.
(2) Includes acquisitions of communications infrastructure.
(3) Predominately relates to the purchase of property and equipment under capital leases and installment land purchases.

	2018	2017
Gross amount of accumulated depreciation at beginning	$ (7,303)	$ (6,446)
Additions during period:		
Depreciation	(1,057)	(890)
Total additions	(1,057)	(890)
Deductions during period:		
Amount for assets sold or disposed	18	26
Other	1	7
Total deductions	19	33
Balance at end	$ (8,341)	$ (7,303)

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this Annual Report on Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized, on this 25th day of February, 2019.

CROWN CASTLE INTERNATIONAL CORP.

By: /s/ DANIEL K. SCHLANGER

Daniel K. Schlanger
Senior Vice President and Chief Financial Officer

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Jay A. Brown and Kenneth J. Simon and each of them, as his or her true and lawful attorneys-in-fact and agents with full power of substitution and re-substitution for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all documents relating to the Annual Report on Form 10-K, including any and all amendments and supplements thereto, for the year ended December 31, 2018 and to file the same with all exhibits thereto and other documents in connection therewith with the Securities and Exchange Commission granting unto said attorneys-in-fact and agents full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully as to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or their substitute or substitutes may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, this Annual Report on Form 10-K has been signed below by the following persons on behalf of the Registrant and in the capacities indicated below on this 25th day of February, 2019.

Name	Title
/s/ JAY A. BROWN **Jay A. Brown**	President, Chief Executive Officer and Director (Principal Executive Officer)
/s/ DANIEL K. SCHLANGER **Daniel K. Schlanger**	Senior Vice President and Chief Financial Officer (Principal Financial Officer)
/s/ ROBERT S. COLLINS **Robert S. Collins**	Vice President and Controller (Principal Accounting Officer)
/s/ J. LANDIS MARTIN **J. Landis Martin**	Chairman of the Board of Directors
/s/ P. ROBERT BARTOLO **P. Robert Bartolo**	Director
/s/ CINDY CHRISTY **Cindy Christy**	Director
/s/ ARI Q. FITZGERALD **Ari Q. Fitzgerald**	Director
/s/ ROBERT E. GARRISON II **Robert E. Garrison II**	Director
/s/ ANDREA J. GOLDSMITH **Andrea J. Goldsmith**	Director
/s/ LEE W. HOGAN **Lee W. Hogan**	Director
/s/ EDWARD C. HUTCHESON, JR. **Edward C. Hutcheson, Jr.**	Director
/s/ ROBERT F. MCKENZIE **Robert F. McKenzie**	Director
/s/ ANTHONY J. MELONE **Anthony J. Melone**	Director
/s/ W. BENJAMIN MORELAND **W. Benjamin Moreland**	Director

Exhibit 3.3

AMENDED AND RESTATED

BY-LAWS

OF

CROWN CASTLE INTERNATIONAL CORP.

February 21, 2019

ARTICLE I

Offices and Records

SECTION 1.01. Delaware Office. The registered office of Crown Castle International Corp. (the "Corporation") in the State of Delaware shall be located in the City of Wilmington, County of New Castle.

SECTION 1.02. Other Offices. The Corporation may have such other offices, within or without the State of Delaware, as the Board of Directors of the Corporation (the "Board") may designate or as the business of the Corporation may from time to time require.

ARTICLE II

Stockholders

SECTION 2.01. Annual Meeting. The annual meeting of the stockholders of the Corporation (the "Stockholders") shall be held at such date, place and time as may be fixed by resolution of the Board.

SECTION 2.02. Special Meeting. Subject to the rights of the holders of any series of preferred stock of the Corporation (the "Preferred Stock") with respect to special meetings of the holders thereof, special meetings of Stockholders may be called at any time only by (i) the Secretary (the "Secretary"), the Chief Executive Officer (the "Chief Executive Officer") or the President (the "President") of the Corporation at the direction of the Board pursuant to a resolution adopted by the Board or (ii) the Chief Executive Officer.

SECTION 2.03. Place of Meeting. The Board may designate the place of meeting for any meeting of Stockholders. If no designation is made by the Board, the place of meeting shall be the principal executive offices of the Corporation.

SECTION 2.04. Notice of Meeting. Unless otherwise provided by applicable law, notice, stating the place, day and hour of the meeting and, in the case of special meetings, the purpose or purposes for which such special meeting is called, shall be prepared and delivered by the Corporation not less than 10 days nor more than 60 days before the date of the meeting to each Stockholder of record entitled to vote at such meeting. Such further notice shall be given as may be required by applicable law. Only such business shall be conducted at a special meeting of Stockholders as shall have been brought before the meeting pursuant to the Corporation's notice of meeting. Any previously scheduled meeting of Stockholders may be postponed, and (unless the Amended and Restated Certificate of Incorporation of the Corporation, as amended from time to time (the "Charter") otherwise provides) any special meeting of Stockholders may be canceled, by resolution of the Board upon public notice given prior to the time previously scheduled for such meeting of Stockholders.

SECTION 2.05. Quorum and Adjournment. Except as otherwise provided by applicable law or by the Charter, the holders of a majority of the voting power of the outstanding shares of capital stock of the Corporation entitled to vote in a general vote of Stockholders as a single class with shares of common stock of the Corporation (the "Voting Stock"), represented in person or by proxy, shall constitute a quorum at a meeting of Stockholders; provided, however, that (i) in the election of Directors of the Corporation ("Directors"), the holders of a majority of the voting power of the outstanding shares of capital stock of the Corporation entitled to vote generally in the election of Directors, represented in person or by proxy, shall constitute a quorum at a meeting of Stockholders for the election of Directors and (ii) when specified business is to be voted on by a class or series voting as a class, the holders of a majority of the voting power of the shares of such class or series, represented in person or by proxy, shall constitute a quorum for the transaction of such business. The Chairman of the Board (the "Chairman") or the holders of a majority of the voting power of the shares of Voting Stock so represented may adjourn the meeting from time to time, whether or not there is such a quorum (or, in the case of specified business to be voted on by a class or series, the Chairman or the holders of a majority of the voting power of the shares of such class or series so represented may adjourn the meeting with respect to such specified business). No notice of the time and place of adjourned meetings need be given except as required by applicable law. The Stockholders present at a duly organized meeting may continue to transact business until adjournment, notwithstanding the withdrawal of enough Stockholders to leave less than a quorum.

SECTION 2.06. Proxies. At all meetings of Stockholders, a Stockholder may vote by proxy as may be permitted by applicable law; provided that no proxy shall be voted after three years from its date, unless the proxy provides for a longer period. Any proxy to be used at a meeting of Stockholders must be filed with the Secretary or his or her representative at or before the time of the meeting.

SECTION 2.07. Notice of Stockholder Business and Nominations.

(a) Annual Meetings of Stockholders. (i) Nominations of persons for election to the Board and the proposal of business to be considered by the Stockholders may be made at an annual meeting of Stockholders (A) pursuant to the Corporation's notice of meeting delivered pursuant to Section 2.04 of these Amended and Restated Bylaws, as amended from time to time (these "By-laws"), (B) by or at the direction of the Board or any committee thereof, (C) by any Stockholder who is entitled to vote at the meeting, who complied with the notice procedures set forth in Section 2.07(a)(ii) and Section 2.07(a)(iii) and who was a Stockholder of record at the time such notice is delivered to the Secretary or (D) pursuant to and in compliance with the procedures and requirements set forth in Section 2.10.

(ii) For nominations or other business to be properly brought before an annual meeting by a Stockholder pursuant to Section 2.07(a)(i)(C), the Stockholder must have given timely notice thereof in writing to the Secretary and, in the case of business other than nominations, such other business must otherwise be a proper matter for Stockholder action. To be timely, a Stockholder's notice for purposes of Section 2.07(a)(i)(C) shall be delivered to the Secretary at the principal executive offices of the Corporation not less than 90 days nor more than 120 days prior to the first anniversary of the preceding year's annual meeting; provided, however, that in the event that the date of the annual meeting is advanced by more than 30 days, or delayed by more than 90 days, from such anniversary date, notice by the Stockholder to be timely for purposes of Section 2.07(a)(i)(C) must be so delivered not earlier than the 120th day prior to such annual meeting and not later than the close of business on the later of the 90th day prior to such annual meeting or the 10th day following the day on which Public Announcement (as defined in Section 2.07(c)(ii)) of the date of such meeting is first made by the Corporation. In no event shall the Public Announcement of an adjournment or postponement of an annual meeting commence a new time period for the giving of a Stockholder's notice for purposes of Section 2.07(a)(i)(C). Such Stockholder's notice for purposes of Section 2.07(a)(i)(C) shall set forth (A) as to each person whom the Stockholder proposes to nominate for election or reelection as a Director pursuant to Section 2.07(a)(i)(C), all information relating to such person that is required to be disclosed in solicitations of proxies for election of Directors in an election contest, or is otherwise required, in each case pursuant to Regulation 14A under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and the rules and regulations promulgated thereunder, including such person's written consent to being named in the proxy statement as a nominee and to serving as a Director if elected; (B) as to any other business that the Stockholder proposes to bring before the meeting, a brief description of the business desired to be brought before the meeting, the text of the proposal or business (including the text of any resolutions proposed for consideration and in the event that such business includes a proposal to amend these By-laws, the language of the proposed amendment), the reasons for conducting such business at the meeting and any material interest in such business of such Stockholder and the beneficial owner, if any, on whose behalf the proposal is made; and (C) as to the

Stockholder giving the notice for purposes of Section 2.07(a)(i)(C) and the beneficial owner, if any, on whose behalf the nomination or proposal is made (1) the name and address of such Stockholder, as they appear on the Corporation's books, and of such beneficial owner, (2) the class and number of shares of the Corporation which are owned beneficially and of record by such Stockholder and such beneficial owner, (3) a representation that the Stockholder is a holder of record of stock of the Corporation entitled to vote at such meeting and intends to appear in person or by proxy at the meeting to propose such business or nomination and (4) a representation whether the Stockholder or the beneficial owner, if any, intends or is part of a group which intends (a) to deliver a proxy statement or form of proxy to holders of at least the percentage of the Corporation's outstanding capital stock required to approve or adopt the proposal or elect the nominee or (b) otherwise to solicit proxies from Stockholders in support of such proposal or nomination pursuant to Section 2.07(a)(i)(C). The foregoing notice requirements of this Section 2.07(a), with respect to nominations or proposals pursuant to Section 2.07(a)(i)(C), shall be deemed satisfied by a Stockholder if the Stockholder has notified the Corporation of his, her or its intention to present a proposal or nomination at an annual meeting in compliance with applicable rules and regulations promulgated under the Exchange Act and such Stockholder's proposal or nomination has been included in a proxy statement that has been prepared by the Corporation to solicit proxies for such annual meeting. The Corporation may require any proposed nominee to furnish such other information as it may reasonably require to determine the eligibility of such proposed nominee to serve as a Director.

(iii) Notwithstanding anything in the second sentence of Section 2.07(a)(ii) to the contrary, in the event that the number of Directors to be elected to the Board is increased after the time period for which nominations pursuant to Section 2.07(a)(i)(C) would otherwise be due under paragraph (a)(ii) of this Section 2.07 and there is no Public Announcement naming all of the nominees for Director or specifying the size of the increased Board made by the Corporation at least 100 days prior to the first anniversary of the preceding year's annual meeting, a Stockholder's notice required for the purposes of Section 2.07(a)(i)(C) shall also be considered timely, but only with respect to nominees for any new positions created by such increase, if it shall be delivered to the Secretary at the principal executive offices of the Corporation not later than the close of business on the 10th day following the day on which such Public Announcement is first made by the Corporation.

(b) Special Meetings of Stockholders. Only such business shall be conducted at a special meeting of Stockholders as shall have been brought before the meeting pursuant to the Corporation's notice of meeting pursuant to Section 2.04 of these By-laws. Nominations of persons for election to the Board may be made at a special meeting of Stockholders at which Directors are to be elected pursuant to the Corporation's notice of meeting (A) by or at the direction of the Board or (B) by any Stockholder who is entitled to vote at the meeting, who complies with the notice procedures set forth in this Section 2.07(b) and who is a Stockholder of record at the time such notice is delivered to the Secretary. In the event the Corporation calls a special meeting of Stockholders for the purpose of electing one or more Directors to the Board, any such Stockholder may nominate such number of persons for election to such position(s) as are specified in the Corporation's notice of meeting, if the Stockholder's notice as required by Section 2.07(a)(ii) shall be delivered to the Secretary at the principal executive offices of the Corporation not earlier than the 120th day prior to such special meeting and not later than the close of business on the later of the 90th day prior to such special meeting or the 10th day following the day on which Public Announcement of the date of the special meeting and of the nominees proposed by the Board to be elected at such meeting is first made by the Corporation. In no event shall the Public Announcement of an adjournment or postponement of a special meeting commence a new time period for the giving of a Stockholder's notice as described above.

(c) General. (i) Only persons who are nominated in accordance with the procedures set forth in Section 2.07(a) or Section 2.07(b) or in accordance with Section 2.10 shall be eligible to be elected as Directors at a meeting of Stockholders and only such business shall be conducted at a meeting of Stockholders as shall have been brought before the meeting in accordance with the procedures set forth in this Section 2.07. Except as otherwise provided by applicable law, the Charter or these By-laws, the Chairman shall have the power and duty to determine whether a nomination or any business proposed to be brought before the meeting was made in accordance with the procedures set forth in this Section 2.07 and, if any proposed nomination or business is not in compliance with these By-laws, to declare that such defective proposal or nomination shall be disregarded. Notwithstanding the foregoing provisions of this Section 2.07, unless otherwise required by law, if the Stockholder (or a qualified representative of the Stockholder) does not appear at the annual or special meeting of Stockholders to present a nomination or proposed business, such nomination shall be disregarded and such proposed business shall not be transacted, notwithstanding that proxies in respect of such vote may have been received by the Corporation. For purposes of this Section 2.07 and Section 2.10, to be considered a qualified representative of the Stockholder, a person must be a duly authorized officer, manager or partner of such Stockholder or must be authorized by a writing executed by such Stockholder or an electronic transmission delivered by such Stockholder to act for such Stockholder as proxy at the meeting of Stockholders and such person must produce such writing or electronic transmission, or a reliable reproduction of the writing or electronic transmission, at the meeting of Stockholders.

(ii) For purposes of these By-laws, "Public Announcement" shall mean disclosure in a press release reported by the Dow Jones News Service, Associated Press or comparable national news service or in a document publicly filed by the Corporation with the Securities and Exchange Commission pursuant to Section 13, 14 or 15(d) of the Exchange Act or any document delivered to all Stockholders (including any quarterly income statement).

(iii) Notwithstanding the foregoing provisions of these By-laws, a Stockholder shall also comply with all applicable requirements of the Exchange Act and the rules and regulations thereunder with respect to the matters set forth in this Section 2.07 or in Section 2.10. Nothing in these By-laws shall be deemed to affect any rights of (a) Stockholders to request inclusion of proposals in the Corporation's proxy statement pursuant to Rule 14a-8 under the Exchange Act or (b) holders of any series of Preferred Stock to elect Directors pursuant to any applicable provisions of the Charter.

SECTION 2.08. Procedure for Election of Directors; Voting. Subject to the rights of the holders of any class or series of stock to elect Directors separately, at all meetings of the Stockholders at which a quorum is present and Directors are to be elected, each Director shall be elected by a majority of the votes cast with respect to the Director nominee's election by Stockholders entitled to vote and present in person or represented by proxy; provided, however, if as of the tenth day preceding the date the Corporation first mails its notice of meeting for such meeting to the Stockholders, the number of nominees standing for election at any meeting of the Stockholders exceeds the number of Directors to be elected (such an election being a "Contested Election"), the Directors shall be elected by a plurality of the votes cast at the meeting. For purposes of this paragraph, a majority of the votes cast means that the number of votes cast "for" a nominee must exceed the number of votes cast "against" the nominee (with abstentions and broker non-votes not counted as a vote cast either "for" or "against" a nominee). The Board shall nominate for re-election as a Director an incumbent candidate only if such candidate shall have tendered, prior to the date the Corporation first mails its notice of meeting for the Stockholder meeting at which such candidate is to be re-elected as a Director, an irrevocable resignation that will be effective upon (1) failure to receive the required vote at any election which is not a Contested Election in which such candidate is nominated for re-election and (2) the Board's subsequent acceptance of such resignation. Following certification of the vote of an election that is not a Contested Election, if an incumbent Director fails to receive the required vote for re-election, the nominating and corporate governance committee of the Board will make a recommendation to the Board as to whether to accept or reject the resignation, or whether other action should be taken. The Board should then act on the nominating and corporate governance committee's recommendation and publicly disclose its decision and, in the case of rejection of the resignation, the rationale behind it, generally within 90 days following the date of certification of the election results. If the Board accepts a Director's resignation pursuant to this Section 2.08, then the Directors may fill the resulting vacancy pursuant to Article VII of the Charter or the Board may decrease the size of the Board.

Except as otherwise provided by applicable law, rule or regulation, the Charter or these By-laws, all matters other than the election of Directors submitted to Stockholders at any meeting shall be decided by the affirmative vote of a majority of the voting power of the shares present in person or represented by proxy at the meeting and entitled to vote thereon, and where a separate vote by class or series is required, a majority of the voting power of the shares of that class or series present in person or represented by proxy at the meeting and entitled to vote thereon.

The vote on any matter, including the election of Directors, shall be by written ballot. Each ballot shall be signed by the Stockholder voting, or by such Stockholder’s proxy, and shall state the number of shares voted.

SECTION 2.09. Inspectors of Elections; Opening and Closing the Polls. (a) To the extent required by applicable law, the Board by resolution shall appoint one or more inspectors, which inspector or inspectors may not be Directors, officers or employees of the Corporation, to act at the meeting and make a written report thereof. One or more persons may be designated as alternate inspectors to replace any inspector who fails to act. To the extent required by applicable law, if no inspector or alternate has been appointed to act, or if all inspectors or alternates who have been appointed are unable to act, at a meeting of Stockholders, the Chairman shall appoint one or more inspectors to act at the meeting. Each inspector, before discharging his or her duties, shall take and sign an oath to faithfully execute the duties of inspector with strict impartiality and according to the best of his or her ability. The inspectors shall have the duties prescribed by the General Corporation Law of the State of Delaware (the “DGCL”).

(b) The Chairman shall fix and announce at the meeting the date and time of the opening and the closing of the polls for each matter upon which the Stockholders will vote at the meeting. The Board may adopt by resolution such rules and regulations for the conduct of the meeting of Stockholders as it shall deem appropriate. Except to the extent inconsistent with such rules and regulations as adopted by the Board, the Chairman shall have the right and authority to convene and to recess or adjourn the meeting, to prescribe such rules, regulations and procedures and to do all such acts as, in the judgment of the Chairman, are appropriate for the proper conduct of the meeting. Such rules, regulations or procedures, whether adopted by the Board or prescribed by the Chairman, may include the following: (i) the establishment of an agenda or order of business for the meeting; (ii) rules and procedures for maintaining order at the meeting and the safety of those present; (iii) limitations on attendance at or participation in the meeting to Stockholders of record of the Corporation, their duly authorized and constituted proxies or such other persons as the Board or the Chairman shall determine; (iv) restrictions on entry to the meeting after the time fixed for the commencement thereof; and (v) limitations on the time allotted to questions or comments by participants. The Board or the Chairman shall, if the facts warrant, determine and declare to the meeting that a matter or business was not properly brought before the meeting and if the Board or the Chairman should so determine, shall so declare to the meeting, and any such matter or business not properly brought before the meeting shall not be transacted or considered. Unless and to the extent determined by the Board or the Chairman, meetings of Stockholders shall not be required to be held in accordance with the rules of parliamentary procedure.

SECTION 2.10. Proxy Access.

(a) The Corporation shall include in its proxy statement for an annual meeting of the Stockholders, the name, together with the required information specified below, of any person nominated for election to the Board by a Stockholder that satisfies, or by a group of no more than 20 Stockholders that satisfy, the requirements of this Section 2.10, and who expressly elects at the time of providing the notice required by this Section 2.10 to have its nominee included in the Corporation’s proxy statement pursuant to this Section 2.10. The number of Stockholders to be counted towards the 20 Stockholder limit in the foregoing sentence shall be the aggregate number of record holders and beneficial owners whose ownership is counted for the purposes of satisfying the ownership requirements set forth in Section 2.10(e). For purposes of determining such aggregate number of Stockholders, two or more funds that are (i) under common management and investment control, (ii) under common management and funded primarily by the same employer or (iii) a “group of investment companies,” as such term is defined in Section 12(d)(1)(G)(ii) of the Investment Company Act of 1940, as amended, shall be treated as one Stockholder; provided that, within the time period specified in Section 2.10(b) for providing notice of a nomination in accordance with the procedures set forth in this Section 2.10, the funds provide documentation reasonably satisfactory to the Corporation that demonstrates that such funds satisfy the requirements of clause (i), (ii) or (iii) above. For purposes of this Section 2.10, the information that the Corporation will be required to include in its proxy statement is: (A) the information concerning the nominee and the Stockholder or group of Stockholders who nominated such nominee that is required to be disclosed in the Corporation’s proxy statement by the regulations promulgated under the Exchange Act; and (B) if such Stockholder or group of Stockholders so elects, a statement pursuant to paragraph (j) of this Section 2.10. To be timely, this required information must be received by the Secretary at the principal executive offices of the Corporation within the time period required for the written notice of Stockholder nominations set forth in Section 2.10(b) along with such written notice.

(b) For nominations pursuant to this Section 2.10 to be properly submitted by a Stockholder or group of Stockholders, such Stockholder or group of Stockholders must give timely written notice in writing of such nominations to the Secretary of the Corporation. To be considered timely, a Stockholder's notice, together with the other information required by this Section 2.10, must be received by the Secretary at the principal executive offices of the Corporation not less than 120 calendar days nor more than 150 days prior to the first anniversary of the release date of the Corporation's proxy statement with respect to the preceding year's annual meeting.

However, if no annual meeting was held in the previous year, or if the date of the applicable annual meeting is advanced by more than 30 days, or delayed by more than 90 days, from the anniversary date of the preceding year's annual meeting, a Stockholder's notice must be received by the Secretary not earlier than the 120th day prior to the applicable annual meeting and not later than the close of business on the later of the 90th day prior to such annual meeting or the 10th day following the day on which Public Announcement of the date of such meeting is first made by the Corporation. In no event shall the Public Announcement of an adjournment or postponement of an annual meeting commence a new time period for the giving of a Stockholder's notice as described in this Section 2.10.

(c) The number of Stockholder nominees nominated pursuant to this Section 2.10 and appearing in the Corporation's proxy statement with respect to an annual meeting of Stockholders shall not exceed the greater of (i) two or (ii) 20% of the number of directors in office as of the last day on which notice of a nomination in accordance with the procedures set forth in this Section 2.10 may be received by the Secretary of the Corporation pursuant to this Section 2.10, or if such amount is not a whole number, the closest whole number below 20%; provided, however, the number of nominees that may be nominated pursuant to this Section 2.10 for a particular annual meeting shall be reduced by (i) any nominees that were submitted by a Stockholder or group of Stockholders for inclusion in the Corporation's proxy statement with respect to the upcoming annual meeting pursuant to this Section 2.10, but either are subsequently withdrawn or that the Board decides to nominate as Board nominees at the upcoming annual meeting and (ii) any nominees who were previously elected to the Board, after being nominated pursuant to this Section 2.10, at any of the preceding two annual meetings and who are re-nominated for election by the Board at the upcoming annual meeting. In the event that one or more vacancies for any reason occurs on the Board after the last day on which notice of a nomination in accordance with the procedures set forth in this Section 2.10 may be received by the Secretary of the Corporation pursuant to Section 2.10, but before the date of the annual meeting of Stockholders and the Board resolves to reduce the size of the Board in connection therewith, the maximum number of Stockholder nominees nominated pursuant to this Section 2.10 included in the Corporation's proxy statement shall be calculated based on the number of directors in office as so reduced. Any Stockholder or group of Stockholders submitting more than one nominee for inclusion in the Corporation's proxy statement pursuant to this Section 2.10 shall rank its nominees based on the order that such Stockholder or group of Stockholders desires such nominees to be selected for inclusion in the Corporation's proxy statement in the event that the total number of Stockholder nominees submitted by Stockholders or groups of Stockholders pursuant to this Section 2.10 exceeds the maximum number of Stockholder nominees provided for in this Section 2.10. In the event that the number of Stockholder nominees submitted by Stockholders or groups of Stockholders pursuant to this Section 2.10 exceeds the maximum number of Stockholder nominees provided for in this Section 2.10, the highest ranking Stockholder nominee who meets the requirements of this Section 2.10 from each Stockholder or group of Stockholders will be selected for inclusion in the Corporation's proxy statement until the maximum number is reached, going in order of the amount (largest to smallest) of shares of common stock of the Corporation each Stockholder or group of Stockholders disclosed as owned in its respective notice of a nomination submitted to the Corporation in accordance with the procedures set forth in this Section 2.10. If the maximum number is not reached after the highest ranking Stockholder nominee who meets the requirements of this Section 2.10 from each Stockholder or group of Stockholders has been selected, this process will continue as many times as necessary, following the same order each time, until the maximum number is reached.

(d) For purposes of this Section 2.10, a Stockholder or group of Stockholders shall be deemed to "own" only those outstanding shares of common stock of the Corporation as to which the Stockholder or any member of a group of Stockholders possesses both (A) the full voting and investment rights pertaining to the shares and (B) the full economic interest in (including the opportunity for profit and risk of loss on) such shares; provided that the number of shares calculated in accordance with clauses (A) and (B) shall not include any shares (x) sold by such

Stockholder or any of its affiliates in any transaction that has not been settled or closed, (y) borrowed by such Stockholder or any of its affiliates for any purposes or purchased by such Stockholder or any of its affiliates pursuant to an agreement to resell or (z) subject to any option, warrant, forward contract, swap, contract of sale, other derivative or similar agreement entered into by such Stockholder or any of its affiliates, whether any such instrument or agreement is to be settled with shares or with cash based on the notional amount or value of shares of outstanding common stock of the Corporation, in any such case which instrument or agreement has, or is intended to have, the purpose or effect of (1) reducing in any manner, to any extent or at any time in the future, such Stockholder's or affiliates' full right to vote or direct the voting of any such shares, and/or (2) hedging, offsetting or altering to any degree gain or loss arising from the full economic ownership of such shares by such Stockholder or affiliate. A person's ownership of shares shall be deemed to continue during any period in which (A) the person has loaned such shares, provided that the person has the power to recall such loaned shares on five business days' notice; or (B) the person has delegated any voting power by means of a proxy, power of attorney or other instrument or arrangement which is revocable at any time by the person. The terms "owned," "owning" and other variations of the word "own", shall have correlative meanings. Whether outstanding shares of the common stock of the Corporation are "owned" for these purposes shall be determined by the Board. For purposes of this Section 2.10, the term "affiliate" or "affiliates" shall have the meaning ascribed thereto under the General Rules and Regulations under the Exchange Act.

(e) In order to make a nomination pursuant to this Section 2.10, a Stockholder or group of Stockholders must have owned (as defined above) 3% or more of the Corporation's outstanding common stock continuously for at least three years as of both the date the written notice of the nomination is delivered to or mailed and received by the Corporation in accordance with this Section 2.10 and the record date for determining Stockholders entitled to vote at the annual meeting of Stockholders, and must continue to own at least 3% of the Corporation's outstanding common stock through the meeting date. Within the time period specified in this Section 2.10 for providing notice of a nomination in accordance with the procedures set forth in this Section 2.10, a Stockholder or group of Stockholders must provide the following information in writing to the Secretary of the Corporation: (A) one or more written statements from the record holder of the shares (and from each intermediary through which the shares are or have been owned during the requisite three-year holding period) verifying that, as of a date within seven calendar days prior to the date the written notice of the nomination is delivered to or mailed and received by the Secretary of the Corporation, the Stockholder or group of Stockholders owns, and has owned continuously for the preceding three years, at least 3% of the Corporation's outstanding common stock, and the Stockholder or group of Stockholders' agreement to provide, within five business days after the record date for the annual meeting of Stockholders, written statements from the record holder and intermediaries verifying such Stockholder or group of Stockholders' continuous ownership of at least 3% of the Corporation's outstanding common stock through the record date; (B) the written consent of each Stockholder nominee to being named in the proxy statement as a nominee and to serve as a director if elected and (C) a copy of the Schedule 14N that has been filed with the Securities and Exchange Commission as required by Rule 14a-18 under the Exchange Act.

(f) Within the time period specified in this Section 2.10 for providing notice of a nomination in accordance with the procedures set forth in this Section 2.10, a Stockholder or group of Stockholders must provide a representation that such Stockholder or group of Stockholders: (A) acquired at least 3% of the Corporation's outstanding common stock in the ordinary course of business and not with the intent to change or influence control at the Corporation, and does not presently have such intent, (B) presently intends to maintain qualifying ownership of at least 3% of the Corporation's outstanding common stock through the date of the annual meeting, (C) has not nominated and will not nominate for election to the Board at the annual meeting of Stockholders any person other than the nominee or nominees being nominated pursuant to this Section 2.10, (D) has not engaged and will not engage in, and has not and will not be a "participant" in another person's, "solicitation" within the meaning of Rule 14a-1(l) under the Exchange Act, in support of the election of any individual as a director at the annual meeting of Stockholders other than its nominee or a nominee of the Board, (E) will not distribute to any Stockholder any form of proxy for the annual meeting of Stockholders other than the form distributed by the Corporation, and (F) will provide facts, statements and other information in all communications with the Corporation and Stockholders of the Corporation that are or will be true and correct in all material respects and do not and will not omit to state a material fact necessary in order to make the statements made, in light of the circumstances under which they were made, not misleading.

(g) Within the time period specified in this Section 2.10 for providing notice of a nomination in accordance with the procedures set forth in this Section 2.10, a Stockholder or group of Stockholders must provide an undertaking that the Stockholder or group of Stockholders agrees to: (A) assume all liability stemming from any legal or regulatory violation arising out of the Stockholder or group of Stockholders' communications with the Stockholders of the Corporation or out of the information that the such Stockholder or group of Stockholders provided to the Corporation, (B) comply with all other laws and regulations applicable to any solicitation in connection with the annual meeting of Stockholders, and (C) indemnify and hold harmless the Corporation and each of its directors, officers and employees individually against any liability, loss or damages in connection with any threatened or pending action, suit or proceeding, whether legal, administrative or investigative, against the Corporation or any of its directors, officers or employees arising out of any nomination submitted by the Stockholder or group of Stockholders pursuant to this Section 2.10. The inspector of elections shall not give effect to the Stockholder or group of Stockholders' votes with respect to the election of directors if such Stockholder or group of Stockholders does not comply with the undertakings in this Section 2.10(g).

(h) Within the time period specified in this Section 2.10 for providing notice of a nomination in accordance with the procedures set forth in this Section 2.10, a Stockholder nominee must deliver to the Secretary of the Corporation a written representation and agreement that such person (A) is not and will not become a party to any agreement, arrangement or understanding with, and has not given any commitment or assurance to, any person or entity as to how such person, if elected as a director of the Corporation, will act or vote on any issue or question that has not been disclosed to the Corporation, (B) may not be, and may not become, a party to any compensatory, payment, indemnification or other financial agreement, arrangement or understanding with any person or entity other than the Corporation in connection with service or action as a director that has not been disclosed to the Corporation, and (C) will comply with all of the Corporation's corporate governance, conflict of interest, confidentiality and stock ownership and trading policies and guidelines, and any other Corporation policies and guidelines applicable to directors. At the request of the Corporation, the Stockholder nominee must submit all completed and signed questionnaires required of directors of the Corporation.

The Corporation may request such additional information as necessary to permit the Board to determine if each Stockholder nominee is independent under the listing standards of the principal U.S. securities exchange upon which the common stock of the Corporation is listed, any applicable rules of the Securities and Exchange Commission and any publicly disclosed standards used by the Board in determining and disclosing the independence of the Corporation's directors. If the Board determines that a Stockholder nominee is not independent under the listing standards of the principal U.S. securities exchange upon which the common stock of the Corporation is listed, any applicable rules of the Securities and Exchange Commission and any publicly disclosed standards used by the Board in determining and disclosing the independence of the Corporation's directors, the Stockholder nominee will be ineligible for inclusion in the Corporation's proxy statement.

(i) In the event that any information or communications provided by the Stockholder or group of Stockholders or the Stockholder nominee to the Corporation or its Stockholders ceases to be true and correct in all material respects or omits a material fact necessary to make the statements made, in light of the circumstances under which they were made, not misleading, each Stockholder or group of Stockholders or Stockholder nominee, as the case may be, shall promptly notify the Secretary of the Corporation of any defect in such previously provided information and of the information that is required to correct any such defect.

(j) The Stockholder or group of Stockholders may provide to the Secretary of the Corporation, at the time the information required by this Section 2.10 is provided, a written statement for inclusion in the Corporation's proxy statement for the annual meeting of Stockholders, not to exceed 500 words, in support of the Stockholder nominee's candidacy. Notwithstanding anything to the contrary contained in this Section 2.10, the Corporation may omit from its proxy statement any information or statement that it, in good faith, believes would violate any applicable law or regulation.

(k) The Corporation shall not be required to include, pursuant to this Section 2.10, any Stockholder nominee in its proxy statement for any meeting of Stockholders: (A) for which the Secretary of the Corporation receives a notice that a Stockholder or group of Stockholders has nominated a person for election to the Board pursuant to the advance notice requirements for Stockholder nominees for director, (B) if the Stockholder nominee is, or has been within the three years preceding the date the Corporation first mails to the Stockholders its notice of meeting that includes the name of the Stockholder nominee, an officer or director of a company that is a competitor, as defined in Section 8 of the Clayton Antitrust Act of 1914, of the Corporation, (C) who is not independent under any publicly disclosed standards used by the Board in determining and disclosing the independence of the Corporation’s directors, as determined by the Board, (D) if the Stockholder nominee or the Stockholder or group of Stockholders who has nominated such Stockholder nominee has engaged in or is currently engaged in, or has been or is a “participant” in another person’s, “solicitation” within the meaning of Rule 14a-1(l) under the Exchange Act, in support of the election of any individual as a director at the meeting other than such Stockholder nominee or a nominee of the Board, (E) who is or becomes a party to any compensatory, payment or other financial agreement, arrangement or understanding with any person other than the Corporation that has not been disclosed to the Corporation, (F) who is named subject of a criminal proceeding (excluding traffic violations and other minor offenses) pending as of the date the Corporation first mails to the Stockholders its notice of meeting that includes the name of the Stockholder nominee and, within the ten years preceding such date, must not have been convicted in such a criminal proceeding, (G) who upon becoming a member of the Board, would cause the Corporation to be in violation of these By-Laws, the Certificate of Incorporation, the rules and listing standards of the principal U.S. exchange upon which the common stock of the Corporation is listed, or any applicable state or federal law, rule or regulation, (H) if such Stockholder nominee or the applicable Stockholder or group of Stockholders shall have provided information to the Corporation in respect to such nomination that was untrue in any material respect or omitted to state a material fact necessary in order to make the statement made, in light of the circumstances under which it was made, not misleading, as determined by the Board, or (I) if the Stockholder or group of Stockholders or applicable Stockholder nominee otherwise contravenes any of the agreements, representations or undertakings made by such Stockholder or group of Stockholders or Stockholder nominee or fails to comply with its obligations pursuant to this Section 2.10. For purposes of clause (B) above, a “competitor” of the Corporation is any company engaged in any business or other activities that are competitive with any aspect of the Corporation’s business to an extent that is more than de minimis, as determined by the Board.

(l) Notwithstanding anything to the contrary set forth in this Section 2.10, the Board or the chairman of the annual meeting of Stockholders shall declare a nomination by a Stockholder or group of Stockholders to be invalid, and such nomination shall be disregarded notwithstanding that proxies in respect of such vote may have been received by the Corporation, if: (A) the Stockholder nominee(s) or the applicable Stockholder (or any member of any group of Stockholders) shall have breached its or their obligations under this Section 2.10, including a breach of any representations, agreements or undertakings required under this Section 2.10, as determined by the Board or the chairman of the annual meeting of Stockholders or (B) the Stockholder or group of Stockholders (or a qualified representative thereof) does not appear at the annual meeting of Stockholders to present any nomination pursuant to this Section 2.10.

(m) Any Stockholder nominee who is included in the Corporation’s proxy statement for a particular annual meeting of Stockholders but either: (A) withdraws from or becomes ineligible or unavailable for election at the annual meeting of Stockholders, or (B) does not receive at least 25% of the votes cast in favor of the Stockholder nominee’s election, will be ineligible to be a Stockholder nominee pursuant to this Section 2.10 for the next two annual meetings of Stockholders.

ARTICLE III

Board

SECTION 3.01. General Powers. The business and affairs of the Corporation shall be managed by or under the direction of the Board.

SECTION 3.02. Number, Tenure and Qualifications. Subject to the rights of the holders of any series of Preferred Stock, the number of Directors shall be fixed from time to time exclusively pursuant to a resolution adopted by the Board. However, no decrease in the number of Directors constituting the Board shall shorten the term of any incumbent Director.

SECTION 3.03. Regular Meetings. A regular meeting of the Board shall be held without other notice than this Section 3.03 immediately after, and at the same place as, each annual meeting of Stockholders. The Board may, by resolution, provide the time and place for the holding of additional regular meetings without notice other than such resolution. Unless otherwise determined by the Board, the Secretary shall act as secretary at all regular meetings of the Board and in the Secretary's absence a temporary secretary shall be appointed by the chairman of the meeting.

SECTION 3.04. Special Meetings. Special meetings of the Board shall be called at the request of (i) the Chairman and either the Chief Executive Officer or President or (ii) a majority of the Board. The person or persons authorized to call special meetings of the Board may fix the place and time of the meetings. Unless otherwise determined by the Board, the Secretary shall act as secretary at all special meetings of the Board and in the Secretary's absence a temporary secretary shall be appointed by the chairman of the meeting.

SECTION 3.05. Notice. Notice of any special meeting shall be mailed to each Director at his or her business or residence not later than five days before the day on which such meeting is to be held or shall be sent to either of such places by telegraph or facsimile or other electronic transmission, or be communicated to each Director personally or by telephone, not later than two days before such day of meeting. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the Board need be specified in the notice of such meeting, except for amendments to these By-laws as provided pursuant to Section 8.01 hereof. A meeting may be held at any time without notice if all the Directors are present (except as otherwise provided by applicable law) or if those not present waive notice of the meeting in accordance with Section 6.04 hereof, either before or after such meeting, or as otherwise provided by applicable law.

SECTION 3.06. Action Without Meeting. Any action required or permitted to be taken at any meeting of the Board or any committee thereof may be taken without a meeting if all members of the Board or of such committee, as the case may be, consent thereto in writing, or by electronic transmission, and such writing or writings or electronic transmission or transmissions are filed with the records of the proceedings of the Board or of such committee.

SECTION 3.07. Conference Telephone Meetings. Members of the Board, or any committee thereof, may participate in a meeting of the Board or such committee by means of conference telephone or similar communications equipment by means of which all persons participating in the meeting can hear each other, and such participation in a meeting shall constitute presence in person at such meeting.

SECTION 3.08. Quorum. At all meetings of the Board or any committee, a majority of the Entire Board (as defined in Section 3.09(a)) or the entire committee (assuming no vacancies or unfilled newly-created committee memberships), as the case may be, shall constitute a quorum for the transaction of business and the act of a majority of the Directors or members, as the case may be, present at any meeting at which there is a quorum shall be the act of the Board or such committee, as the case may be, except as otherwise provided in the DGCL, the Charter or these By-laws. If a quorum shall not be present at any meeting of the Board or any committee, a majority of the Directors or members, as the case may be, present thereat may adjourn the meeting from time to time without further notice other than announcement at the meeting.

SECTION 3.09. Committees. (a) The Corporation shall have three standing committees: the nominating and corporate governance committee, the audit committee and the compensation committee. Each such standing committee shall have those powers and authority as are delegated to it from time to time pursuant to a resolution adopted by a two-thirds vote of the total number of Directors which the Corporation would have if there were no vacancies or unfilled newly-created directorships (the "Entire Board").

(b) In addition, the Board may, by resolution adopted by a two-thirds vote of the Entire Board, designate one or more additional committees, with each such committee consisting of one or more Directors and having such powers and authority as the Board shall designate by such resolution.

(c) Any modification to the powers and authority of any committee shall require the adoption of a resolution by a two-thirds vote of the Entire Board.

(d) All acts done by any committee within the scope of its powers and authority pursuant to these By-laws and the resolutions adopted by the Board in accordance with the terms hereof shall be deemed to be, and may be certified as being, done or conferred under authority of the Board. The Secretary or any Assistant Secretary of the Corporation ("Assistant Secretary") is empowered to certify that any resolution duly adopted by any such committee is binding upon the Corporation and to execute and deliver such certifications from time to time as may be necessary or proper to the conduct of the business of the Corporation.

(e) Regular meetings of committees shall be held at such times as such is determined by resolution of the Board or the committee in question and no notice shall be required for any regular meeting other than such resolution. A special meeting of any committee shall be called by resolution of the Board, or by the Secretary or an Assistant Secretary upon the request of the chairman of such committee or a majority of the members of such committee. Notice of special meetings shall be given to each member of the committee in the same manner as that provided for in Section 3.05 of these By-laws.

SECTION 3.10. Committee Members. (a) Each member of any committee of the Board shall hold office until such member's successor is duly elected and has qualified, unless such member sooner dies, resigns or is removed or disqualified. The number of Directors which shall constitute any committee shall be determined by resolution adopted by a two-thirds vote of the Entire Board.

(b) The Board may remove a Director from a committee or change the chairmanship of a committee only by resolution adopted by a two-thirds vote of the Entire Board.

(c) The Board may designate one or more Directors as alternate members of any committee to fill any vacancy on a committee and to fill a vacant chairmanship of a committee, occurring as a result of a member or chairman leaving the committee, whether through death, resignation, removal, disqualification or otherwise; provided that any such designation may only be amended by a two-thirds vote of the Entire Board.

SECTION 3.11. Committee Secretary. The Board may elect a secretary of any such committee. If the Board does not elect such a secretary, the committee may do so. The secretary of any committee need not be a member of the committee, but shall be selected from a member of the staff of the office of the Secretary, unless otherwise provided by the Board or the committee, as applicable.

SECTION 3.12. Compensation. The Directors may be paid their expenses, if any, of attendance at each meeting of the Board and may be paid compensation as Director or chairman of any committee and for attendance at each meeting of the Board. Members of special or standing committees may be allowed like compensation and payment of expenses for attending committee meetings.

SECTION 3.13. Chairman. The Chairman shall be a member of the Board. The Chairman, if present, shall preside at all meetings of the Board and at all meetings of Stockholders.

ARTICLE IV

Officers

SECTION 4.01. General. The officers of the Corporation shall be elected by the Board and shall consist of: a Chief Executive Officer; a President; a Chief Financial Officer; one or more Executive Vice Presidents; one or more Vice Presidents; a Secretary; one or more Assistant Secretaries; a Treasurer; a Controller; and such other officers as in the judgment of the Board may be necessary or desirable. All officers chosen by the Board shall have such powers and duties as generally pertain to their respective offices, subject to the specific provisions of this Article IV. Such officers shall also have powers and duties as from time to time may be conferred by the Board or any committee thereof. Any number of offices may be held by the same person, unless otherwise prohibited by applicable law, the Charter or these By-laws. The officers of the Corporation need not be Stockholders or Directors.

SECTION 4.02. Election and Term of Office. The elected officers of the Corporation shall be elected annually by the Board at the regular meeting of the Board held after each annual meeting of Stockholders. If the election of officers shall not be held at such meeting, such election shall be held as soon thereafter as convenient. Each officer shall hold office until his or her successor shall have been duly elected and shall have qualified or until his or her earlier death, resignation, removal or disqualification.

SECTION 4.03. Chief Executive Officer. The Chief Executive Officer shall supervise, coordinate and manage the Corporation's business and activities and supervise, coordinate and manage its operating expenses and capital allocation, shall have general authority to exercise all the powers necessary for the Chief Executive Officer and shall perform such other duties and have such other powers as may be prescribed by the Board or these By-laws, all in accordance with basic policies as established by and subject to the oversight of the Board.

SECTION 4.04. President. The President shall be an officer of the Corporation. The President shall supervise, coordinate and manage the Corporation's business and activities and supervise, coordinate and manage its operating expenses and capital allocation, shall have general authority to exercise all the powers necessary for the President and shall perform such other duties and have such other powers as may be prescribed by the Board or these By-laws, all in accordance with basic policies as established by and subject to the oversight of the Board, the Chairman and the Chief Executive Officer.

SECTION 4.05. Chief Financial Officer. The Chief Financial Officer (the "Chief Financial Officer") of the Corporation shall have responsibility for the financial affairs of the Corporation. The Chief Financial Officer shall perform such other duties and have such other powers as may be prescribed by the Board or these By-laws, all in accordance with basic policies as established by and subject to the oversight of the Board, the Chairman, the Chief Executive Officer and the President.

SECTION 4.06. Vice President. The Vice President (the "Vice President"), or Vice Presidents, of the Corporation, if any shall be appointed, shall have such duties as the Board, the Chief Executive Officer, the President or these By-laws may from time to time prescribe.

SECTION 4.07. Treasurer. The Treasurer (the "Treasurer") of the Corporation shall have the custody of the Corporation's funds and securities and shall keep full and accurate account of receipts and disbursements in books belonging to the Corporation. The Treasurer shall deposit all moneys and other valuables in the name and to the credit of the Corporation in such depositaries as may be designated by the Board. The Treasurer shall disburse the funds of the Corporation as may be ordered by the Board, the Chief Executive Officer or the President, taking proper vouchers for such disbursements.

SECTION 4.08. Secretary. The Secretary shall give, or cause to be given, notice of all meetings of Stockholders and Directors and all other notices required by applicable law or by these By-laws, and in case of his or her absence or refusal or neglect so to do, any such notice may be given by any person thereunto directed by the Chief Executive Officer, the President or the Directors, upon whose request the meeting is called as provided in these By-laws. The Secretary shall record all the proceedings of the meetings of the Board, any committees thereof and Stockholders in a book to be kept for that purpose, and shall perform such other duties as may be assigned to him or her by the Board, the Chief Executive Officer or the President. The Secretary shall have the custody of the seal of the Corporation and shall affix the same to all instruments requiring it, when authorized by the Board, the Chief Executive Officer or the President, and attest the same.

SECTION 4.09. Assistant Treasurers and Assistant Secretaries. Assistant Treasurers (the "Assistant Treasurers") and Assistant Secretaries of the Corporation, if any shall be appointed, shall have such powers and shall perform such duties as shall be assigned to them, respectively, by the Board, the Chief Executive Officer or the President.

SECTION 4.10. Vacancies. A newly created office and a vacancy in any office because of death, resignation, disqualification or removal may be filled only by the Board for the unexpired portion of the term of any such office.

ARTICLE V

Stock Certificates and Transfers

SECTION 5.01. Stock Certificates and Transfers. (a) The shares of the Corporation shall be evidenced by certificates in such form as the appropriate officers of the Corporation may from time to time prescribe; provided that the Board may provide by resolution or resolutions that all or some of any or all classes or series of the stock of the Corporation shall be uncertificated shares. Every holder of stock represented by certificates shall be entitled to have a certificate signed by, or in the name of, the Corporation by the Chairman or the President or any Vice President and by the Treasurer or an Assistant Treasurer, or the Secretary or an Assistant Secretary, representing the number of shares registered in certificate form. Except as otherwise expressly provided by applicable law, the rights and obligations of the holders of uncertificated stock, if any, and the rights and obligations of the holders of certificates representing stock of the same class and series shall be identical.

(b) The certificates of stock shall be signed, countersigned and registered in such manner as the Board may by resolution prescribe, which resolution may permit all or any of the signatures on such certificates to be in facsimile. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon a certificate has ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the Corporation with the same effect as if he or she were such officer, transfer agent or registrar at the date of issue.

(c) Subject to applicable law, the shares of the stock of the Corporation represented by certificates shall be transferred on the books of the Corporation, upon due surrender for cancelation of certificates representing the same number of shares, with an assignment and power of transfer endorsed thereon or attached thereto, duly executed, with such proof of the authenticity of the signature as the Corporation or its agents may reasonably require. Upon receipt of proper transfer instructions from the registered owner of uncertificated shares, such uncertificated shares shall be transferred to the person entitled thereto upon the recordation of the transaction upon the books of the Corporation. Within a reasonable time after the issuance or transfer of uncertificated stock, the Corporation shall send to the registered owner thereof a written notice containing the information required to be set forth or stated on certificates pursuant to the DGCL or, unless otherwise provided by the DGCL, a statement that the Corporation will furnish without charge to each Stockholder who so requests the powers, designations, preferences and relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences or rights.

SECTION 5.02. Lost, Stolen or Destroyed Certificates. No certificate for shares or uncertificated shares of stock in the Corporation shall be issued in place of any certificate alleged to have been lost, destroyed or stolen, except on production of such evidence of such loss, destruction or theft and on delivery to the Corporation of a bond of indemnity in such amount, upon such terms and secured by such surety, as the Board or its designee may in its or his or her discretion require.

ARTICLE VI

Miscellaneous Provisions

SECTION 6.01. Fiscal Year. The fiscal year of the Corporation shall be as specified by the Board.

SECTION 6.02. Dividends. The Board may from time to time declare, and the Corporation may pay, dividends on its outstanding shares in the manner and upon the terms and conditions provided by applicable law and the Charter.

SECTION 6.03. Seal. The corporate seal shall have thereon the name of the Corporation and shall be in such form as may be approved from time to time by the Board.

SECTION 6.04. Waiver of Notice. Whenever any notice is required to be given to any Stockholder or Director under the provisions of the DGCL, a waiver thereof in writing, signed by the person or persons entitled to such notice, or a waiver thereof by electronic transmission by the person or persons entitled to such notice, whether before or after the time stated therein, shall be deemed equivalent to the giving of such notice. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends a meeting for the express purpose of objecting at the beginning of such meeting, to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any annual or special meeting of Stockholders or any meeting of the Board or committee thereof need be specified in any waiver of notice of such meeting.

SECTION 6.05. Audits. The accounts, books and records of the Corporation shall be audited upon the conclusion of each fiscal year by an independent certified public accountant selected by the audit committee, and it shall be the duty of the audit committee to cause such audit to be made annually.

SECTION 6.06. Resignations. Any Director or any officer, whether elected or appointed, may resign at any time upon notice of such resignation to the Corporation.

SECTION 6.07. Indemnification and Insurance. (a) Each person who was or is made a party or is threatened to be made a party to or is involved in any manner in any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (hereinafter a "Proceeding"), by reason of the fact that he or she or a person of whom he or she is the legal representative is or was a Director or officer of the Corporation or, while a Director or officer of the Corporation, a Director, officer, employee or agent of another corporation, partnership, limited liability company, joint venture, trust or other enterprise shall be indemnified and held harmless by the Corporation to the fullest extent permitted by the DGCL, as the same exists or may hereafter be amended, or any other applicable laws as presently or hereafter in effect, and such indemnification shall continue as to a person who has ceased to be a Director or officer and shall inure to the benefit of his or her heirs, executors and administrators; provided, however, that the Corporation shall indemnify any such person seeking indemnification in connection with a Proceeding (or part thereof) initiated by such person only if such Proceeding (or part thereof) was authorized by the Board or is a Proceeding to enforce such person's claim to indemnification pursuant to the rights granted by this Section 6.07. The Corporation shall pay, to the fullest extent not prohibited by applicable law, the expenses incurred by any person described in the first sentence of this Section 6.07(a) in defending any such Proceeding in advance of its final disposition upon, to the extent such an undertaking is required by applicable law, receipt of an undertaking by or on behalf of such person to repay such amount if it shall ultimately be determined that such person is not entitled to be indemnified by the Corporation as authorized in this Section 6.07 or otherwise.

(b) The indemnification and the advancement of expenses incurred in defending a Proceeding prior to its final disposition provided by, or granted pursuant to, this Section 6.07 shall not be exclusive of any other right which any person may have or hereafter acquire under any statute, provision of the Charter, other provision of these By-laws, vote of Stockholders or Disinterested Directors (as defined in Section 6.07(f)(1)) or otherwise. No repeal, modification or amendment of, or adoption of any provision inconsistent with, this Section 6.07, nor, to the fullest extent permitted by applicable law, any modification of law, shall adversely affect any right or protection of any person granted pursuant hereto existing at, or with respect to any events that occurred prior to, the time of such repeal, amendment, adoption or modification.

(c) The Corporation may maintain insurance, at its expense, to protect itself and any person who is or was a Director, officer, partner, member, employee or agent of the Corporation or a Subsidiary (as defined in Section 6.07(f)(2)) or of another corporation, partnership, limited liability company, joint venture, trust or other enterprise against any expense, liability or loss, whether or not the Corporation would have the power to indemnify such person against such expense, liability or loss under the DGCL.

(d) The Corporation may, to the extent authorized from time to time by the Board, grant rights to indemnification and rights to be paid by the Corporation the expenses incurred in defending any Proceeding in advance of its final disposition, to any person who is or was an employee or agent (other than a Director or officer) of the Corporation or a Subsidiary and to any person who is or was serving at the request of the Corporation or a Subsidiary as a Director, officer, partner, member, employee or agent of another corporation, partnership, limited liability company, joint venture, trust or other enterprise, including service with respect to employee benefit plans maintained or sponsored by the Corporation or a Subsidiary, to the fullest extent of the provisions of this Section 6.07 with respect to the indemnification and advancement of expenses of Directors and officers of the Corporation.

(e) If any provision or provisions of this Section 6.07 shall be held to be invalid, illegal or unenforceable for any reason whatsoever: (1) the validity, the legality and enforceability of the remaining provisions of this Section 6.07 (including each portion of any paragraph or clause of this Section 6.07 containing any such provision held to be invalid, illegal or unenforceable, that is not itself held to be invalid, illegal or unenforceable) shall not in any way be affected or impaired thereby; and (2) to the fullest extent possible, the provisions of this Section 6.07 (including each such portion of any paragraph of this Section 6.07 containing any such provision held to be invalid, illegal or unenforceable) shall be construed so as to give effect to the intent manifested by the provision held invalid, illegal or unenforceable.

(f) For purposes of these By-laws (including this Section 6.07):

(1) "Disinterested Director" means a Director who is not and was not a party to the proceeding or matter in respect of which indemnification is sought by the claimant.

(2) "Subsidiary" means a corporation, a limited liability company or any other enterprise, a majority of the capital stock, interests or other equity of which, as the case may be, is owned directly or indirectly by the Corporation, other than Directors' qualifying shares, if any.

(g) Any notice, request, or other communication required or permitted to be given to the Corporation under this Section 6.07 shall be in writing and either delivered in person or sent by electronic transmission, overnight mail or courier service, or certified or registered mail, postage prepaid, return receipt requested, to the Secretary and shall be effective only upon receipt by the Secretary.

SECTION 6.08. Interpretation. The defined terms contained in these By-Laws are applicable to the singular as well as the plural forms of such terms. As used herein, the term "including" and any variation thereof, means "including without limitation." When used in these By-laws, the words "Article" and "Section" refer to Articles and Sections of these By-laws unless otherwise specified. A reference to one gender herein includes each other gender and the neuter where appropriate. The headings to Articles and Sections of these By-laws are included for convenience of reference only and do not constitute a part hereof for any other purpose or in any way affect the meaning or construction of any provision herein.

ARTICLE VII

Contracts, Proxies, Etc.

SECTION 7.01. Contracts. Except as otherwise required by applicable law, the Charter or these By-laws, any contracts or other instruments may be executed and delivered in the name and on the behalf of the Corporation by such officer or officers of the Corporation as the Board may from time to time direct. Such authority may be general or confined to specific instances as the Board may determine. Subject to the control and direction of the Board, the Chief Executive Officer, President, Chief Financial Officer, Treasurer, Vice-President and any Assistant Treasurer or Assistant Secretary may enter into, execute, deliver and amend bonds, promissory notes, contracts, agreements, deeds, leases, guarantees, loans, commitments, obligations, liabilities and other instruments to be made or executed for or on behalf of the Corporation. Subject to any restrictions imposed by the Board, such officers of the Corporation may delegate such powers to others under his or her jurisdiction, it being understood, however, that any such delegation of power shall not relieve such officer of responsibility with respect to the exercise of such delegated power.

SECTION 7.02. Proxies. Unless otherwise provided by resolution adopted by the Board, the Chairman, the Chief Executive Officer or the President may from time to time appoint an attorney or attorneys or agent or agents of the Corporation, in the name and behalf of the Corporation, to cast the votes which the Corporation may be entitled to cast as the holder of stock or other securities in any other corporation or entity, any of whose stock or other securities may be held by the Corporation, at meetings of the holders of the stock or other securities of such other corporation or entity, or to consent in writing, in the name of the Corporation as such holder, to any action by such other corporation or entity, and may instruct the person or persons so appointed as to the manner of casting such vote or giving such consent, and may execute or cause to be executed in the name and on behalf of the Corporation and under its corporate seal or otherwise, all such written proxies or other instruments as he or she may deem necessary or proper in the premises.

ARTICLE VIII

Amendments

SECTION 8.01. Amendments. These By-laws may be altered, amended or repealed, in whole or in part, or new Amended and Restated By-laws may be adopted by the Stockholders or by the Board at any meeting thereof; provided, however, that notice of such alteration, amendment, repeal or adoption of new Amended and Restated By-laws is contained in the notice of such meeting of Stockholders or in the notice of such meeting of the Board and, in the latter case, such notice is given not less than 24 hours prior to the meeting. Unless a higher percentage is required by the Charter as to any matter which is the subject of these By-laws, all such amendments must be approved by either the holders of at least 80% of the voting power of the then outstanding Voting Stock, voting as a single class, or by the Board; provided that, notwithstanding the foregoing, the Board may alter, amend or repeal, or adopt new By-laws in conflict with, (i) any provision of these By-laws which requires a two-thirds vote of the Entire Board for action to be taken thereunder and (ii) this proviso to this Section 8.01 of these By-laws only by a resolution adopted by a two-thirds vote of the Entire Board.

ARTICLE IX

Forum for Adjudication of Disputes

SECTION 9.01. Exclusive Forum for Certain Disputes. Unless the Corporation consents in writing to the selection of an alternative forum, the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of the Corporation, (ii) any action asserting a claim of breach of a fiduciary duty owed by any current or past Director, officer or other employee of the Corporation to the Corporation or any of the Stockholders (including any beneficial owner of stock of the Corporation), (iii) any action asserting a claim arising pursuant to any provision of the DGCL, the Charter or these By-Laws (in each case, as may be amended from time to time), and (iv) any action asserting a claim governed by the internal affairs doctrine, shall, to the fullest extent permitted by law, be the Court of Chancery of the State of Delaware or, if such court lacks jurisdiction, any state or federal court in the state of Delaware that has jurisdiction. Any person (including any entity) purchasing or otherwise acquiring or holding any interest in shares of capital stock of the Corporation shall be deemed to have notice of and consented to the provisions of this Section 9.01.

EXHIBIT 21

CROWN CASTLE INTERNATIONAL CORP. SUBSIDIARIES[a]

Subsidiary	Jurisdiction of Incorporation
CC Holdings GS V LLC	Delaware
CC Towers Guarantor LLC	Delaware
CC Towers Holding LLC	Delaware
CCATT LLC	Delaware
CCATT Holdings LLC	Delaware
CCGS Holdings Corp.	Delaware
CCTM1 LLC	Delaware
CCTM Holdings LLC	Delaware
CCTMO LLC	Delaware
Crown Atlantic Company LLC	Delaware
Crown Castle Atlantic LLC	Delaware
Crown Castle CA Corp.	Delaware
Crown Castle Fiber Holdings Corp.	Delaware
Crown Castle Fiber LLC	Delaware
Crown Castle GT Company LLC	Delaware
Crown Castle GT Corp.	Delaware
Crown Castle GT Holding Sub LLC	Delaware
Crown Castle Investment II Corp.	Delaware
Crown Castle NG East LLC	Delaware
Crown Castle NG Networks LLC	Delaware
Crown Castle NG West LLC	Delaware
Crown Castle Operating Company	Delaware
Crown Castle Solutions LLC	Delaware
Crown Castle South LLC	Delaware
Crown Castle Towers 06-2 LLC	Delaware
Crown Castle Towers 09 LLC	Delaware
Crown Castle Towers LLC	Delaware
Crown Castle USA Inc.	Pennsylvania
Crown Communication LLC	Delaware
Global Signal Acquisitions LLC	Delaware
Global Signal Acquisitions II LLC	Delaware
Global Signal Acquisitions IV LLC	Delaware
Global Signal GP LLC	Delaware
Global Signal Holdings III LLC	Delaware
Global Signal Operating Partnership, L.P.	Delaware
Pinnacle Towers Acquisition LLC	Delaware
Pinnacle Towers Acquisition Holdings LLC	Delaware
Pinnacle Towers LLC	Delaware

(a) Reflects certain subsidiary consolidations that occurred on January 1, 2019.

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We hereby consent to the incorporation by reference in the Registration Statements on Form S-3 ASR (No. 333-223921) and Form S-8 (No. 333-212383, 333-118659, 333-163843, 333-181715 and 333-188801) of Crown Castle International Corp. of our report dated February 25, 2019 relating to the financial statements, financial statement schedules and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP
Pittsburgh, Pennsylvania
February 25, 2019

Exhibit 31.1

Certification
For the Year Ended December 31, 2018

I, Jay A. Brown, certify that:

1. I have reviewed this annual report on Form 10-K of Crown Castle International Corp. ("registrant");

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.

Date: February 25, 2019

/s/ Jay A. Brown
Jay A. Brown
President and Chief Executive Officer

Exhibit 31.2

Certification
For the Year Ended December 31, 2018

I, Daniel K. Schlanger, certify that:

1. I have reviewed this annual report on Form 10-K of Crown Castle International Corp. (“registrant”);

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.

Date: February 25, 2019

/s/ Daniel K. Schlanger

Daniel K. Schlanger
Senior Vice President and Chief Financial Officer

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 on Form 10-K of Crown Castle International Corp., a Delaware Corporation (“Company”), for the period ending December 31, 2018 as filed with the Securities and Exchange Commission on the date hereof (“Report”), each of the undersigned officers of the Company hereby certifies pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of such officer's knowledge:

1) the Report complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of December 31, 2018 (the last date of the period covered by the Report).

/s/ Jay A. Brown
Jay A. Brown
President and Chief Executive Officer
February 25, 2019

/s/ Daniel K. Schlanger
Daniel K. Schlanger
Senior Vice President and Chief Financial Officer
February 25, 2019

A signed original of this written statement required by Section 906 of the Sarbanes-Oxley Act of 2002 has been provided to Crown Castle International Corp. and will be retained by Crown Castle International Corp. and furnished to the Securities and Exchange Commission or its staff upon request.