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

FORM 10-K

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

For the fiscal year ended December 31, 2019

OR

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

For the transition period from _____________ to _____________

Commission file number 000-31293

EQUINIX, INC.
(Exact name of registrant as specified in its charter)

Delaware	**77-0487526**
(State of incorporation)	(IRS Employer Identification No.)

One Lagoon Drive, Redwood City, California 94065
(Address of principal executive offices, including ZIP code)

(650) 598-6000
(Registrant's telephone number, including area code)

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

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, $0.001	EQIX	The NASDAQ Stock Market LLC

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 Act. Yes ☒ No ☐

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

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

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

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

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
		Emerging growth company	☐

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

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

The aggregate market value of the voting and non-voting common stock held by non-affiliates computed by reference to the price at which the common stock was last sold as of the last business day of the registrant's most recently completed second fiscal quarter was approximately $42.8 billion. As of February 20, 2020, a total of 85,443,883 shares of the registrant's common stock were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Part III – Portions of the registrant's definitive proxy statement to be issued in conjunction with the registrant's 2020 Annual Meeting of Stockholders, which is expected to be filed not later than 120 days after the registrant's fiscal year ended December 31, 2019. Except as expressly incorporated by reference, the registrant's proxy statement shall not be deemed to be a part of this report on Form 10-K.

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FORM 10-K
DECEMBER 31, 2019

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PART I

ITEM 1. Business

The words "Equinix", "we", "our", "ours", "us" and the "Company" refer to Equinix, Inc. All statements in this discussion that are not historical are forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, including statements regarding Equinix's "expectations", "beliefs", "intentions", "strategies", "forecasts", "predictions", "plans" or the like. Such statements are based on management's current expectations and are subject to a number of factors and uncertainties that could cause actual results to differ materially from those described in the forward-looking statements. Equinix cautions investors that there can be no assurance that actual results or business conditions will not differ materially from those projected or suggested in such forward-looking statements as a result of various factors, including, but not limited to, the risk factors discussed in this Annual Report on Form 10-K. Equinix expressly disclaims any obligation or undertaking to release publicly any updates or revisions to any forward looking statements contained herein to reflect any change in Equinix's expectations with regard thereto or any change in events, conditions, or circumstances on which any such statements are based.

Overview: Where Opportunity Connects

Equinix, Inc. connects enterprises and service providers directly to their customers and partners across the world's most interconnected data center and interconnection platform in the Americas, Asia-Pacific, and Europe, the Middle East and Africa ("EMEA"). Platform Equinix ® combines a global footprint of state-of-the-art International Business Exchange™ ("IBX®") data centers, interconnection solutions, edge services, unique business and digital ecosystems, and expert consulting and support. Equinix was incorporated on June 22, 1998 as a Delaware corporation and operates as a real estate investment trust for federal income tax purposes ("REIT").

Al Avery and Jay Adelson founded Equinix as a vendor-neutral multi-tenant data center ("MTDC") provider where competing networks could connect and share data traffic to help scale the rapid growth of the early internet. The company’s name, Equinix (Equality, Neutrality and Internet Exchange), reflects that vision. The founders also believed they not only had the opportunity but also the responsibility to create a company that would be the steward of some of the most important digital infrastructure assets in the world. Two decades later, we have expanded upon that vision to build Platform Equinix, with unmatched scale and reach.

Our interconnected data centers around the world allow our customers to increase information and application delivery performance for users, and quickly deploy distributed IT infrastructures and access business and digital ecosystems, all while significantly reducing costs. The Equinix global platform and the quality of our IBX data centers, interconnection offerings and edge services have enabled us to establish a critical mass of customers. As more customers choose Platform Equinix, for bandwidth cost and performance reasons it benefits their suppliers and business partners to colocate in the same data centers and connect directly with each other. This adjacency creates a “network effect” that attracts new customers and enables our existing customers to capture further economic and performance benefits from our offerings.

In 2019, Equinix entered into a joint venture in the form of a limited liability partnership with GIC Private Limited, Singapore's sovereign wealth fund ("GIC") (the "Joint Venture"), to develop and operate xScale™ data centers in Europe to serve the needs of the growing hyperscale data center market, including the world's largest cloud service providers. xScale data centers are engineered to meet the technical and operational requirements and price points of core hyperscale workload deployments and also offer access to Equinix's comprehensive suite of interconnection and edge services. These services will tie into the hyperscale companies' existing access points at Equinix, thereby increasing the speed of connectivity to their existing and future enterprise customers. This will enable hyperscale companies to consolidate core and access point deployments into one global provider to streamline and simplify their rapid growth.

In 2019, Equinix opened ten new data centers, invested in two xScale data centers, added capacity in 22 markets and expanded the total number of IBX and xScale data center facilities to 210, including our acquisition of three data centers in Mexico from Axtel S.A.B. de C.V. in early 2020. 2019 and early 2020 highlights include:

- Equinix formed the Joint Venture with GIC to develop and operate xScale data centers in Europe.
- Data center expansions included five new IBX sites in the following metros: Seoul, Singapore, Sydney, Tokyo and Helsinki, with an additional new market entry announced in Muscat, Oman.
- Equinix closed transactions that will broaden its Europe and Latin America markets:
    - One data center in Amsterdam acquired from Switch Datacenters (closed in April 2019), bringing Equinix's Amsterdam footprint to a total of eight Amsterdam facilities to serve European markets.
    - Three data centers in Mexico acquired from Axtel S.A.B. de C.V. on January 8, 2020, bringing Equinix's Latin America footprint to ten data centers.
- Equinix announced an agreement to acquire leading bare metal automation company Packet Host, Inc. on January 14, 2020. After the closing of this acquisition, which is expected in 2020, bare metal as a service will allow enterprises and services providers to avoid the capital expenditures and operational requirements of owning hardware by accessing bare metal servers on demand in Equinix's global data centers.

In support of our growing business, we've added technology leaders to the Equinix team. In September 2019, Dr. Justin Dustzadeh joined us as Chief Technology Officer and, in October 2019 and January 2020, respectively, we expanded the expertise of the Equinix Board of Directors (now 11 members) with the appointment of Sandra Rivera of Intel Corporation and Adaire Fox-Martin of SAP.

Industry Trends: Taking Digital Business to the Edge

Digital transformation is changing where and how businesses deploy and deliver IT services to employees and is creating new digital business models for partners and customers. At the same time, macroeconomic, technology and regulatory trends are driving complexity and risk that must be addressed in multiple locations for companies to effectively compete in the global digital economy. These trends include:

- Digital business transformation: Real-time interactions between people, things, locations, clouds and data require proximity and direct connections.
- Urbanization: This is creating large, global population centers which require companies to locate digital services close to users to deliver great user experiences. These same concentrations of people provide an economy of scale which makes distributing applications, data, content and networking to serve these locations cost effective.
- Cybersecurity: A cybersecurity breach is one of the most serious risks facing companies today, and many of the most serious breaches actually occur via a penetration of a company's business partners' networks. To protect against this, businesses need to distribute their security controls out to the edge where most traffic exchange is happening.
- Data compliance: To meet new regulations, companies need to deploy data storage, analytics and clouds within the same jurisdiction, and then replicate this across multiple global locations.
- Business ecosystems: Digital trade flows involve an increasing variety of customers, partners and employees. To enable this, companies deploy a digital presence in close physical proximity to an industry exchange point and then connect to it directly. In the aggregate, these form a business ecosystem. These ecosystems are expanding in depth and number.

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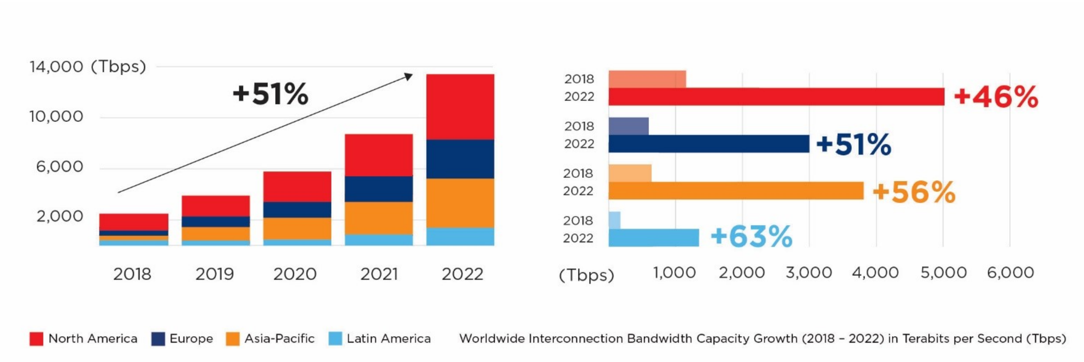
These trends are accelerating the need for a secure, compliant and responsive global business platform that enables the private interconnection of people, locations, clouds, data and things in multiple locations to deliver real-time interactions and data exchange around the world.

As part of their digital transformation, businesses in most industries are shifting their centralized IT infrastructures to the edge to bring digital services closer to users for better performance, which has become a significant driver of digital business value. To realize the full potential of the edge, IT organizations require greater interconnection bandwidth. Interconnection bandwidth is defined as the total capacity provisioned to privately and directly exchanged traffic, with a diverse set of partners and providers, at distributed IT exchange points inside carrier-neutral colocation data centers. Private interconnection capacity between businesses, as reported in the third annual Global Interconnection Index ("GXI"), a market study published by Equinix, is anticipated to grow by 51% between 2018 and 2022, reaching 13,300+ terabits per second, which is double the projected peak of global internet traffic and could be more than 13 times the volume of global internet traffic, or 53 zettabytes annually.

Worldwide Interconnection Bandwidth Capacity Growth (2018 - 2022) in Terabits per Second (Tbps)



Source: GXI Volume 3

Equinix Business Proposition: Reach Everywhere, Connect Everyone, Integrate Everything

In 2019, we continued to build new data center, interconnection and edge services capabilities that will further our vision for the future of Platform Equinix, a future that will provide our customers with the ability to reach everywhere, connect with everyone and integrate everything on their digital transformation journey. Equinix offers a comprehensive, integrated suite of data center, interconnection and edge services and products to more than 9,700 enterprise and service provider customers worldwide.

The following are the leading revenue generating product and other offerings that collectively make up Platform Equinix:

Data Centers Solutions

Our global, state-of-the-art data centers meet strict standards of security, reliability, certification and sustainability. Offerings in these data centers are typically billed based on the space and power a customer consumes, are delivered under a fixed duration contract and generate monthly recurring revenue ("MRR").

- **IBX Data Centers** - The more than 200 IBX vendor-neutral colocation data centers worldwide provide our customers with secure, reliable and robust environments that are necessary to aggregate and distribute information and connect digital and business ecosystems globally. IBX data centers provide access to vital ecosystems where enterprises, network, cloud and SaaS providers, and business partners directly and securely interconnect to each other.
- **xScale Data Centers -** xScale data centers are designed to serve the unique core workload deployment needs of a targeted group of hyperscale companies, which include the world's largest cloud service providers. With xScale data centers, hyperscale customers add to their core hyperscale data center deployments and existing customer access points at Equinix, allowing streamlined expansion with a single global vendor.

Interconnection Solutions

Our interconnection solutions connect businesses directly, securely and dynamically within and between our data centers across our global platform. Our interconnection services are typically billed based on the outbound connections from a customer and generate MRR.

- **Cross Connects -** Provide a point-to-point cable link between two customers in the same IBX data center. They deliver fast, convenient, affordable and highly reliable connectivity and data exchange with business partners and service providers within the Equinix ecosystem.
- **Equinix Cloud Exchange Fabric™ ("ECX Fabric™")** - Directly, securely and dynamically connects distributed infrastructure and ecosystems across Equinix data centers globally using software-defined interconnection. Customers can establish data center-to-data center network connections on demand between any two ECX Fabric locations within a metro or globally and move information within a dense digital and business ecosystem.
- **Equinix Internet Exchange™** - Enables networks, content providers and large enterprises to exchange internet traffic through the largest global peering solution. Service providers can aggregate traffic to multiple counterparties, called peers, on one physical port and handle multiple small peers while moving high-traffic peers to private interconnections. This reduces latency for end-users when accessing content and applications.

Edge Services

Our edge services help businesses rapidly deploy as-a-service networking, security and hardware across our global data center footprint - as an alternative to buying, owning and managing the physical infrastructure. Our edge services are typically billed based on the number of instances and the capacity used by a customer and generate MRR.

- **Network Edge** - Allows customers to modernize networks quickly, by deploying network functions virtualization ("NFV") from multiple vendors across Equinix metros. Companies can select, deploy and connect virtual network services at the edge quickly, with no additional hardware requirements.
- **Equinix SmartKey™** - Helps customers simplify data protection across any cloud architecture via a global SaaS-based, hardware security module management and cryptography service that provides on-premises and hybrid multicloud cloud encryption key management.
- **Bare Metal -** Equinix's announced acquisition of Packet on January 14, 2020, once completed, and our own organic bare metal service also in development, are expected to help enterprises more seamlessly deploy hybrid multicloud architectures on Platform Equinix. Enterprises and services providers will be able to avoid the capital expenditures and operational requirements of owning hardware by accessing bare metal servers on demand in Equinix's global data centers.

Enablement Offerings

Equinix offers a number of remote support and professional services designed to speed and streamline digital transformation and data center deployments for its customers. These services are typically billed based on consumption and generate non-recurring revenue ("NRR").

- **Equinix Infrastructure Services** - Combines Equinix data center expertise with the skills and scale of certified technology partners worldwide. Our colocation expertise helps customers achieve an efficient data center deployment design that optimizes space and enables easy service access.
- **Equinix Professional Services** - Helps enterprises and service providers design and deploy IT solutions. Our global teams of network transformation, hybrid multicloud and digital edge solution experts help companies design and manage technology solutions which are deployed on our global platform.

Competition

While a large number of enterprises and service providers, such as hyperscale cloud service providers, own their own data centers, many others outsource some or all of their IT housing and interconnection requirements in third party facilities, such as those operated by Equinix.

Historically, that outsourcing market was served by large telecommunications carriers who bundled their products and services with their colocation offerings. The data center market landscape has evolved to include private and vendor-neutral MTDC providers, hyperscale cloud providers, managed infrastructure and application hosting providers, and systems integrators. It is estimated that Equinix is one of more than 1,200 companies that provide MTDC offerings around the world. The global MTDC market is highly fragmented. Each of these data center solutions providers can bundle various colocation, interconnection and network offerings and outsourced IT infrastructure solutions. We believe that this outsourcing trend is likely to accelerate in the coming years.

Equinix is differentiated in this market by being able to offer customers a global platform that reaches 26 countries and contains the industry's largest and most active ecosystem of partners in our sites. This ecosystem creates a "network effect" which improves performance and lowers cost for our customers and is a significant source of competitive advantage for Equinix.

Customers and Partners

Equinix customers include telecommunications carriers, mobile and other network services providers, cloud and IT services providers, digital media and content providers, financial services companies, and global enterprise ecosystems in various industries. We provide each company access to a choice of business partners and solutions based on their colocation, interconnection and managed IT service needs, and delivered 99.9999% operational uptime across our global data centers in 2019. As of December 31, 2019, we had more than 9,700 customers worldwide. No one customer made up 10% or more of our total business revenues in the year ended December 31, 2019.

The following companies represent some of our leading customers and partners:

We serve our customers with a direct sales force and channel marketing program. We organize our sales force by customer type, as well as by establishing a sales presence in diverse geographic regions, which enables efficient servicing of the customer base from a network of regional offices. We also support our customers with a global customer care organization.

Employees, Community and Intellectual Property

As the leading global interconnection and data center company, Equinix is dedicated to powering, protecting and connecting the digital world and doing so in a sustainable and responsible way. In 2015, we made a long-term commitment to achieve 100% clean and renewable energy across our global operations. We have made substantial progress against this goal covering over 90% of our footprint worldwide with net-zero carbon emission renewable energy products.

As of December 31, 2019, Equinix had 8,378 employees worldwide with 3,672 based in the Americas, 2,941 based in EMEA and 1,765 based in Asia-Pacific. Of those employees, 3,904 employees were in engineering and operations, 1,521 employees were in sales and marketing and 2,953 employees were in management, finance and administration.

Equinix believes its culture is a key differentiator in its ability to attract, retain and motivate its employees. Core to its culture is a commitment to make sure Equinix is a place where everyone can confidently say, “I’m safe, I belong and I matter.” New and expanding programs such as our Diversity, Inclusion and Belonging initiative aim to empower every employee in our company. For example, our Women Leaders Network of over 1,900 employees is driving visibility of women in our workforce and encouraging the emergence of new leaders worldwide. Also, our Equinix Impact program continues to grow, enabling employees to give back to their communities with the support of Equinix, volunteering nearly 14,000 hours to local causes.

Equinix owns and maintains intellectual property in the form of trademarks, patents, application programming interfaces, customer portals and a variety of products and other offerings.

Our Business Segment Financial Information

We currently operate in three reportable segments comprised of our Americas, EMEA and Asia-Pacific geographic regions. Information attributable to each of our reportable segments is set forth in Note 17 within the Consolidated Financial Statements.

Available Information

We were incorporated in Delaware in June 1998. We are required to file reports under the Securities Exchange Act of 1934, as amended, with the Securities and Exchange Commission ("SEC"). The SEC maintains an internet website at http://www.sec.gov that contains reports, proxy and information statements and other information.

You may also obtain copies of our annual reports on Form 10-K, our quarterly reports on Form 10-Q and our current reports on Form 8-K, and any amendments to such reports, free of charge by visiting the Investor Relations page on our website, www.equinix.com. These reports are available as soon as reasonably practical after we file them with the SEC. Information contained on or accessible through our website is not part of this Annual Report on Form 10-K.

ITEM 1A. Risk Factors

In addition to the other information contained in this report, the following risk factors should be considered carefully in evaluating our business:

Acquisitions present many risks, and we may not realize the financial or strategic goals that were contemplated at the time of any transaction.

Over the last several years, we have completed numerous acquisitions, including most recently that of Axtel S.A.B. de C.V. in Mexico on January 8, 2020. On January 14, 2020, we also announced an agreement to acquire Packet Host, Inc., a bare metal automation company. We cannot assure that we will consummate the acquisition of Packet or any future acquisition. We expect to make additional acquisitions in the future which may include (i) acquisitions of businesses, products, solutions or technologies that we believe to be complementary, (ii) acquisitions of new IBX data centers or real estate for development of new IBX data centers; or (iii) acquisitions through investments in local data center operators. We may pay for future acquisitions by using our existing cash resources (which may limit other potential uses of our cash), incurring additional debt (which may increase our interest expense, leverage and debt service requirements) and/or issuing shares (which may dilute our existing stockholders and have a negative effect on our earnings per share). Acquisitions expose us to potential risks, including:

- the possible disruption of our ongoing business and diversion of management's attention by acquisition, transition and integration activities, particularly when multiple acquisitions and integrations are occurring at the same time;
- our potential inability to successfully pursue or realize some or all of the anticipated revenue opportunities associated with an acquisition or investment;
- the possibility that we may not be able to successfully integrate acquired businesses, or businesses in which we invest, or achieve anticipated operating efficiencies or cost savings;
- the possibility that announced acquisitions may not be completed, due to failure to satisfy the conditions to closing as a result of:
    - an injunction, law or order that makes unlawful the consummation of the acquisition;
    - inaccuracy or breach of the representations and warranties of, or the non-compliance with covenants by, either party;
    - the nonreceipt of closing documents; or
    - for other reasons;
- the possibility that there could be a delay in the completion of an acquisition, which could, among other things, result in additional transaction costs, loss of revenue or other negative effects resulting from uncertainty about completion of the respective acquisition;
- the dilution of our existing stockholders as a result of our issuing stock as consideration in a transaction or selling stock in order to fund the transaction;
- the possibility of customer dissatisfaction if we are unable to achieve levels of quality and stability on par with past practices;
- the possibility that we will be unable to retain relationships with key customers, landlords and/or suppliers of the acquired businesses, some of which may terminate their contracts with the acquired business as a result of the acquisition or which may attempt to negotiate changes in their current or future business relationships with us;
- the possibility that we could lose key employees from the acquired businesses before integrating them;
- the possibility that we may be unable to integrate or migrate IT systems, which could create a risk of errors or performance problems and could affect our ability to meet customer service level obligations;
- the potential deterioration in our ability to access credit markets due to increased leverage;
- the possibility that our customers may not accept either the existing equipment infrastructure or the "look-and-feel" of a new or different IBX data center;
- the possibility that additional capital expenditures may be required or that transaction expenses associated with acquisitions may be higher than anticipated;
- the possibility that required financing to fund an acquisition may not be available on acceptable terms or at all;

- the possibility that we may be unable to obtain required approvals from governmental authorities under antitrust and competition laws on a timely basis or at all, which could, among other things, delay or prevent us from completing an acquisition, limit our ability to realize the expected financial or strategic benefits of an acquisition or have other adverse effects on our current business and operations;
- the possible loss or reduction in value of acquired businesses;
- the possibility that future acquisitions may present new complexities in deal structure, related complex accounting and coordination with new partners, particularly in light of our desire to maintain our qualification for taxation as a REIT;
- the possibility that we may not be able to prepare and issue our financial statements and other public filings in a timely and accurate manner, and/or maintain an effective control environment, due to the strain on the finance organization when multiple acquisitions and integrations are occurring at the same time;
- the possibility that future acquisitions may trigger property tax reassessments resulting in a substantial increase to our property taxes beyond that which we anticipated;
- the possibility that future acquisitions may be in geographies and regulatory environments to which we are unaccustomed and we may become subject to complex requirements and risks with which we have limited experience;
- the possibility that carriers may find it cost-prohibitive or impractical to bring fiber and networks into a new IBX data center;
- the possibility of litigation or other claims in connection with, or as a result of, an acquisition, including claims from terminated employees, customers, former stockholders or other third parties;
- the possibility that asset divestments may be required in order to obtain regulatory clearance for a transaction;
- the possibility of pre-existing undisclosed liabilities, including, but not limited to, lease or landlord related liability, environmental liability or asbestos liability, for which insurance coverage may be insufficient or unavailable, or other issues not discovered in the diligence process; and
- the possibility that we receive limited or incorrect information about the acquired business in the diligence process. For example, we sometimes do not receive all of the customer contracts associated with our acquisitions in the diligence process, which affects our visibility into customer termination rights and could expose us to additional liabilities.

The occurrence of any of these risks could have a material adverse effect on our business, results of operations, financial condition or cash flows. If an acquisition does not proceed or is materially delayed for any reason, the price of our common stock may be adversely impacted, and we will not recognize the anticipated benefits of the acquisition.

We cannot assure that the price of any future acquisitions of IBX data centers will be similar to prior IBX data center acquisitions. In fact, we expect costs required to build or render new IBX data centers operational to increase in the future. If our revenue does not keep pace with these potential acquisition and expansion costs, we may not be able to maintain our current or expected margins as we absorb these additional expenses. There is no assurance we would successfully overcome these risks, or any other problems encountered with these acquisitions.

The anticipated benefits of the Joint Venture with GIC may not be fully realized, or take longer to realize than expected.

On October 8, 2019, we entered into a joint venture with GIC, Singapore's sovereign wealth fund, to develop and operate xScale™ data centers in Europe. We sold our London 10 and Paris 8 data centers and certain construction development and leases in London and Frankfurt to the Joint Venture. The data centers and facilities are now owned by wholly-owned subsidiaries of EMEA Hyperscale 1 C.V., a Dutch limited partnership of which Equinix owns a 20% interest, GIC owns an 80% interest, and Equinix will operate the facilities.

We may not realize all of the anticipated benefits from the Joint Venture. The success of the Joint Venture will depend, in part, on the successful partnership between Equinix and GIC. Such a partnership is subject to risks as outlined below and more generally, to the same types of business risks as would impact our IBX data center business. A failure to successfully partner, or a failure to realize our expectations for the Joint Venture, could materially impact our business, financial condition and results of operations.

Joint venture investments, such as our Joint Venture with GIC, could expose us to risks and liabilities in connection with the formation of the new joint ventures, the operation of such joint ventures without sole decision-making authority, and our reliance on joint venture partners who may have economic and business interests that are inconsistent with our business interests.

In addition to our Joint Venture with GIC, we may co-invest with other third parties through partnerships, joint ventures or other entities in the future. These joint ventures could result in our acquisition of non-controlling interests in or shared responsibility for managing the affairs of a property or portfolio of properties, partnership, joint venture or other entity. We may be subject to additional risks, including:

- we may not have the right to exercise sole decision-making authority regarding the properties, partnership, joint venture or other entity;
- if our partners become bankrupt or fail to fund their share of required capital contributions, we may choose to or be required to contribute such capital;
- our partners may have economic, tax or other business interests or goals which are inconsistent with our business interests or goals, and may be in a position to take actions contrary to our policies or objectives;
- our joint venture partners may take actions that are not within our control, which could require us to dispose of the joint venture asset, transfer it to a taxable REIT subsidiary ("TRS") in order for Equinix to maintain its qualification for taxation as a REIT, or purchase the partner's interests or assets at an above-market price;
- our joint venture partners may take actions unrelated to our business agreement but which reflect poorly on Equinix because of our joint venture;
- disputes between us and our partners may result in litigation or arbitration that would increase our expenses and prevent our management from focusing their time and effort on our day-to-day business; and
- we may in certain circumstances be liable for the actions of our third-party partners or guarantee all or a portion of the joint venture's liabilities, which may require the company to pay an amount greater than its investment in the joint venture.

Each of these factors may result in returns on these investments being less than we expect or in losses, and our financial and operating results may be adversely affected.

Our substantial debt could adversely affect our cash flows and limit our flexibility to raise additional capital.

We have a significant amount of debt and may need to incur additional debt to support our growth. Additional debt may also be incurred to fund future acquisitions, any future special distributions, regular distributions or the other cash outlays associated with maintaining our qualification for taxation as a REIT. As of December 31, 2019, our total indebtedness (gross of debt issuance cost, debt discount, and debt premium) was approximately $11.9 billion, our stockholders' equity was $8.8 billion and our cash, cash equivalents, and investments totaled $1.9 billion. In addition, as of December 31, 2019, we had approximately $1.9 billion of additional liquidity available to us from our $2.0 billion revolving credit facility. In addition to our substantial debt, we lease many of our IBX data centers and certain equipment under lease agreements, some of which are accounted for as operating leases. As of December 31, 2019, we recorded operating lease liabilities of $1.5 billion, which represents our obligation to make lease payments under those lease arrangements.

Our substantial amount of debt and related covenants, and our off-balance sheet commitments, could have important consequences. For example, they could:

- require us to dedicate a substantial portion of our cash flow from operations to make interest and principal payments on our debt and in respect of other off-balance sheet arrangements, reducing the availability of our cash flow to fund future capital expenditures, working capital, execution of our expansion strategy and other general corporate requirements;
- increase the likelihood of negative outlook from our credit rating agencies, or of a downgrade to our current rating;
- make it more difficult for us to satisfy our obligations under our various debt instruments;
- increase our cost of borrowing and even limit our ability to access additional debt to fund future growth;
- increase our vulnerability to general adverse economic and industry conditions and adverse changes in governmental regulations;
- limit our flexibility in planning for, or reacting to, changes in our business and industry, which may place us at a competitive disadvantage compared with our competitors;
- limit our operating flexibility through covenants with which we must comply;
- limit our ability to borrow additional funds, even when necessary to maintain adequate liquidity, which would also limit our ability to further expand our business; and

- make us more vulnerable to increases in interest rates because of the variable interest rates on some of our borrowings to the extent we have not entirely hedged such variable rate debt.

The occurrence of any of the foregoing factors could have a material adverse effect on our business, results of operations and financial condition.

We may also need to refinance a portion of our outstanding debt as it matures. There is a risk that we may not be able to refinance existing debt or that the terms of any refinancing may not be as favorable as the terms of our existing debt. Furthermore, if prevailing interest rates or other factors at the time of refinancing result in higher interest rates upon refinancing, then the interest expense relating to that refinanced indebtedness would increase. These risks could materially adversely affect our financial condition, cash flows and results of operations.

The phase out of the London Interbank Offered Rate ("LIBOR"), and uncertainty as to its replacement, may adversely affect our business.

On July 27, 2017, the United Kingdom Financial Conduct Authority, which regulates LIBOR, announced that it intends to stop persuading or compelling banks to submit rates for the calibration of LIBOR after 2021 after which time it can no longer guarantee its availability. Although alternative reference rates have been proposed, it is unknown at this point which of these alternative reference rates will attain market acceptance as replacements for LIBOR.

Certain term loan borrowings under our Senior Credit Facility bear interest at rates that are calculated based on LIBOR. In addition, certain of our agreements, including financing, customer, vendor, leasing, intercompany, derivative and joint venture agreements, also make reference to LIBOR. To prepare for the phase out of LIBOR, we may need to renegotiate the Senior Credit Facility and other agreements and may not be able to do so on terms that are favorable to us. It is also currently unknown what impact any contract modification will have on our financial statements. Further, the financial markets may be disrupted as a result of the phase out of LIBOR if banks fail to execute a smooth transition to an alternate rate.

Disruption in the financial markets or the inability to renegotiate our agreements to remove and replace LIBOR on favorable terms, or a negative impact from any contract modifications, could have an adverse effect on our business, financial position, and operating results.

Adverse global economic conditions and credit market uncertainty could adversely impact our business and financial condition.

Adverse global economic conditions and uncertain conditions in the credit markets have created, and in the future may create, uncertainty and unpredictability and add risk to our future outlook. An uncertain global economy could also result in churn in our customer base, reductions in revenues from our offerings, longer sales cycles, slower adoption of new technologies and increased price competition, adversely affecting our liquidity. Customers and vendors filing for bankruptcy can also lead to costly and time-intensive actions with adverse effects. The uncertain economic environment could also have an impact on our foreign exchange forward contracts if our counterparties' credit deteriorates or they are otherwise unable to perform their obligations. Finally, our ability to access the capital markets may be severely restricted at a time when we would like, or need, to do so which could have an impact on our flexibility to pursue additional expansion opportunities and maintain our desired level of revenue growth in the future.

If we cannot effectively manage our international operations, and successfully implement our international expansion plans, or comply with evolving laws and regulations, our revenues may not increase, and our business and results of operations would be harmed.

For the years ended December 31, 2019, 2018 and 2017, we recognized approximately 58%, 55% and 55%, respectively, of our revenues outside the U.S. We currently operate outside of the U.S. in Canada, Brazil, Colombia, Mexico, EMEA and Asia-Pacific.

To date, the network neutrality of our IBX data centers and the variety of networks available to our customers has often been a competitive advantage for us. In certain of our acquired IBX data centers in the Asia-Pacific region, the limited number of carriers available reduces that advantage. As a result, we may need to adapt our key revenue-generating offerings and pricing to be competitive in those markets. In addition, we are currently undergoing expansions or evaluating expansion opportunities outside of the U.S. Undertaking and managing expansions in foreign jurisdictions may present unanticipated challenges to us.

Our international operations are generally subject to a number of additional risks, including:

- the costs of customizing IBX data centers for foreign countries;
- protectionist laws and business practices favoring local competition;
- greater difficulty or delay in accounts receivable collection;
- difficulties in staffing and managing foreign operations, including negotiating with foreign labor unions or workers' councils;
- difficulties in managing across cultures and in foreign languages;
- political and economic instability;
- fluctuations in currency exchange rates;
- difficulties in repatriating funds from certain countries;
- our ability to obtain, transfer or maintain licenses required by governmental entities with respect to our business;
- unexpected changes in regulatory, tax and political environments such as the United Kingdom's withdrawal from the European Union ("Brexit");
- our ability to secure and maintain the necessary physical and telecommunications infrastructure;
- compliance with anti-bribery and corruption laws;
- compliance with economic and trade sanctions enforced by the Office of Foreign Assets Control of the U.S. Department of Treasury; and
- compliance with evolving governmental regulation with which we have little experience.

Geo-political events, such as Brexit, the political unrest in Hong Kong, and the trade war between the U.S. and China, may increase the likelihood of the listed risks to occur. With respect to Brexit, it is possible that the level of economic activity in the United Kingdom and the rest of Europe will be adversely impacted and that we will face increased regulatory and legal complexities in these regions which could have an adverse impact on our business and employees in EMEA and could adversely affect our financial condition and results of operations. In addition, compliance with international and U.S. laws and regulations that apply to our international operations increases our cost of doing business in foreign jurisdictions. These laws and regulations include the General Data Protection Regulation (GDPR) and other data privacy requirements, labor relations laws, tax laws, anti-competition regulations, import and trade restrictions, export requirements, economic and trade sanctions, U.S. laws such as the Foreign Corrupt Practices Act and local laws which also prohibit corrupt payments to governmental officials. Violations of these laws and regulations could result in fines, criminal sanctions against us, our officers or our employees, and prohibitions on the conduct of our business. Any such violations could include prohibitions on our ability to offer our offerings in one or more countries, could delay or prevent potential acquisitions, and could also materially damage our reputation, our brand, our international expansion efforts, our ability to attract and retain employees, our business and operating results. Our success depends, in part, on our ability to anticipate and address these risks and manage these difficulties.

Economic and political uncertainty in developing markets could adversely affect our revenue and earnings.

We conduct business and are contemplating expansion in developing markets with economies and governments that tend to be more volatile than those in the U.S. and Western Europe. The risk of doing business in developing markets such as Brazil, China, Colombia, Indonesia, Mexico, Oman, Turkey, the United Arab Emirates and other economically volatile areas could adversely affect our operations and earnings. Such risks include the financial instability among customers in these regions, political instability, fraud or corruption and other non-economic factors such as irregular trade flows that need to be managed successfully with the help of the local governments. In addition, commercial laws in some developing countries can be vague, inconsistently administered and retroactively applied. If we are deemed to be not in compliance with applicable laws in developing countries where we conduct business, our prospects and business in those countries could be harmed, which could then have a material adverse impact on our results of operations and financial position. Our failure to successfully manage economic, political and other risks relating to doing business in developing countries and economically and politically volatile areas could adversely affect our business.

Terrorist activity throughout the world and military action to counter terrorism could adversely impact our business.

The continued threat of terrorist activity and other acts of war or hostility contribute to a climate of political and economic uncertainty. Due to existing or developing circumstances, we may need to incur additional costs in the future to provide enhanced security, including cyber security, which could have a material adverse effect on our business and results of operations. These circumstances may also adversely affect our ability to attract and retain customers, our ability to raise capital and the operation and maintenance of our IBX data centers.

Our business may be adversely affected by the recent coronavirus outbreak.

In December 2019, a novel strain of coronavirus, referred to as 2019-nCoV, Covid-19 Coronavirus Epidemic, or Covid-19, was reported to have surfaced in Wuhan, China. Covid-19 has since spread to other regions in China and other countries, including jurisdictions in which we operate. We continue to monitor our operations and government recommendations and have made some modifications to our operations because of Covid-19. For example, we have implemented enhanced health and safety precautions in certain of our IBXs to reduce the risk of exposure and have requested that non-IBX datacenter employees in certain jurisdictions work from home and refrain from travel. The outbreak and any additional preventative or protective actions that we may take in response to this Covid-19 or any other global health threat or pandemic may result in business and/or operational disruption. Our customers' businesses could be disrupted, and our revenues could be negatively affected. Additionally, global economic disrupters like the Covid-19 could negatively impact our supply chain and cause delays in the construction of our IBX datacenters which rely on materials, products and manufacturing from China. It may not be possible to find replacement products or supplies and ongoing delays could affect our business and growth. While it is too early to tell whether Covid-19 will have a material effect on our business over time, we are experiencing delays from certain vendors and suppliers who have been affected more directly by Covid-19 in China. The extent to which Covid-19 impacts our results will depend on many factors and future developments, including new information about Covid-19 and any new government regulations which may emerge to contain the virus, among others.

Sales or issuances of 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. We have established an "at-the-market" stock offering program (the "ATM Program") through which we may, from time to time, issue and sell shares of our common stock to or through sales agents up to established limits. By the end of 2019, we had $300.0 million of shares available for sale under our ATM Program. We may also seek authorization to sell additional shares of common stock under the ATM Program which could lead to additional dilution for our stockholders. Please see Note 12 of the Notes to the Consolidated Financial Statements in Item 8 of this Annual Report on Form 10-K for sales of our common stock under the ATM Program to date.

The market price of our stock may continue to be highly volatile, and the value of an investment in our common stock may decline.

The market price of the shares of our common stock has been and may continue to be highly volatile. General economic and market conditions, and market conditions for telecommunications and real estate investment trust stocks in general, may affect the market price of our common stock.

Announcements by us or others, or speculations about our future plans, may also have a significant impact on the market price of our common stock. These may relate to:

- our operating results or forecasts;
- new issuances of equity, debt or convertible debt by us, including issuances through our ATM Program;
- increases in market interest rates and changes in other general market and economic conditions, including inflationary concerns;
- changes to our capital allocation, tax planning or business strategy;
- our qualification for taxation as a REIT and our declaration of distributions to our stockholders;
- changes in U.S. or foreign tax laws;
- changes in management or key personnel;
- developments in our relationships with customers;
- announcements by our customers or competitors;
- changes in regulatory policy or interpretation;
- governmental investigations;
- changes in the ratings of our debt or stock by rating agencies or securities analysts;
- our purchase or development of real estate and/or additional IBX data centers;
- our acquisitions of complementary businesses; or
- the operational performance of our IBX data centers.

The stock market has from time to time experienced extreme price and volume fluctuations, which have particularly affected the market prices for telecommunications companies, and which have often been unrelated to their operating performance. These broad market fluctuations may adversely affect the market price of our common stock. One of the factors that investors may consider in deciding whether to buy or sell our common stock is our distribution rate as a percentage of our stock price relative to market interest rates. If market interest rates increase, prospective investors may demand a higher distribution rate or seek alternative investments paying higher dividends or interest. As a result, interest rate fluctuations and conditions in the capital markets may affect the market value of our common stock. Furthermore, companies that have experienced volatility in the market price of their stock have been subject to securities class action litigation. We may be the target of this type of litigation in the future. Securities litigation against us could result in substantial costs and/or damages, and divert management's attention from other business concerns, which could seriously harm our business.

If we are not able to generate sufficient operating cash flows or obtain external financing, our ability to fund incremental expansion plans may be limited.

Our capital expenditures, together with ongoing operating expenses, obligations to service our debt and the cash outlays associated with our REIT distribution requirements, are, and will continue to be, a substantial burden on our cash flow and may decrease our cash balances. Additional debt or equity financing may not be available when needed or, if available, may not be available on satisfactory terms. Our inability to obtain additional debt and/or equity financing or to generate sufficient cash from operations may require us to prioritize projects or curtail capital expenditures which could adversely affect our results of operations.

Fluctuations in foreign currency exchange rates in the markets in which we operate internationally could harm our results of operations.

We may experience gains and losses resulting from fluctuations in foreign currency exchange rates. To date, the majority of revenues and costs in our international operations are denominated in foreign currencies. Where our prices are denominated in U.S. Dollars, our sales and revenues could be adversely affected by declines in foreign currencies relative to the U.S. Dollar, thereby making our offerings more expensive in local currencies. We are also exposed to risks resulting from fluctuations in foreign currency exchange rates in connection with our international operations. To the extent we are paying contractors in foreign currencies, our operations could cost more than anticipated as a result of declines in the U.S. Dollar relative to foreign currencies. In addition, fluctuating foreign currency exchange rates have a direct impact on how our international results of operations translate into U.S. Dollars.

Although we currently undertake, and may decide in the future to further undertake, foreign exchange hedging transactions to reduce foreign currency transaction exposure, we do not currently intend to eliminate all foreign currency transaction exposure. In addition, REIT compliance rules may restrict our ability to enter into hedging transactions. Therefore, any weakness of the U.S. Dollar may have a positive impact on our consolidated results of operations because the currencies in the foreign countries in which we operate may translate into more U.S. Dollars. However, if the U.S. Dollar strengthens relative to the currencies of the foreign countries in which we operate, our consolidated financial position and results of operations may be negatively impacted as amounts in foreign currencies will generally translate into fewer U.S. Dollars. For additional information on foreign currency risks, refer to our discussion of foreign currency risk in "Quantitative and Qualitative Disclosures About Market Risk" included in Item 7A of this Annual Report on Form 10-K.

Our derivative transactions expose us to counterparty credit risk.

Our derivative transactions expose us to risk of financial loss if a counterparty fails to perform under a derivative contract. Disruptions in the financial markets could lead to sudden decreases in a counterparty's liquidity, which could make them unable to perform under the terms of their derivative contract and we may not be able to realize the benefit of the derivative contract.

Changes in U.S. or foreign tax laws, regulations, or interpretations thereof, including changes to tax rates, may adversely affect our financial statements and cash taxes.

We are a U.S. company with global subsidiaries and are subject to income and other taxes in the U.S. (although currently limited due to our taxation as a REIT) and many foreign jurisdictions. Significant judgment is required in determining our worldwide provision for income and other taxes. Although we believe that we have adequately assessed and accounted for our potential tax liabilities, and that our tax estimates are reasonable, there can be no certainty that additional taxes will not be due upon audit of our tax returns or as a result of changes to the tax laws and interpretations thereof. For example, we are currently undergoing audits and appealing the tentative assessments in a number of jurisdictions where we operate. The final results of these audits and the outcome of the appeals are uncertain and may not be resolved in our favor. Further, the nature and timing of any future changes to each jurisdiction's tax laws and the impact on our future tax liabilities cannot be predicted with any accuracy but could materially and adversely impact our results of operations and financial position or cash flows.

We may be vulnerable to security breaches which could disrupt our operations and have a material adverse effect on our financial performance and operating results.

We face risks associated with unauthorized access to our computer systems, loss or destruction of data, computer viruses, malware, distributed denial-of-service attacks or other malicious activities. These threats may result from human error, equipment failure or fraud or malice on the part of employees or third parties. A party who is able to compromise the security measures on our networks or the security of our infrastructure could misappropriate either our proprietary information or the personal information of our customers or our employees, or cause interruptions or malfunctions in our operations or our customers' operations. As we provide assurances to our customers that we provide a high level of security, such a compromise could be particularly harmful to our brand and reputation. We may be required to expend significant capital and resources to protect against such threats or to alleviate problems caused by breaches in security. As techniques used to breach security change frequently and are generally not recognized until launched against a target, we may not be able to promptly detect that a cyber breach has occurred, or implement security measures in a timely manner or, if and when implemented, we may not be able to determine the extent to which these measures could be circumvented. Any breaches that may occur could expose us to increased risk of lawsuits, regulatory penalties, loss of existing or potential customers, damage relating to loss of proprietary information, harm to our reputation and increases in our security costs, which could have a material adverse effect on our financial performance and operating results. We maintain insurance coverage for cyber risks, but such coverage may be unavailable or insufficient to cover our losses.

We offer professional services to our customers where we consult on data center solutions and assist with implementations. We also offer managed services in certain of our foreign jurisdictions outside of the U.S. where we manage the data center infrastructure for our customers. The access to our clients' networks and data, which is gained from these services, creates some risk that our clients' networks or data will be improperly accessed. We may also design our clients' cloud storage systems in such a way that exposes our clients to increased risk of data breach. If Equinix were held to be responsible for any such a breach, it could result in a significant loss to Equinix, including damage to Equinix's client relationships, harm to our brand and reputation, and legal liability.

We are continuing to invest in our expansion efforts but may not have sufficient customer demand in the future to realize expected returns on these investments.

We are considering the acquisition or lease of additional properties and the construction of new IBX data centers beyond those expansion projects already announced. We will be required to commit substantial operational and financial resources to these IBX data centers, generally 12 to 18 months in advance of securing customer contracts, and we may not have sufficient customer demand in those markets to support these centers once they are built. In addition, unanticipated technological changes could affect customer requirements for data centers, and we may not have built such requirements into our new IBX data centers. Either of these contingencies, if they were to occur, could make it difficult for us to realize expected or reasonable returns on these investments.

Our offerings have a long sales cycle that may harm our revenue and operating results.

A customer's decision to purchase our offerings typically involves a significant commitment of resources. In addition, some customers will be reluctant to commit to locating in our IBX data centers until they are confident that the IBX data center has adequate carrier connections. As a result, we have a long sales cycle. Furthermore, we may devote significant time and resources to pursuing a particular sale or customer that does not result in revenues. We have also significantly expanded our sales force in recent years, and it will take time for these new hires to become fully productive.

Delays due to the length of our sales cycle may materially and adversely affect our revenues and operating results, which could harm our ability to meet our forecasts and cause volatility in our stock price.

Any failure of our physical infrastructure or negative impact on our ability to provide our services, or damage to customer infrastructure within our IBX data centers, could lead to significant costs and disruptions that could reduce our revenue and harm our business reputation and financial results.

Our business depends on providing customers with highly reliable solutions. We must safehouse our customers' infrastructure and equipment located in our IBX data centers and ensure our IBX data centers and non-IBX offices remain operational at all times. We own certain of our IBX data centers, but others are leased by us, and we rely on the landlord for basic maintenance of our leased IBX data centers and office buildings. If such landlord has not maintained a leased property sufficiently, we may be forced into an early exit from the center which could be disruptive to our business. Furthermore, we continue to acquire IBX data centers not built by us. If we discover that these buildings and their infrastructure assets are not in the condition we expected when they were acquired, we may be required to incur substantial additional costs to repair or upgrade the centers.

Problems at one or more of our IBX data centers or corporate offices, whether or not within our control, could result in service interruptions or significant infrastructure or equipment damage. These could result from numerous factors, including:

- human error;
- equipment failure;
- physical, electronic and cyber security breaches;
- fire, earthquake, hurricane, flood, tornado and other natural disasters;
- extreme temperatures;
- water damage;
- fiber cuts;
- power loss;
- terrorist acts;
- sabotage and vandalism;
- global pandemics or health emergencies, such as the coronavirus; and
- failure of business partners who provide our resale products.

We have service level commitment obligations to certain customers. As a result, service interruptions or significant equipment damage in our IBX data centers could result in difficulty maintaining service level commitments to these customers and potential claims related to such failures. Because our IBX data centers are critical to many of our customers' businesses, service interruptions or significant equipment damage in our IBX data centers could also result in lost profits or other indirect or consequential damages to our customers. We cannot guarantee that a court would enforce any contractual limitations on our liability in the event that one of our customers brings a lawsuit against us as a result of a problem at one of our IBX data centers and we may decide to reach settlements with affected customers irrespective of any such contractual limitations. Any such settlement may result in a reduction of revenue under U.S. generally accepted accounting principles ("GAAP"). In addition, any loss of service, equipment damage or inability to meet our service level commitment obligations could reduce the confidence of our customers and could consequently impair our ability to obtain and retain customers, which would adversely affect both our ability to generate revenues and our operating results.

Furthermore, we are dependent upon internet service providers, telecommunications carriers and other website operators in the Americas, Asia-Pacific and EMEA regions and elsewhere, some of which have experienced significant system failures and electrical outages in the past. Our customers may in the future experience difficulties due to system failures unrelated to our systems and offerings. If, for any reason, these providers fail to provide the required services, our business, financial condition and results of operations could be materially and adversely impacted.

We are currently making significant investments in our back-office information technology systems and processes. Difficulties from or disruptions to these efforts may interrupt our normal operations and adversely affect our business and operating results.

We have been investing heavily in our back-office information technology systems and processes for a number of years and expect such investment to continue for the foreseeable future in support of our pursuit of global, scalable solutions across all geographies and functions that we operate in. These continuing investments include: 1) ongoing improvements to the customer experience from initial quote to customer billing and our revenue recognition process; 2) integration of recently-acquired operations onto our various information technology systems; and 3) implementation of new tools and technologies to either further streamline and automate processes, such as our procurement system, or to support our compliance with evolving U.S. GAAP, such as the new revenue accounting, derivatives and hedging and leasing standards. As a result of our continued work on these projects, we may experience difficulties with our systems, management distraction and significant business disruptions. For example, difficulties with our systems may interrupt our ability to accept and deliver customer orders and may adversely impact our overall financial operations, including our accounts payable, accounts receivables, general ledger, fixed assets, revenue recognition, close processes, internal financial controls and our ability to otherwise run and track our business. We may need to expend significant attention, time and resources to correct problems or find alternative sources for performing these functions. All of these changes to our financial systems also create an increased risk of deficiencies in our internal controls over financial reporting until such systems are stabilized. Such significant investments in our back-office systems may take longer to complete and cost more than originally planned. In addition, we may not realize the full benefits we hoped to achieve and there is a risk of an impairment charge if we decide that portions of these projects will not ultimately benefit the company or are de-scoped. Finally, the collective impact of these changes to our business has placed significant demands on impacted employees across multiple functions, increasing the risk of errors and control deficiencies in our financial statements, distraction from the effective operation of our business and difficulty in attracting and retaining employees. Any such difficulties or disruptions may adversely affect our business and operating results.

Inadequate or inaccurate external and internal information, including budget and planning data, could lead to inaccurate financial forecasts and inappropriate financial decisions.

Our financial forecasts are dependent on estimates and assumptions regarding budget and planning data, market growth, foreign exchange rates, our ability to remain qualified for taxation as a REIT, and our ability to generate sufficient cash flow to reinvest in the business, fund internal growth, make acquisitions, pay dividends and meet our debt obligations. Our financial projections are based on historical experience and on various other assumptions that our management believes to be reasonable under the circumstances and at the time they are made. However, if our external and internal information is inadequate, our actual results may differ materially from our forecasts and cause us to make inappropriate financial decisions. Any material variation between our financial forecasts and our actual results may also adversely affect our future profitability, stock price and stockholder confidence.

The level of insurance coverage that we purchase may prove to be inadequate.

We carry liability, property, business interruption and other insurance policies to cover insurable risks to our company. We select the types of insurance, the limits and the deductibles based on our specific risk profile, the cost of the insurance coverage versus its perceived benefit and general industry standards. Our insurance policies contain industry standard exclusions for events such as war and nuclear reaction. We purchase minimal levels of earthquake insurance for certain of our IBX data centers, but for most of our data centers, including many in California, we have elected to self-insure. The earthquake and flood insurance that we do purchase would be subject to high deductibles. Any of the limits of insurance that we purchase, including those for cyber risks, could prove to be inadequate, which could materially and adversely impact our business, financial condition and results of operations.

Our construction of additional new IBX data centers or IBX data center expansions could involve significant risks to our business.

In order to sustain our growth in certain of our existing and new markets, we may have to expand an existing data center, lease a new facility or acquire suitable land, with or without structures, to build new IBX data centers from the ground up. Expansions or new builds are currently underway, or being contemplated, in many of our markets. These construction projects expose us to many risks which could have an adverse effect on our operating results and financial condition. Some of the risks associated with these projects include:

- construction delays;
- lack of availability and delays for data center equipment, including items such as generators and switchgear;
- unexpected budget changes;
- increased prices for building supplies, raw materials and data center equipment;
- labor availability, labor disputes and work stoppages with contractors, subcontractors and other third parties;
- unanticipated environmental issues and geological problems;
- delays related to permitting from public agencies and utility companies; and
- delays in site readiness leading to our failure to meet commitments made to customers planning to expand into a new build.

Construction projects are dependent on permitting from public agencies and utility companies. We are currently experiencing permitting delays in Amsterdam due to the temporary halt on construction of data centers in the municipality due to pressure on power infrastructure and special planning. While we don't expect any negative impact for our business in Amsterdam, these types of delays related to permitting from public agencies and utility companies could occur in other markets and have an adverse effect on our growth.

Additionally, all construction related projects require us to carefully select and rely on the experience of one or more designers, general contractors, and associated subcontractors during the design and construction process. Should a designer, general contractor or significant subcontractor experience financial problems or other problems during the design or construction process, we could experience significant delays, increased costs to complete the project and/or other negative impacts to our expected returns.

Site selection is also a critical factor in our expansion plans. There may not be suitable properties available in our markets with the necessary combination of high power capacity and fiber connectivity, or selection may be limited. Thus, while we may prefer to locate new IBX data centers adjacent to our existing locations, it may not always be possible. In the event we decide to build new IBX data centers separate from our existing IBX data centers, we may provide interconnection solutions to connect these two centers. Should these solutions not provide the necessary reliability to sustain connection, this could result in lower interconnection revenue and lower margins and could have a negative impact on customer retention over time.

Environmental regulations may impose upon us new or unexpected costs.

We are subject to various federal, state, local and international environmental and health and safety laws and regulations, including those relating to the generation, storage, handling and disposal of hazardous substances and wastes. Certain of these laws and regulations also impose joint and several liability, without regard to fault, for investigation and cleanup costs on current and former owners and operators of real property and persons who have disposed of or released hazardous substances into the environment. Our operations involve the use of hazardous substances and materials such as petroleum fuel for emergency generators, as well as batteries, cleaning solutions and other materials. In addition, we lease, own or operate real property at which hazardous substances and regulated materials have been used in the past. At some of our locations, hazardous substances or regulated materials are known to be present in soil or groundwater, and there may be additional unknown hazardous substances or regulated materials present at sites we own, operate or lease. At some of our locations, there are land use restrictions in place relating to earlier environmental cleanups that do not materially limit our use of the sites. To the extent any hazardous substances or any other substance or material must be cleaned up or removed from our property, we may be responsible under applicable laws, permits or leases for the removal or cleanup of such substances or materials, the cost of which could be substantial.

We purchase significant amounts of electricity from generating facilities and utility companies that are subject to environmental laws, regulations and permit requirements. These environmental requirements are subject to material change, which could result in increases in our electricity suppliers' compliance costs that may be passed through to us. Regulations promulgated by the U.S. EPA could limit air emissions from coal-fired power plants, restrict discharges of cooling water, and otherwise impose new operational restraints on conventional power plants that could increase costs of electricity. Regulatory programs intended to promote increased generation of electricity from renewable sources may also increase our costs of procuring electricity. In addition, we are directly subject to environmental, health and safety laws regulating air emissions, storm water management and other issues arising in our business. For example, our emergency generators are subject to state and federal regulations governing air pollutants, which could limit the operation of those generators or require the installation of new pollution control technologies. While environmental regulations do not normally impose material costs upon our operations, unexpected events, equipment malfunctions, human error and changes in law or regulations, among other factors, can lead to additional capital requirements, limitations upon our operations and unexpected increased costs.

Regulation of greenhouse gas ("GHG") emissions could increase the cost of electricity by reducing amounts of electricity generated from fossil fuels, by requiring the use of more expensive generating methods or by imposing taxes or fees upon electricity generation or use. There has been interest in the U.S. Congress in addressing climate change expressed by a number of bills introduced in the current Congressional Session. Federal legislative proposals to address climate change include measures ranging from "carbon taxes," to tax credits, to federally imposed limitations on GHG emissions. The course of future legislation and regulation remains difficult to predict and the potential increased costs associated with GHG regulation or taxes cannot be estimated at this time.

State regulations also have the potential to increase our costs of obtaining electricity. Certain states, like California, have issued or may enact environmental regulations that could materially affect our facilities and electricity costs. California has limited GHG emissions from new and existing conventional power plants by imposing regulatory caps and by auctioning the rights to emission allowances. Washington, Oregon and Massachusetts have issued regulations to implement similar carbon cap and trade programs, and other states are considering proposals to limit carbon emissions through cap and trade programs, carbon pricing programs and other mechanisms. Some northeastern states adopted a multi-state program for limiting carbon emissions through the Regional Greenhouse Gas Initiative ("RGGI") cap and trade program. State programs have not had a material adverse effect on our electricity costs to date, but due to the market-driven nature of some of the programs, they could have a material adverse effect on electricity costs in the future.

Aside from regulatory requirements, we have separately undertaken efforts to procure energy from renewable energy projects in order to support new renewables development. The costs of procuring such energy may exceed the costs of procuring electricity from existing sources, such as existing utilities or electric service provided through conventional grids. These efforts to support and enhance renewable electricity generation may increase our costs of electricity above those that would be incurred through procurement of conventional electricity from existing sources.

Our business may be adversely affected by climate change and responses to it.

Severe weather events, such as droughts, heat waves, fires, hurricanes, and flooding, pose a threat to our data centers and our customers' IT infrastructure through physical damage to facilities or equipment, power supply disruption, and long-term effects on the cost of electricity. The frequency and intensity of severe weather events are reportedly increasing locally and regionally as part of broader climate changes. Global weather pattern changes may also pose long-term risks of physical impacts to our business.

We maintain disaster recovery and business continuity plans that would be implemented in the event of severe weather events that interrupt our business or affect our customers' IT infrastructure. While these plans are designed to allow us to recover from natural disasters or other events that can interrupt our business, we cannot be certain that our plans will protect us or our customers from all such disasters or events. Failure to prevent impact to customers from such events could adversely affect our business.

We face pressures from our customers and stockholders, who are increasingly focused on climate change, to prioritize sustainable energy practices, reduce our carbon footprint and promote sustainability. To address these concerns, we pursue opportunities to improve energy efficiency and implement energy-saving retrofits. In addition, we have established a long-term goal of using 100% clean and renewable energy. As a result of these and other initiatives, we have made progress towards reducing our carbon footprint. It is possible, however, that our customers and investors might not be satisfied with our sustainability efforts or the speed of their adoption. If we do not meet our customers' or stockholders' expectations, our business and/or our share price could be harmed.

Concern about climate change in various jurisdictions may result in more stringent laws and regulatory requirements regarding emissions of carbon dioxide or other GHGs. As described above under "RISK FACTORS - Environmental regulations may impose upon us new or unexpected costs," restrictions on carbon dioxide or other GHG emissions could result in significant increases in operating or capital costs, including higher energy costs generally, and increased costs from carbon taxes, emission cap and trade programs and renewable portfolio standards that are imposed upon our electricity suppliers. These higher energy costs, and the cost of complying across our global platform, or of failing to comply with these and other climate change regulations, may have an adverse effect on our business and our results of operations.

Our business could be harmed by prolonged power outages, shortages or capacity constraints.

Our IBX data centers are affected by problems accessing electricity sources, such as planned or unplanned power outages and limitations on transmission or distribution. Unplanned power outages, including, but not limited to those relating to large storms, earthquakes, fires, tsunamis, cyberattacks and planned power outages by public utilities such as those related to Pacific Gas and Electric Company's ("PG&E") planned outages in California to minimize fire risks, could harm our customers and our business. Our international operations are sometimes located outside of developed, reliable electricity markets, where we are exposed to some insecurity in supply associated with technical and regulatory problems, as well as transmission constraints. Some of our IBX data centers are located in leased buildings where, depending upon the lease requirements and number of tenants involved, we may or may not control some or all of the infrastructure including generators and fuel tanks. As a result, in the event of a power outage, we may be dependent upon the landlord, as well as the utility company, to restore the power. We attempt to limit our exposure to system downtime by using backup generators and alternative power supplies, but these measures may not always prevent downtime, which can adversely affect customer experience and revenues.

In each of our markets, we rely on third parties to provide a sufficient amount of power for current and future customers. At the same time, power and cooling requirements are increasing per unit of equipment. As a result, some customers are consuming an increasing amount of power per cabinet. We generally do not control the amount of power our customers draw from their installed circuits, which can result in growth in the aggregate power consumption of our facilities beyond our originally planning and expectations. This means that limitations on the capacity of our electrical delivery systems and equipment could limit customer utilization of our IBX data centers. These limitations could have a negative impact on the effective available capacity of a given center and limit our ability to grow our business, which could have a negative impact on our financial performance, operating results and cash flows.

Each new facility requires access to significant quantities of electricity. Limitations on generation, transmission and distribution may limit our ability to obtain sufficient power capacity for potential expansion sites in new or existing markets. We may experience significant delays and substantial increased costs demanded by the utilities to provide the level of electrical service required by our current IBX data center designs.

The security of our electricity supplies in California could be adversely affected by the actions of the court in the bankruptcy proceeding (the "Bankruptcy Court") filed on January 29, 2019, of PG&E, the public utility that serves the area in which some of our facilities are located. PG&E announced that it filed for bankruptcy to facilitate the resolution of liabilities in connection with the 2017 and 2018 Northern California wildfires. On January 31, 2020, PG&E filed an amended proposed chapter 11 plan of reorganization (the “Plan”). If confirmed, the Plan will provide for the assumption (i.e., continuation) of all executory contracts not otherwise rejected (i.e., breached) during the pendency of the bankruptcy case, including high-priced power purchase agreements and other agreements under which PG&E procures electricity for distribution to customers like us. Until the Plan is confirmed by the Bankruptcy Court and becomes effective, there are no assurances that any or all executory contracts will be assumed. It is still possible that, during its bankruptcy, PG&E could seek permission from the Bankruptcy Court to reject certain burdensome executory contracts. It is not certain that PG&E will be able to obtain such relief. Just before the bankruptcy filing, the Federal Energy Regulatory Commission ("FERC") ruled that its approval is required before PG&E may reject any FERC-jurisdictional wholesale power agreements. The Bankruptcy Court disagreed with FERC, holding instead that FERC does not have concurrent jurisdiction, or any jurisdiction, over the determination of whether any rejection of a power purchase agreement should be authorized. FERC’s ruling and the Bankruptcy Court’s decision are on direct appeal to the United States Court of Appeals for the Ninth Circuit where they remain under review. If PG&E seeks and is ultimately allowed to reject power agreements, it is difficult to predict the consequences of any such action for us but they could potentially include procuring electricity from more expensive sources, reducing the availability and reliability of electricity supplied to our facilities and relying on a larger percentage of electricity generated by fossil fuels, any of which could reduce supplies of electricity available to our operations or increase our costs of electricity.

Any power outages, shortages or capacity constraints may have an adverse effect on our business and our results of operations.

If we are unable to implement our evolving organizational structure or if we are unable to recruit or retain key executives and qualified personnel, our business could be harmed.

In connection with the evolving needs of our customers and our business, we undertook a review of our organizational architecture and have made, and will continue to make, changes as a result of that review. There can be no assurances that the changes won't result in attrition, that the significant amount of management and other employees' time and focus to implement the changes won't divert attention from operating and growing the business, or that any changes will result in increased organizational effectiveness. We must also continue to identify, hire, train and retain key personnel who maintain relationships with our customers and who can provide the technical, strategic and marketing skills required for our company's growth. There is a shortage of qualified personnel in these fields, and we compete with other companies for the limited pool of talent.

The failure to recruit and retain necessary key executives and personnel could cause disruption, harm our business and hamper our ability to grow our company.

We may not be able to compete successfully against current and future competitors.

The global multi-tenant data center market is highly fragmented. It is estimated that Equinix is one of more than 1,200 companies that provide these offerings around the world. Equinix competes with these firms which vary in terms of their data center offerings. We must continue to evolve our product strategy and be able to differentiate our IBX data centers and product offerings from those of our competitors.

Some of our competitors may adopt aggressive pricing policies, especially if they are not highly leveraged or have lower return thresholds than we do. As a result, we may suffer from pricing pressure that would adversely affect our ability to generate revenues. Some of these competitors may also provide our target customers with additional benefits, including bundled communication services or cloud services, and may do so in a manner that is more attractive to our potential customers than obtaining space in our IBX data centers. Similarly, with growing acceptance of cloud-based technologies, we are at risk of losing customers that may decide to fully leverage cloud infrastructure offerings instead of managing their own. Competitors could also operate more successfully or form alliances to acquire significant market share.

Failure to compete successfully may materially adversely affect our financial condition, cash flows and results of operations.

If we cannot continue to develop, acquire, market and provide new offerings or enhancements to existing offerings that meet customer requirements and differentiate us from our customers, our operating results could suffer.

As our customers evolve their IT strategies, we must remain flexible and evolve along with new technologies and industry and market shifts. Ineffective planning and execution in our cloud and product development strategies may cause difficulty in sustaining our competitive advantages.

The process of developing and acquiring new offerings and enhancing existing offerings is complex. If we fail to anticipate customers' evolving needs and expectations or do not adapt to technological and IT trends, our results of operations could suffer. In order to adapt effectively, we sometimes must make long-term investments, develop, acquire or obtain certain intellectual property and commit significant resources before knowing whether our predictions will accurately reflect customer demand for the new offerings. If we misjudge customer needs in the future, our new offerings may not succeed, and our revenues and earnings may be harmed. Additionally, any delay in the development, acquisition, marketing or launch of a new offering could result in customer dissatisfaction or attrition. If we cannot continue adapting our products, or if our competitors can adapt their products more quickly than us, our business could be harmed.

We recently announced our Joint Venture with GIC and are also in discussions with a targeted set of hyperscale customers to develop capacity to serve their larger footprint needs by leveraging existing capacity and dedicated hyperscale builds. We have announced our intention to seek additional joint venture partners for certain of our hyperscale builds. There can be no assurances that our joint ventures will be successful or that we find additional partners or that we are able to successfully meet the needs of these customers.

We also recently announced an agreement to acquire Packet Host, Inc., a bare metal automation company which would facilitate a new product offering for Equinix. While we believe this new product offering will be desirable to our customers and will complement our other offerings on Platform Equinix, we cannot guarantee the success of this product or any other new product offering. Our company has not historically offered hardware solutions, and this would be a new market area for us which can bring challenges and could harm our business if not executed in the time or manner that we expect.

The use of high power density equipment may limit our ability to fully utilize our older IBX data centers.

Some customers have increased their use of high power density equipment, such as blade servers, in our IBX data centers which has increased the demand for power on a per cabinet basis. Because many of our IBX data centers were built a number of years ago, the current demand for power may exceed the designed electrical capacity in these centers. As power, not space, is a limiting factor in many of our IBX data centers, our ability to fully utilize those IBX data centers may be impacted. The ability to increase the power capacity of an IBX data center, should we decide to, is dependent on several factors including, but not limited to, the local utility's ability to provide additional power; the length of time required to provide such power; and/or whether it is feasible to upgrade the electrical infrastructure of an IBX data center to deliver additional power to customers. Although we are currently designing and building to a higher power specification than that of many of our older IBX data centers, there is a risk that demand will continue to increase and our IBX data centers could become underutilized sooner than expected.

If our internal controls are found to be ineffective, our financial results or our stock price may be adversely affected.

Our most recent evaluation of our controls resulted in our conclusion that, as of December 31, 2019, in compliance with Section 404 of the Sarbanes-Oxley Act of 2002, our internal controls over financial reporting were effective. Our ability to manage our operations and growth through, for example, the integration of recently acquired businesses, the adoption of new accounting principles and tax laws, and our overhaul of our back office systems that, for example, support the customer experience from initial quote to customer billing and our revenue recognition process, will require us to further develop our controls and reporting systems and implement or amend new or existing controls and reporting systems in those areas where the implementation and integration is still ongoing. All of these changes to our financial systems and the implementation and integration of acquisitions create an increased risk of deficiencies in our internal controls over financial reporting. If, in the future, our internal control over financial reporting is found to be ineffective, or if a material weakness is identified in our controls over financial reporting, our financial results may be adversely affected. Investors may also lose confidence in the reliability of our financial statements which could adversely affect our stock price.

Our operating results may fluctuate.

We have experienced fluctuations in our results of operations on a quarterly and annual basis. The fluctuations in our operating results may cause the market price of our common stock to be volatile. We may experience significant fluctuations in our operating results in the foreseeable future due to a variety of factors, including, but not limited to:

- fluctuations of foreign currencies in the markets in which we operate;
- the timing and magnitude of depreciation and interest expense or other expenses related to the acquisition, purchase or construction of additional IBX data centers or the upgrade of existing IBX data centers;
- demand for space, power and solutions at our IBX data centers;
- changes in general economic conditions, such as an economic downturn, or specific market conditions in the telecommunications and internet industries, both of which may have an impact on our customer base;
- charges to earnings resulting from past acquisitions due to, among other things, impairment of goodwill or intangible assets, reduction in the useful lives of intangible assets acquired, identification of additional assumed contingent liabilities or revised estimates to restructure an acquired company's operations;
- the duration of the sales cycle for our offerings and our ability to ramp our newly-hired sales persons to full productivity within the time period we have forecasted;
- additions and changes in product offerings and our ability to ramp up and integrate new products within the time period we have forecasted;
- restructuring charges or reversals of restructuring charges, which may be necessary due to revised sublease assumptions, changes in strategy or otherwise;
- acquisitions or dispositions we may make;
- the financial condition and credit risk of our customers;
- the provision of customer discounts and credits;
- the mix of current and proposed products and offerings and the gross margins associated with our products and offerings;
- the timing required for new and future IBX data centers to open or become fully utilized;
- competition in the markets in which we operate;
- conditions related to international operations;
- increasing repair and maintenance expenses in connection with aging IBX data centers;
- lack of available capacity in our existing IBX data centers to generate new revenue or delays in opening new or acquired IBX data centers that delay our ability to generate new revenue in markets which have otherwise reached capacity;
- changes in rent expense as we amend our IBX data center leases in connection with extending their lease terms when their initial lease term expiration dates approach or changes in shared operating costs in connection with our leases, which are commonly referred to as common area maintenance expenses;
- the timing and magnitude of other operating expenses, including taxes, expenses related to the expansion of sales, marketing, operations and acquisitions, if any, of complementary businesses and assets;
- the cost and availability of adequate public utilities, including electricity;
- changes in employee stock-based compensation;
- overall inflation;
- increasing interest expense due to any increases in interest rates and/or potential additional debt financings;
- changes in our tax planning strategies or failure to realize anticipated benefits from such strategies;
- changes in income tax benefit or expense; and
- changes in or new GAAP as periodically released by the Financial Accounting Standards Board ("FASB").

Any of the foregoing factors, or other factors discussed elsewhere in this report, could have a material adverse effect on our business, results of operations and financial condition. Although we have experienced growth in revenues in recent quarters, this growth rate is not necessarily indicative of future operating results. Prior to 2008, we had generated net losses every fiscal year since inception. It is possible that we may not be able to generate net income on a quarterly or annual basis in the future. In addition, a relatively large portion of our expenses are fixed in the short-term, particularly with respect to lease and personnel expenses, depreciation and amortization and interest expenses. Therefore, our results of operations are particularly sensitive to fluctuations in revenues. As such, comparisons to prior reporting periods should not be relied upon as indications of our future performance. In addition, our operating results in one or more future quarters may fail to meet the expectations of securities analysts or investors.

Our days sales outstanding ("DSO") may be negatively impacted by process and system upgrades and acquisitions.

Our DSO may be negatively impacted by ongoing process and system upgrades which can impact our customers' experience in the short term, together with integrating recent acquisitions into our processes and systems, which may have a negative impact on our operating cash flows, liquidity and financial performance.

We may incur goodwill and other intangible asset impairment charges, or impairment charges to our property, plant and equipment, which could result in a significant reduction to our earnings.

In accordance with U.S. GAAP, we are required to assess our goodwill and other intangible assets annually, or more frequently whenever events or changes in circumstances indicate potential impairment, such as changing market conditions or any changes in key assumptions. If the testing performed indicates that an asset may not be recoverable, we are required to record a non-cash impairment charge for the difference between the carrying value of the goodwill or other intangible assets and the implied fair value of the goodwill or other intangible assets in the period the determination is made.

We also periodically monitor the remaining net book values of our property, plant and equipment, including at the individual IBX data center level. Although each individual IBX data center is currently performing in accordance with our expectations, the possibility that one or more IBX data centers could begin to under-perform relative to our expectations is possible and may also result in non-cash impairment charges.

These charges could be significant, which could have a material adverse effect on our business, results of operations or financial condition.

We have incurred substantial losses in the past and may incur additional losses in the future.

As of December 31, 2019, our retained earnings were $1.4 billion. Although we have generated net income for each fiscal year since 2008, except for the year ended December 31, 2014, we are currently investing heavily in our future growth through the build out of multiple additional IBX data centers, expansions of IBX data centers and acquisitions of complementary businesses. As a result, we will incur higher depreciation and other operating expenses, as well as transaction costs and interest expense, that may negatively impact our ability to sustain profitability in future periods unless and until these new IBX data centers generate enough revenue to exceed their operating costs and cover the additional overhead needed to scale our business for this anticipated growth. The current global financial uncertainty may also impact our ability to sustain profitability if we cannot generate sufficient revenue to offset the increased costs of our recently-opened IBX data centers or IBX data centers currently under construction. In addition, costs associated with the acquisition and integration of any acquired companies, as well as the additional interest expense associated with debt financing we have undertaken to fund our growth initiatives, may also negatively impact our ability to sustain profitability. Finally, given the competitive and evolving nature of the industry in which we operate, we may not be able to sustain or increase profitability on a quarterly or annual basis.

The failure to obtain favorable terms when we renew our IBX data center leases, or the failure to renew such leases, could harm our business and results of operations.

While we own certain of our IBX data centers, others are leased under long-term arrangements. These leased centers have all been subject to significant development by us in order to convert them from, in most cases, vacant buildings or warehouses into IBX data centers. Most of our IBX data center leases have renewal options available to us. However, many of these renewal options provide for the rent to be set at then-prevailing market rates. To the extent that then-prevailing market rates or negotiated rates are higher than present rates, these higher costs may adversely impact our business and results of operations, or we may decide against renewing the lease. In the event that an IBX data center lease does not have a renewal option, or we fail to exercise a renewal option in a timely fashion and lose our right to renew the lease, we may not be successful in negotiating a renewal of the lease with the landlord. A failure to renew a lease could force us to exit a building prematurely, which could disrupt our business, harm our customer relationships, expose us to liability under our customer contracts, cause us to take impairment charges and affect our operating results negatively.

We depend on a number of third parties to provide internet connectivity to our IBX data centers; if connectivity is interrupted or terminated, our operating results and cash flow could be materially and adversely affected.

The presence of diverse telecommunications carriers' fiber networks in our IBX data centers is critical to our ability to retain and attract new customers. We are not a telecommunications carrier, and as such, we rely on third parties to provide our customers with carrier services. We believe that the availability of carrier capacity will directly affect our ability to achieve our projected results. We rely primarily on revenue opportunities from the telecommunications carriers' customers to encourage them to invest the capital and operating resources required to connect from their centers to our IBX data centers. Carriers will likely evaluate the revenue opportunity of an IBX data center based on the assumption that the environment will be highly competitive. We cannot provide assurance that each and every carrier will elect to offer its services within our IBX data centers or that once a carrier has decided to provide internet connectivity to our IBX data centers that it will continue to do so for any period of time.

Our new IBX data centers require construction and operation of a sophisticated redundant fiber network. The construction required to connect multiple carrier facilities to our IBX data centers is complex and involves factors outside of our control, including regulatory processes and the availability of construction resources. Any hardware or fiber failures on this network may result in significant loss of connectivity to our new IBX data center expansions. This could affect our ability to attract new customers to these IBX data centers or retain existing customers.

If the establishment of highly diverse internet connectivity to our IBX data centers does not occur, is materially delayed or is discontinued, or is subject to failure, our operating results and cash flow will be adversely affected.

We have government customers, which subjects us to risks including early termination, audits, investigations, sanctions and penalties.

We derive revenues from contracts with the U.S. government, state and local governments and foreign governments. Some of these customers may terminate all or part of their contracts at any time, without cause. There is increased pressure for governments and their agencies, both domestically and internationally, to reduce spending. Some of our federal government contracts are subject to the approval of appropriations being made by the U.S. Congress to fund the expenditures under these contracts. Similarly, some of our contracts at the state and local levels are subject to government funding authorizations.

Additionally, government contracts often have unique terms and conditions, such as most favored customer obligations, and are generally subject to audits and investigations which could result in various civil and criminal penalties and administrative sanctions, including termination of contracts, refund of a portion of fees received, forfeiture of profits, suspension of payments, fines and suspensions or debarment from future government business.

Because we depend on the development and growth of a balanced customer base, including key magnet customers, failure to attract, grow and retain this base of customers could harm our business and operating results.

Our ability to maximize revenues depends on our ability to develop and grow a balanced customer base, consisting of a variety of companies, including enterprises, cloud, digital content and financial companies, and network service providers. We consider certain of these customers to be key magnets in that they draw in other customers. The more balanced the customer base within each IBX data center, the better we will be able to generate significant interconnection revenues, which in turn increases our overall revenues. Our ability to attract customers to our IBX data centers will depend on a variety of factors, including the presence of multiple carriers, the mix of our offerings, the overall mix of customers, the presence of key customers attracting business through vertical market ecosystems, the IBX data center's operating reliability and security and our ability to effectively market our offerings. However, some of our customers may face competitive pressures and may ultimately not be successful or may be consolidated through merger or acquisition. If these customers do not continue to use our IBX data centers it may be disruptive to our business. Finally, the uncertain global economic climate may harm our ability to attract and retain customers if customers slow spending, or delay decision-making on our offerings, or if customers begin to have difficulty paying us or seek bankruptcy protection and we experience increased churn in our customer base. Any of these factors may hinder the development, growth and retention of a balanced customer base and adversely affect our business, financial condition and results of operations.

We may be subject to securities class action and other litigation, which may harm our business and results of operations.

We may be subject to securities class action or other litigation. For example, securities class action litigation has often been brought against a company following periods of volatility in the market price of its securities. Litigation can be lengthy, expensive, and divert management's attention and resources. Results cannot be predicted with certainty and an adverse outcome in litigation could result in monetary damages or injunctive relief. Further, any payments made in settlement may directly reduce our revenue under U.S. GAAP and could negatively impact our operating results for the period. For all of these reasons, litigation could seriously harm our business, results of operations, financial condition or cash flows.

We may not be able to protect our intellectual property rights.

We cannot make assurances that the steps taken by us to protect our intellectual property rights will be adequate to deter misappropriation of proprietary information or that we will be able to detect unauthorized use and take appropriate steps to enforce our intellectual property rights. We also are subject to the risk of litigation alleging infringement of third-party intellectual property rights. Any such claims could require us to spend significant sums in litigation, pay damages, develop non-infringing intellectual property or acquire licenses to the intellectual property that is the subject of the alleged infringement.

Government regulation may adversely affect our business.

Various laws and governmental regulations, both in the U.S. and abroad, governing internet-related services, related communications services and information technologies remain largely unsettled, even in areas where there has been some legislative action. For example, the Federal Communications Commission ("FCC") recently overturned network neutrality rules, which may result in material changes in the regulations and contribution regime affecting us and our customers. Furthermore, the U.S. Congress and state legislatures are reviewing and considering changes to the new FCC rules making the future of network neutrality and its impact on Equinix uncertain. There may also be forthcoming regulation in the U.S. in the areas of cybersecurity, data privacy and data security, any of which could impact Equinix and our customers. Similarly, data privacy regulations continue to evolve and must be addressed by Equinix as a global company.

We remain focused on whether and how existing and changing laws, such as those governing intellectual property, privacy, libel, telecommunications services, data flows/data localization, carbon emissions impact, and taxation apply to the internet and to related offerings such as ours; and substantial resources may be required to comply with regulations or bring any non-compliant business practices into compliance with such regulations. In addition, the continuing development of the market for online commerce and the displacement of traditional telephony service by the internet and related communications services may prompt an increased call for more stringent consumer protection laws or other regulation both in the U.S. and abroad that may impose additional burdens on companies conducting business online and their service providers.

The adoption, or modification of laws or regulations relating to the internet and our business, or interpretations of existing laws, could have a material adverse effect on our business, financial condition and results of operations.

Industry consolidation may have a negative impact on our business model.

If customers combine businesses, they may require less colocation space, which could lead to churn in our customer base. Regional competitors may also consolidate to become a global competitor. Consolidation of our customers and/or our competitors may present a risk to our business model and have a negative impact on our revenues.

We have various mechanisms in place that may discourage takeover attempts.

Certain provisions of our certificate of incorporation and bylaws may discourage, delay or prevent a third party from acquiring control of us in a merger, acquisition or similar transaction that a stockholder may consider favorable. Such provisions include:

- ownership limitations and transfer restrictions relating to our stock that are intended to facilitate our compliance with certain REIT rules relating to share ownership;
- authorization for the issuance of "blank check" preferred stock;
- the prohibition of cumulative voting in the election of directors;
- limits on the persons who may call special meetings of stockholders;

- limits on stockholder action by written consent; and
- advance notice requirements for nominations to the Board of Directors or for proposing matters that can be acted on by stockholders at stockholder meetings.

In addition, Section 203 of the Delaware General Corporation Law, which restricts certain business combinations with interested stockholders in certain situations, may also discourage, delay or prevent someone from acquiring or merging with us.

Risks Related to Our Taxation as a REIT

We may not remain qualified for taxation as a REIT.

We have elected to be taxed as a REIT for U.S. federal income tax purposes beginning with our 2015 taxable year. We believe that our organization and method of operation comply with the rules and regulations promulgated under the Internal Revenue Code of 1986, as amended (the "Code"), such that we will continue to qualify for taxation as a REIT. However, we cannot assure you that we have qualified for taxation as a REIT or that we will remain so qualified. Qualification for taxation as a REIT involves the application of highly technical and complex provisions of the Code to our operations as well as various factual determinations concerning matters and circumstances not entirely within our control. There are limited judicial or administrative interpretations of applicable REIT provisions of the Code.

If, in any taxable year, we fail to remain qualified for taxation as a REIT and are not entitled to relief under the Code:

- we will not be allowed a deduction for distributions to stockholders in computing our taxable income;
- we will be subject to federal and state income tax on our taxable income at regular corporate income tax rates; and
- we would not be eligible to elect REIT status again until the fifth taxable year that begins after the first year for which we failed to qualify for taxation as a REIT.

Any such corporate tax liability could be substantial and would reduce the amount of cash available for other purposes. If we fail to remain qualified for taxation as a REIT, we may need to borrow additional funds or liquidate some investments to pay any additional tax liability. Accordingly, funds available for investment and distributions to stockholders could be reduced.

As a REIT, failure to make required distributions would subject us to federal corporate income tax.

We paid quarterly distributions in every quarter of 2019 and have declared a quarterly distribution to be paid on March 18, 2020. The amount, timing and form of any future distributions will be determined, and will be subject to adjustment, by our Board of Directors. To remain qualified for taxation as a REIT, we are generally required to distribute at least 90% of our REIT taxable income (determined without regard to the dividends paid deduction and excluding net capital gain) each year, or in limited circumstances, the following year, to our stockholders. Generally, we expect to distribute all or substantially all of our REIT taxable income. If our cash available for distribution falls short of our estimates, we may be unable to maintain distributions that approximate our REIT taxable income and may fail to remain qualified for taxation as a REIT. In addition, our cash flows from operations may be insufficient to fund required distributions as a result of differences in timing between the actual receipt of income and the payment of expenses and the recognition of income and expenses for federal income tax purposes, or the effect of nondeductible expenditures, such as capital expenditures, payments of compensation for which Section 162(m) of the Code denies a deduction, interest expense deductions limited by Section 163(j) of the Code, the creation of reserves or required debt service or amortization payments.

To the extent that we satisfy the 90% distribution requirement but distribute less than 100% of our REIT taxable income, 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 on our undistributed taxable income if the actual amount that we distribute to our stockholders for a calendar year is less than the minimum amount specified under the Code.

We may be required to borrow funds, sell assets or raise equity to satisfy our REIT distribution requirements.

Due to the size and timing of future distributions, including any distributions made to satisfy REIT distribution requirements, we may need to borrow funds, sell assets or raise equity, even if the then-prevailing market conditions are not favorable for these borrowings, sales or offerings.

Any insufficiency of our cash flows to cover our REIT distribution requirements could adversely impact our ability to raise short- and long-term debt, to sell assets, or to offer equity securities in order to fund distributions required to maintain our qualification and taxation as a REIT. Furthermore, the REIT distribution requirements may increase the financing we need to fund capital expenditures, future growth and expansion initiatives. This would increase our indebtedness. A significant increase in our outstanding debt could lead to a downgrade of our credit rating. A downgrade of our credit rating could negatively impact our ability to access credit markets. Further, certain of our current debt instruments limit the amount of indebtedness we and our subsidiaries may incur. Significantly more financing, therefore, may be unavailable, more expensive or restricted by the terms of our outstanding indebtedness. For a discussion of risks related to our substantial level of indebtedness, see other risks described elsewhere in this Form 10-K.

Whether we issue equity, at what price and the amount and other terms of any such issuances will depend on many factors, including alternative sources of capital, our then-existing leverage, our need for additional capital, market conditions and other factors beyond our control. If we raise additional funds through the issuance of equity securities or debt convertible into equity securities, the percentage of stock ownership by our existing stockholders may be reduced. In addition, new equity securities or convertible debt securities could have rights, preferences and privileges senior to those of our current stockholders, which could substantially decrease the value of our securities owned by them. Depending on the share price we are able to obtain, we may have to sell a significant number of shares in order to raise the capital we deem necessary to execute our long-term strategy, and our stockholders may experience dilution in the value of their shares as a result.

Complying with REIT requirements may limit our flexibility or cause us to forgo otherwise attractive opportunities.

To remain qualified for taxation as a REIT for U.S. federal income tax purposes, we must satisfy tests concerning, among other things, the sources of our income, the nature and diversification of our assets and the amounts we distribute to our stockholders. For example, under the Code, no more than 20% of the value of the assets of a REIT may be represented by securities of one or more TRSs. Similar rules apply to other nonqualifying assets. These limitations may affect our ability to make large investments in other non-REIT qualifying operations or assets. In addition, in order to maintain our qualification for taxation as a REIT, we must distribute at least 90% of our REIT taxable income, determined without regard to the dividends paid deduction and excluding any net capital gains. Even if we maintain our qualification for taxation as a REIT, we will be subject to U.S. federal income tax at regular corporate income tax rates for our undistributed REIT taxable income, as well as U.S. federal income tax at regular corporate income tax rates for income recognized by our TRSs; we also pay taxes in the foreign jurisdictions in which our international assets and operations are held and conducted regardless of our qualification for taxation as a REIT. Because of these distribution requirements, we will likely not be able to fund future capital needs and investments from operating cash flow. As such, compliance with REIT tests may hinder our ability to make certain attractive investments, including the purchase of significant nonqualifying assets and the material expansion of non-real estate activities.

Our ability to fully deduct our interest expense may be limited, or we may be required to adjust the tax depreciation of our real property in order to maintain the full deductibility of our interest expense.

The Code limits interest deductions for businesses, whether in corporate or passthrough form, to the sum of the taxpayer's business interest income for the tax year and 30% of the taxpayer's adjusted taxable income for that tax year. This limitation does not apply to an "electing real property trade or business". Although REITs are permitted to make such an election, we do not currently intend to do so. If we so elect in the future, depreciable real property that we hold (including specified improvements) would be required to be depreciated for U.S. federal income tax purposes under the alternative depreciation system of the Code, which generally imposes a class life for depreciable real property as long as 40 years.

As a REIT, we are limited in our ability to fund distribution payments using cash generated through our TRSs.

Our ability to receive distributions from our TRSs is limited by the rules with which we must comply to maintain our qualification for taxation as a REIT. In particular, at least 75% of our gross income for each taxable year as a REIT must be derived from real estate. Consequently, no more than 25% of our gross income may consist of dividend income from our TRSs and other nonqualifying types of income. Thus, our ability to receive distributions from our TRSs may be limited and may impact our ability to fund distributions to our stockholders using cash flows from our TRSs. Specifically, if our TRSs become highly profitable, we might become limited in our ability to receive net income from our TRSs in an amount required to fund distributions to our stockholders commensurate with that profitability.

In addition, a significant amount of our income and cash flows from our TRSs is generated from our international operations. In many cases, there are local withholding taxes and currency controls that may impact our ability or willingness to repatriate funds to the United States to help satisfy REIT distribution requirements.

Our extensive use of TRSs, including for certain of our international operations, may cause us to fail to remain qualified for taxation as a REIT.

Our operations include an extensive use of TRSs. The net income of our TRSs is not required to be distributed to us, and income that is not distributed to us generally is not 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 (1) the fair market value of our securities in our TRSs to exceed 20% of the fair market value of our assets or (2) the fair market value of our securities in our TRSs and other nonqualifying assets to exceed 25% of the fair market value of our assets, then we will fail to remain qualified for taxation as a REIT. Further, a substantial portion of our TRSs are overseas, and a material change in foreign currency rates could also negatively impact our ability to remain qualified for taxation as a REIT.

The Code imposes limitations on the ability of our TRSs to utilize specified income tax deductions, including limits on the use of net operating losses and limits on the deductibility of interest expense.

Our cash distributions are not guaranteed and may fluctuate.

A REIT generally is required to distribute at least 90% of its REIT taxable income to its stockholders.

Our Board of Directors, in its sole discretion, will determine on a quarterly basis the amount of cash to be distributed to our stockholders based on a number of factors including, but not limited to, our results of operations, cash flow and capital requirements, economic conditions, tax considerations, borrowing capacity and other factors, including debt covenant restrictions that may impose limitations on cash payments, future acquisitions and divestitures and any stock repurchase program. Consequently, our distribution levels may fluctuate.

Even if we remain qualified for taxation as a REIT, some of our business activities are subject to corporate level income tax and foreign taxes, which will continue to reduce our cash flows, and we will have potential deferred and contingent tax liabilities.

Even if we remain qualified for taxation as a REIT, we may be subject to some federal, state, local and foreign taxes, including taxes on any undistributed income, and state, local or foreign income, franchise, property and 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 Code to maintain our qualification for taxation as a REIT.

A portion of our business is conducted through wholly-owned TRSs because certain of our business activities could generate nonqualifying REIT income as currently structured and operated. The income of our U.S. TRSs will continue to be subject to federal and state corporate income taxes. In addition, our international assets and operations will continue to be subject to taxation in the foreign jurisdictions where those assets are held or those operations are conducted. Any of these taxes would decrease our earnings and our available cash.

We will also be subject to a federal corporate level income tax at the highest regular corporate income tax rate (currently 21%) on gain recognized from a sale of a REIT asset where our basis in the asset is determined by reference to the basis of the asset in the hands of a C corporation (such as an asset that we or our qualified REIT subsidiaries ("QRSs") hold following the liquidation or other conversion of a former TRS). This 21% tax is generally applicable to any disposition of such an asset during the five-year period after the date we first owned the asset as a REIT asset, to the extent of the built-in-gain based on the fair market value of such asset on the date we first held the asset as a REIT asset.

Complying with REIT requirements may limit our ability to hedge effectively and increase the cost of our hedging and may cause us to incur tax liabilities.

The REIT provisions of the Code limit our ability to hedge assets, liabilities, revenues and expenses. Generally, income from hedging transactions that we enter into to manage risk of interest rate changes or fluctuations with respect to borrowings made or to be made by us to acquire or carry real estate assets and income from certain currency hedging transactions related to our non-U.S. operations, as well as income from qualifying counteracting hedges, do not constitute "gross income" for purposes of the REIT gross income tests. To the extent that we enter into other types of hedging transactions, the income from those transactions is likely to be treated as nonqualifying income for purposes of the REIT gross income tests. As a result of these rules, we may need to limit our use of advantageous hedging techniques or implement those hedges through our TRSs, which we presently do. This increases the cost of our hedging activities because our TRSs are subject to tax on income or gains resulting from hedges entered into by them and may expose us to greater risks associated with changes in interest rates or exchange rates than we would otherwise want to bear. In addition, hedging losses in any of our TRSs may not provide any tax benefit, except for being carried forward for possible use against future income or gain in the TRSs. As a result, our financial performance, including our AFFO, may also fluctuate.

Distributions payable by REITs generally do not qualify for preferential tax rates.

Dividends payable by U.S. corporations to noncorporate stockholders, such as individuals, trusts and estates, are generally eligible for reduced U.S. federal income tax rates applicable to "qualified dividends." Distributions paid by REITs generally are not treated as "qualified dividends" under the Code, and the reduced rates applicable to such dividends do not generally apply. However, for tax years beginning before 2026, REIT dividends paid to noncorporate stockholders are generally taxed at an effective tax rate lower than applicable ordinary income tax rates due to the availability of a deduction under the Code for specified forms of income from passthrough entities. More favorable rates will nevertheless continue to apply to regular corporate "qualified" dividends, which may cause some investors to perceive that an investment in a REIT is less attractive than an investment in a non-REIT entity that pays dividends, thereby reducing the demand and market price of our common stock.

Our certificate of incorporation contains restrictions on the ownership and transfer of our stock, though they may not be successful in preserving our qualification for taxation as a REIT.

In order for us to remain qualified for taxation as a REIT, no more than 50% of the value of outstanding shares of our stock may be owned, beneficially or constructively, by five or fewer individuals at any time during the last half of each taxable year. In addition, rents from "affiliated tenants" will not qualify as qualifying REIT income if we own 10% or more by vote or value of the customer, whether directly or after application of attribution rules under the Code. Subject to certain exceptions, our certificate of incorporation prohibits any stockholder from owning, beneficially or constructively, more than (i) 9.8% in value of the outstanding shares of all classes or series of our capital stock or (ii) 9.8% in value or number, whichever is more restrictive, of the outstanding shares of any class or series of our capital stock. We refer to these restrictions collectively as the "ownership limits" and we included them in our certificate of incorporation to facilitate our compliance with REIT tax rules. The constructive ownership rules under the Code are complex and may cause the outstanding stock owned by a group of related individuals or entities to be deemed to be constructively owned by one individual or entity. As a result, the acquisition of less than 9.8% of our outstanding common stock (or the outstanding shares of any class or series of our stock) by an individual or entity could cause that individual or entity or another individual or entity to own constructively in excess of the relevant ownership limits. Any attempt to own or transfer shares of our common stock or of any of our other capital stock in violation of these restrictions may result in the shares being automatically transferred to a charitable trust or may be void. Even though our certificate of incorporation contains the ownership limits, there can be no assurance that these provisions will be effective to prevent our qualification for taxation as a REIT from being jeopardized, including under the affiliated tenant rule. Furthermore, there can be no assurance that we will be able to monitor and enforce the ownership limits. If the restrictions in our certificate of incorporation are not effective and, as a result, we fail to satisfy the REIT tax rules described above, then absent an applicable relief provision, we will fail to remain qualified for taxation as a REIT.

In addition, the ownership and transfer restrictions could delay, defer or prevent a transaction or a change in control that might involve a premium price for our stock or otherwise be in the best interest of our stockholders. As a result, the overall effect of the ownership and transfer restrictions may be to render more difficult or discourage any attempt to acquire us, even if such acquisition may be favorable to the interests of our stockholders.

Legislative or other actions affecting REITs could have a negative effect on us or our stockholders.

At any time, the federal or state income tax laws governing REITs, or the administrative interpretations of those laws, may be amended. Federal and state tax laws are constantly under review by persons involved in the legislative process, the Internal Revenue Service, the U.S. Department of the Treasury and state taxing authorities. Changes to the tax laws, regulations and administrative interpretations, which may have retroactive application, could adversely affect us. In addition, some of these changes could have a more significant impact on us as compared to other REITs due to the nature of our business and our substantial use of TRSs, particularly non-U.S. TRSs.

We could incur adverse tax consequences if we fail to integrate an acquisition target in compliance with the requirements to qualify for taxation as a REIT.

We periodically explore and occasionally consummate merger and acquisition transactions. When we consummate these transactions, we structure the acquisition to successfully manage the REIT income, asset, and distribution tests that we must satisfy. We believe that we have and will in the future successfully integrate our acquisition targets in a manner that has and will allow us to timely satisfy the REIT tests applicable to us, but if we failed or in the future fail to do so, then we could jeopardize or lose our qualification for taxation as a REIT, particularly if we were not eligible to utilize relief provisions set forth in the Code.

ITEM 1B. Unresolved Staff Comments

There is no disclosure to report pursuant to Item 1B.

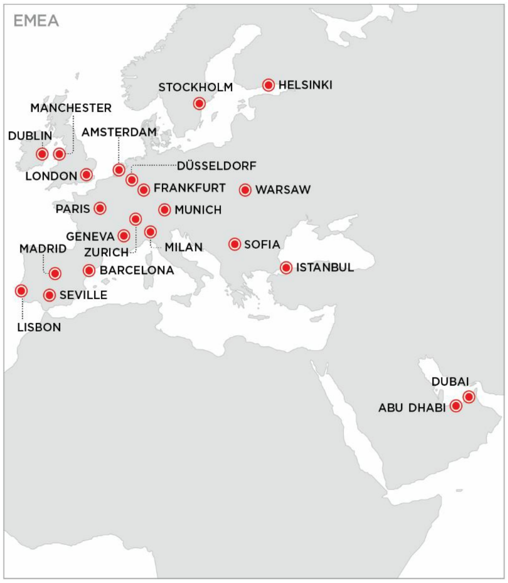
ITEM 2. Properties

Our executive offices are located in Redwood City, California, and we also have sales offices in several cities throughout the U.S. Our Asia-Pacific headquarters office is located in Hong Kong and we also have sales offices in several cities throughout Asia-Pacific. Our EMEA headquarters office is located in Amsterdam, the Netherlands and our regional sales offices in EMEA are based in our IBX data centers in EMEA.

The following tables present the locations of our leased and owned IBX data centers and xScale data centers investments as of December 31, 2019, plus three IBX data centers in Mexico acquired from Axtel S.A.B. de C.V. on January 8, 2020.

AMERICAS

Metro	Leased (1)	Owned (1) (2)
Atlanta	●	●
Bogota		●
Boston	●	●
Chicago	●	●
Culpeper		●
Dallas	●	●
Washington DC/Ashburn	●	●
Denver	●	●
Houston		●
Los Angeles	●	●
Mexico City		●
Miami	●	●
Monterrey	●	
New York	●	●
Philadelphia	●	
Rio de Janeiro	●	●
Sao Paulo	●	●
Seattle	●	●
Silicon Valley	●	●
Toronto	●	●



EMEA

Metro	Leased (1)	Owned (1) (2)
Abu Dhabi	●	
Amsterdam	●	●
Barcelona	●	
Dubai	●	
Dublin	●	●
Dusseldorf		●
East Netherlands	●	
Frankfurt	●	●
Geneva	●	
Helsinki	●	●
Istanbul		●
Lisbon		●
London	●	●
Madrid	●	
Manchester	●	
Milan	●	●
Munich	●	
Paris	●	●
Seville	●	
Sofia		●
Stockholm	●	●
Warsaw	●	
Zurich	●	●

Asia-Pacific

Metro	Leased (1)	Owned (1) (2)
Adelaide		●
Brisbane		●
Canberra		●
Hong Kong	●	
Melbourne		●
Osaka	●	
Perth		●
Seoul	●	
Singapore	●	
Shanghai	●	●
Sydney	●	●
Tokyo	●	●
Jakarta (unconsolidated)	●	

(1) "●" denotes locations with one or more data centers.

(2) Owned sites include IBX data centers subject to long-term ground leases.

The following table presents an overview of our portfolio of IBX data centers as of December 31, 2019:

	# of IBXs (1)	Total Cabinet Capacity (2)	Cabinets Billed	Cabinet Utilization % (3)	MRR per Cabinet (4)
Americas	86	110,900	85,000	77 %	$ 2,384
EMEA	73	120,300	101,200	84 %	1,456
Asia-Pacific	45	65,800	49,600	75 %	1,824
Total	**204**	**297,000**	**235,800**		

(1) Excludes three data centers held by unconsolidated entities (i.e. two xScale data centers and the JK1 IBX data center) and three Mexico data centers acquired in January 2020.

(2) Cabinets represent a specific amount of space within an IBX data center. Customers can combine and use multiple adjacent cabinets within an IBX data center, depending on their space requirements.

(3) The cabinet utilization rate represents the percentage of cabinet space billed versus total cabinet capacity, taking into consideration power limitations.

(4) MRR per cabinet represents average monthly recurring revenue recognized divided by the average number of cabinets billing during the fourth quarter of the year. Americas MRR per cabinet excludes Brazil, Colombia and Infomart non-IBX tenant income and Asia-Pacific MRR per Cabinet excludes Bit-isle MIS.

The following table presents a summary of our significant IBX data center expansion projects under construction as of December 31, 2019:

Property	Property Location	Target Open Date	Sellable Cabinets	Total Capex (in Millions) (1)
Americas:				
BO2 phase II	Boston	Q2 2020	550	$ 32
CH3 phase VI	Chicago	Q2 2020	1,225	31
DA11 phase I	Dallas	Q2 2020	1,975	138
DC15 phase I	Washington D.C.	Q2 2020	1,600	111
SP4 phase III	São Paulo	Q2 2020	1,025	59
TR2 phase III	Toronto	Q2 2020	725	21
DC21 phase I	Washington D.C.	Q4 2020	925	95
SP3 phase III	São Paulo	Q4 2020	1,050	25
LA7 phase II	Los Angeles	Q2 2021	750	54
SV11 phase I	Silicon Valley	Q2 2021	1,450	142
SP5x phase I	São Paulo	Q1 2022	500	52
			11,775	760
EMEA:				
AM4 phase III	Amsterdam	Q1 2020	975	26
HH1 phase I	Hamburg	Q1 2020	375	27
WA3 phase I	Warsaw	Q1 2020	550	34
ZH5 phase III	Zurich	Q1 2020	475	91
AM7 phase II-B	Amsterdam	Q2 2020	475	6
MC1 phase I	Muscat	Q2 2020	250	28
FR5 phase IV	Frankfurt	Q2 2020	350	25
PA2 phase IV	Paris	Q3 2020	250	8
HE7 phase II	Helsinki	Q4 2020	600	28
ML5 phase I	Milan	Q4 2020	500	48
PA9x phase I	Paris	Q4 2020	1,200	112
AM7 phase III	Amsterdam	Q1 2021	1,425	63
LD7 phase II	London	Q1 2021	875	30
LD11x phase I	London	Q1 2021	1,450	135
FR9x phase I	Frankfurt	Q1 2021	1,325	121
MU4 phase I	Munich	Q3 2021	825	69
			11,900	851
Asia-Pacific:				
HK4 phase III	Hong Kong	Q2 2020	1,000	47
SG5 phase I	Singapore	Q3 2020	1,300	144
TY12x phase I	Tokyo	Q4 2020	950	147
TY11 phase II	Tokyo	Q1 2021	1,225	58
OS2x phase I	Osaka	Q4 2021	1,350	156
			5,825	552
Total			29,500	$ 2,163

(1) Capital expenditures are approximate and may change based on final construction details.

ITEM 3. Legal Proceedings

The following is a description of reportable legal proceedings, including those involving governmental authorities under federal, state and local laws regulating the discharge of materials into the environment.

In March 2019, charges were brought by the Public Prosecutor in Milan, Italy against Equinix (Italia) S.r.l. and Eric Schwartz, at that time one of the directors of Equinix (Italia) S.r.l., following the discovery of levels of copper in ground water in excess of those permitted by law and alleged to have been released by Equinix into the water supply. We determined that the copper levels detected had been misinterpreted by the Public Prosecutor's office, which had multiplied the findings tenfold. On March 13, 2019, we asked for an initial extension to file our defense and requested that the charges against both Equinix and Mr. Schwartz be dropped on the grounds that the levels of copper found were in fact less than double the permitted amounts. The Public Prosecutor accepted that the number it originally used was incorrect, but did not agree to drop the charges and has requested a trial date. Our defense was filed April 15, 2019. A trial date has been set for March 6, 2020. The maximum fine for Equinix relating to this matter is €350,000 and the maximum personal fine for Mr. Schwartz is €30,000, which together give the maximum exposure of €380,000.

We have recently adopted a formal compliance program pursuant to Italian Legislative Decree No. 231/2001 ("Decree 231"), which we expect will reduce our exposure to fines and penalties in a Court verdict by 50%. After adoption of Decree 231, the exposure for Equinix would be effectively reduced to €175,000, giving a new maximum exposure of €205,000.

While it is not possible to accurately predict the final outcome of this pending Court proceeding, if it is decided adversely to Equinix, we expect there would be no material effect on our consolidated financial position. Nevertheless, this proceeding is reported pursuant to Securities and Exchange Commission regulations.

ITEM 4. Mine Safety Disclosure

Not applicable.

PART II

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

Our common stock is quoted on the NASDAQ Global Select Market under the symbol of "EQIX." Our common stock began trading in August 2000. As of January 31, 2020, we had 85,353,616 shares of our common stock outstanding held by approximately 303 registered holders. During the years ended December 31, 2019 and 2018, we did not issue or sell any securities on an unregistered basis.

Stock Performance Graph

The graph set forth below compares the cumulative total stockholder return on Equinix's common stock between December 31, 2014 and December 31, 2019 with the cumulative total return of:

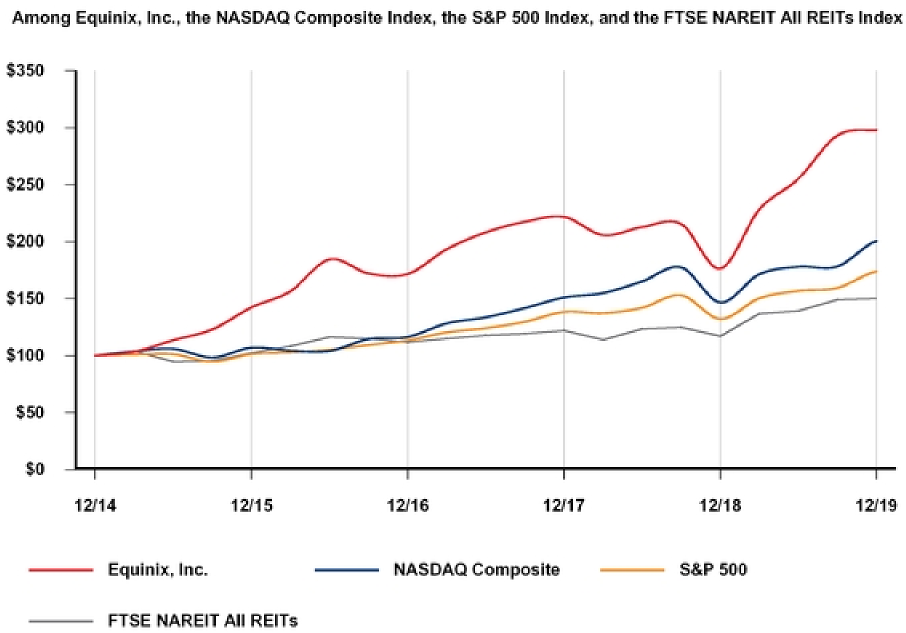
- the S&P 500 Index;
- the NASDAQ Composite Index; and
- the FTSE NAREIT All REITs Index.

The graph assumes the investment of $100.00 on December 31, 2014 in Equinix's common stock and in each index, and assumes the reinvestment of dividends, if any.

Equinix cautions that the stock price performance shown in the graph below is not indicative of, nor intended to forecast, the potential future performance of Equinix's common stock.

Notwithstanding anything to the contrary set forth in any of Equinix's previous or future filings under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, that might incorporate this Annual Report on Form 10-K or future filings made by Equinix under those statutes, the stock performance graph shall not be deemed filed with the Securities and Exchange Commission and shall not be deemed incorporated by reference into any of those prior filings or into any future filings made by Equinix under those statutes.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*



*$100 invested on 12/31/14 in stock or index, including reinvestment of dividends.
Fiscal year ending December 31.

ITEM 6. Selected Financial Data

The following consolidated statement of operations data for the five years ended December 31, 2019 and the consolidated balance sheet data as of December 31, 2019, 2018, 2017, 2016, and 2015 have been derived from our audited consolidated financial statements and the related notes. Our historical results are not necessarily indicative of the results to be expected for future periods. The following selected consolidated financial data for the five years ended December 31, 2019 and as of December 31, 2019, 2018, 2017, 2016, and 2015, should be read in conjunction with our audited consolidated financial statements and the related notes in Item 8 of this Annual Report on Form 10-K and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Item 7 of this Annual Report on Form 10-K. We completed acquisitions of Switch Datacenters' AMS1 data center business in Amsterdam, Netherlands in April 2019, Metronode and Infomart Dallas in April, 2018, the Zenium data center business in Istanbul and Itconic in October 2017, certain colocation business from Verizon in May 2017, IO UK's data center operating business in Slough, United Kingdom in February 2017 (the "IO Acquisition), certain Paris IBX data centers in August 2016 (the "Paris IBX Data Center Acquisition"), Telecity Group plc in January 2016, Bit-isle in November 2015 and Nimbo Technologies Inc. ("Nimbo") in January 2015. In October 2019, we sold our London 10 and Paris 8 data centers, as well as certain data center facilities in Europe to the Joint Venture. In addition, we sold our New York 12 data center in October 2019, solar power assets of Bit-isle in November 2016 and eight of our IBX data centers located in the U.K., the Netherlands and Germany in July 2016. For further information on our acquisitions and divestitures during the three years ended December 31, 2019, see Note 3 and Note 5 within the Consolidated Financial Statements.

On January 1, 2019 and 2018, we adopted Topic 842, Leases, and Topic 606, Revenue from Contracts with Customers, respectively. The consolidated statement of operations is presented under the new accounting standards from the periods when accounting standards were adopted, while the prior period financial statements have not been restated and continue to be reported under accounting standards in effect for those periods. See Note 1 within the Consolidated Financial Statements for further discussion.

	Years Ended December 31,				
	2019	2018	2017	2016	2015
	(dollars in thousands, except per share data)				
Revenues	$ 5,562,140	$ 5,071,654	$ 4,368,428	$ 3,611,989	$ 2,725,867
Costs and operating expenses:					
Cost of revenues	2,810,184	2,605,475	2,193,149	1,820,870	1,291,506
Sales and marketing	651,046	633,702	581,724	438,742	332,012
General and administrative	935,018	826,694	745,906	694,561	493,284
Transaction costs	24,781	34,413	38,635	64,195	41,723
Impairment charges	15,790	—	—	7,698	—
Gain on asset sales	(44,310)	(6,013)	—	(32,816)	—
Total costs and operating expenses	4,392,509	4,094,271	3,559,414	2,993,250	2,158,525
Income from operations	1,169,631	977,383	809,014	618,739	567,342
Interest income	27,697	14,482	13,075	3,476	3,581
Interest expense	(479,684)	(521,494)	(478,698)	(392,156)	(299,055)
Other income (expense)	27,778	14,044	9,213	(57,924)	(60,581)
Loss on debt extinguishment	(52,825)	(51,377)	(65,772)	(12,276)	(289)
Income from continuing operations before income taxes	692,597	433,038	286,832	159,859	210,998
Income tax expense	(185,352)	(67,679)	(53,850)	(45,451)	(23,224)
Net income from continuing operations	507,245	365,359	232,982	114,408	187,774
Net income from discontinued operations, net of tax	—	—	—	12,392	—
Net income	507,245	365,359	232,982	126,800	187,774
Net loss attributable to non-controlling interest	205	—	—	—	—
Net income attributable to Equinix	$ 507,450	$ 365,359	$ 232,982	$ 126,800	$ 187,774
Earnings per share ("EPS") attributable to Equinix:					
Basic EPS from continuing operations	$ 6.03	$ 4.58	$ 3.03	$ 1.63	$ 3.25
Basic EPS from discontinued operations	—	—	—	0.18	—
Basic EPS	$ 6.03	$ 4.58	$ 3.03	$ 1.81	$ 3.25
Weighted-average shares for basic EPS	84,140	79,779	76,854	70,117	57,790
Diluted EPS from continuing operations	$ 5.99	$ 4.56	$ 3.00	$ 1.62	$ 3.21
Diluted EPS from discontinued operations	—	—	—	0.17	—
Diluted EPS	$ 5.99	$ 4.56	$ 3.00	$ 1.79	$ 3.21
Weighted-average shares for diluted EPS	84,679	80,197	77,535	70,816	58,483
Dividends per share [1]	$ 9.84	$ 9.12	$ 8.00	$ 7.00	$ 17.71

[1] During the year ended December 31, 2015, we paid $10.95 per share of special distribution and $6.76 per share of quarterly cash dividend.

	As of December 31,				
	2019	2018	2017	2016	2015
Consolidated Balance Sheet Data:	(in thousands)				
Cash, cash equivalents and short-term and long-term investments	$ 1,879,939	$ 610,706	$ 1,450,031	$ 761,927	$ 2,246,297
Accounts receivable, net	689,134	630,119	576,313	396,245	291,964
Property, plant and equipment, net	12,152,597	11,026,020	9,394,602	7,199,210	5,606,436
Total assets	23,965,615	20,244,638	18,691,457	12,608,371	10,356,695
Finance lease liabilities, less current portion	1,430,882	1,441,077	1,620,256	1,410,742	1,287,139
Mortgage and loans payable, less current portion	1,289,434	1,310,663	1,393,118	1,369,087	472,769
Senior notes, less current portion	8,309,673	8,128,785	6,923,849	3,810,770	3,804,634
Total stockholders' equity	8,840,382	7,219,279	6,849,790	4,365,829	2,745,386

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

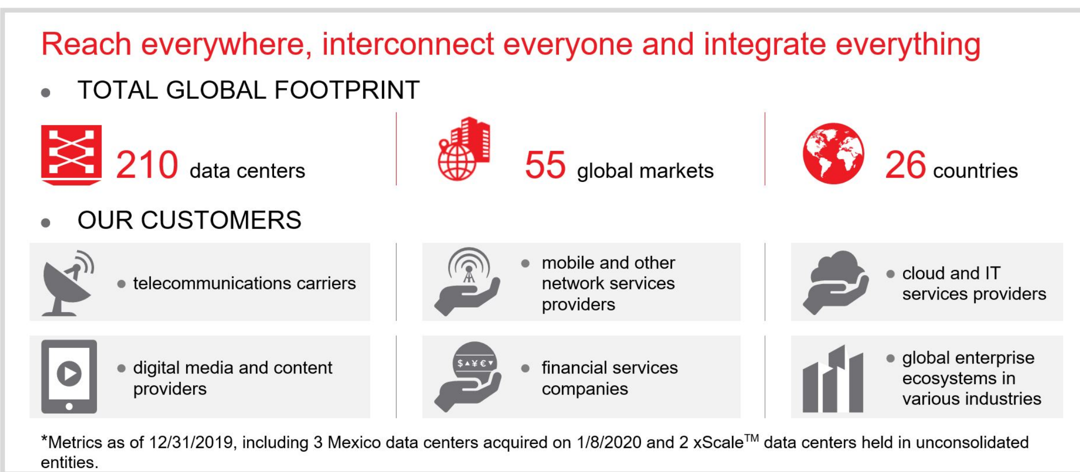
The following commentary should be read in conjunction with the financial statements and related notes contained elsewhere in this Annual Report on Form 10-K. The information in this discussion contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Such statements are based upon current expectations that involve risks and uncertainties. Any statements contained herein that are not statements of historical fact may be deemed to be forward-looking statements. For example, the words "believes," "anticipates," "plans," "expects," "intends" and similar expressions are intended to identify forward-looking statements. Our actual results and the timing of certain events may differ significantly from the results discussed in the forward-looking statements. Factors that might cause such a discrepancy include, but are not limited to, those discussed in "Liquidity and Capital Resources" and "Risk Factors" elsewhere in this Annual Report on Form 10-K. All forward-looking statements in this document are based on information available to us as of the date hereof and we assume no obligation to update any such forward-looking statements.

Item 7 of this Form 10-K focuses on discussion of 2019 and 2018 items as well as 2019 results as compared to 2018 results. For the discussion of 2017 items and 2018 results as compared to 2017 results, please refer to Item 7 of our 2018 Form 10-K as filed with the SEC on February 22, 2019.

Our management's discussion and analysis of financial condition and results of operations is intended to assist readers in understanding our financial information from our management's perspective and is presented as follows:

- Overview
- Results of Operations
- Non-GAAP Financial Measures
- Liquidity and Capital Resources
- Contractual Obligations and Off-Balance-Sheet Arrangements
- Critical Accounting Policies and Estimates
- Recent Accounting Pronouncements

Overview



Equinix provides a global, vendor-neutral data center, interconnection and edge services platform with offerings that aim to enable our customers to reach everywhere, interconnect everyone and integrate everything. Global enterprises, service providers and business ecosystems of industry partners rely on Equinix IBX data centers and expertise around the world for the safe housing of their critical IT equipment and to protect and connect the world's most valued information assets. They also look to Platform Equinix® for the ability to directly and securely interconnect to the networks, clouds and content that enable today's information-driven global digital economy. Recent Equinix IBX data center openings and acquisitions, as well as xScale data center investments, have expanded our total global footprint to 210 IBX and xScale data centers across 55 markets around the world. Equinix offers the following solutions:

- premium data center colocation;
- interconnection and data exchange solutions;
- edge services for deploying networking, security and hardware; and
- remote expert support and professional services.

Our interconnected data centers around the world allow our customers to increase information and application delivery performance to users, and quickly access distributed IT infrastructures and business and digital ecosystems, while significantly reducing costs. The Equinix global platform and the quality of our IBX data centers, interconnection offerings and edge services have enabled us to establish a critical mass of customers. As more customers choose Platform Equinix, for bandwidth cost and performance reasons it benefits their suppliers and business partners to colocate in the same data centers. This adjacency creates a “network effect” that enables our customers to capture the full economic and performance benefits of our offerings. These partners, in turn, pull in their business partners, creating a "marketplace" for their services. Our global platform enables scalable, reliable and cost-effective interconnection that increases data traffic exchange while lowering overall cost and increasing flexibility. Our focused business model is built on our critical mass of enterprise and service provider customers and the resulting "marketplace" effect. This global platform, combined with our strong financial position, continues to drive new customer growth and bookings.

Historically, our market was served by large telecommunications carriers who have bundled their products and services with their colocation offerings. The data center market landscape has evolved to include private and vendor-neutral multitenant data center providers, hyperscale cloud providers, managed infrastructure and application hosting providers, and systems integrators. It is estimated that Equinix is one of more than 1,200 companies that provide MTDC offerings around the world. Each of these data center solutions providers can bundle various colocation, interconnection and network offerings and outsourced IT infrastructure solutions. We are able to offer our customers a global platform that reaches 26 countries with the industry’s largest and most active ecosystem of partners in our sites, proven operational reliability, improved application performance and a highly scalable set of offerings.

The cabinet utilization rate represents the percentage of cabinet space billed versus total cabinet capacity, which is used to measure how efficiently we are managing our cabinet capacity. Our cabinet utilization rate varies from market to market among our IBX data centers across the Americas, EMEA and Asia-Pacific regions. Our cabinet utilization rates were approximately 79% and 81%, respectively, as of December 31, 2019 and 2018. Excluding the impact of our IBX data center expansion projects that have opened during the last 12 months, our cabinet utilization rate would have increased to approximately 82% as of December 31, 2019. We continue to monitor the available capacity in each of our selected markets. To the extent we have limited capacity available in a given market, it may limit our ability for growth in that market. We perform demand studies on an ongoing basis to determine if future expansion is warranted in a market. In addition, power and cooling requirements for most customers are growing on a per unit basis. As a result, customers are consuming an increasing amount of power per cabinet. Although we generally do not control the amount of power our customers draw from installed circuits, we have negotiated power consumption limitations with certain high power-demand customers. This increased power consumption has driven us to build out our new IBX data centers to support power and cooling needs twice that of previous IBX data centers. We could face power limitations in our IBX data centers, even though we may have additional physical cabinet capacity available within a specific IBX data center. This could have a negative impact on the available utilization capacity of a given IBX data center, which could have a negative impact on our ability to grow revenues, affecting our financial performance, operating results and cash flows.

In 2019, we closed our Joint Venture with GIC to develop and operate xScale data centers to serve the needs of the growing hyperscale data center market, including the world's largest cloud service providers. Upon closing, the Joint Venture acquired certain data center facilities in Europe, with the opportunity to add additional facilities to the Joint Venture in the future.

Strategically, we will continue to look at attractive opportunities to grow our market share and selectively improve our footprint and offerings. As was the case with our recent expansions and acquisitions, our expansion criteria will be dependent on a number of factors, including but not limited to demand from new and existing customers, quality of the design, power capacity, access to networks, clouds and software partners, capacity availability in the current market location, amount of incremental investment required by us in the targeted property, automation capabilities, developer talent pool, lead-time to break even on a free cash flow basis and in-place customers. Like our recent expansions and acquisitions, the right combination of these factors may be attractive to us. Depending on the circumstances, these transactions may require additional capital expenditures funded by upfront cash payments or through long-term financing arrangements in order to bring these properties up to Equinix standards. Property expansion may be in the form of purchases of real property, long-term leasing arrangements or acquisitions. Future purchases, construction or acquisitions may be completed by us or with partners or potential customers to minimize the outlay of cash, which can be significant.

Revenue:

> 90%

RECURRING REVENUES

colocation and related interconnection and managed infrastructure offerings

- recurring revenues comprised > 90% of our total revenues during the past 3 years
- > 80% of our monthly recurring revenue bookings during the past 3 years came from existing customers, contributing to our revenue growth
- 3% of our recurring revenues during the last 3 years came from our largest customer
- 39% of our recurring revenues came from our 50 largest customers in 2019

< 10%

NON-RECURRING REVENUES

primarily installation services related to a customer's initial deployment and professional services we perform

Our business is based on a recurring revenue model comprised of colocation and related interconnection and managed infrastructure offerings. We consider these offerings recurring because our customers are generally billed on a fixed and recurring basis each month for the duration of their contract, which is generally one to three years in length. Our recurring revenues have comprised more than 90% of our total revenues during the past three years. In addition, during the past three years, more than 80% of our monthly recurring revenue bookings came from existing customers, contributing to our revenue growth. Our largest customer accounted for approximately 3% of our recurring revenues for the years ended December 31, 2019, 2018 and 2017. Our 50 largest customers accounted for approximately 39%, 38% and 37%, respectively, of our recurring revenues for the years ended December 31, 2019, 2018 and 2017.

Our non-recurring revenues are primarily comprised of installation services related to a customer's initial deployment and professional services we perform. These services are considered to be non-recurring because they are billed typically once, upon completion of the installation or the professional services work performed. The majority of these non-recurring revenues are typically billed on the first invoice distributed to the customer in connection with their initial installation. However, revenues from installation services are deferred and recognized ratably over the period of the contract term. Additionally, revenue from contract settlements, when a customer wishes to terminate their contract early, is generally treated as a contract modification and recognized ratably over the remaining term of the contract, if any. As a percentage of total revenues, we expect non-recurring revenues to represent less than 10% of total revenues for the foreseeable future.

Operating Expenses:

Cost of Revenues. The largest components of our cost of revenues are depreciation, rental payments related to our leased IBX data centers, utility costs, including electricity, bandwidth access, IBX data center employees' salaries and benefits, including stock-based compensation, repairs and maintenance, supplies and equipment and security. A majority of our cost of revenues is fixed in nature and should not vary significantly from period to period, unless we expand our existing IBX data centers or open or acquire new IBX data centers. However, there are certain costs that are considered more variable in nature, including utilities and supplies that are directly related to growth in our existing and new customer base. We expect the cost of our utilities, specifically electricity, will generally increase in the future on a per-unit or fixed basis, in addition to the variable increase related to the growth in consumption by our customers. In addition, the cost of electricity is generally higher in the summer months, as compared to other times of the year. To the extent we incur increased utility costs, such increased costs could materially impact our financial condition, results of operations and cash flows. Furthermore, to the extent we incur increased electricity or other costs as a result of either climate change policies or the physical effects of climate change, such increased costs could materially impact our financial condition, results of operations and cash flows.

Sales and Marketing. Our sales and marketing expenses consist primarily of compensation and related costs for sales and marketing personnel, including stock-based compensation, amortization of contract costs, marketing programs, public relations, promotional materials and travel, as well as bad debt expense and amortization of customer relationship intangible assets.

General and Administrative. Our general and administrative expenses consist primarily of salaries and related expenses, including stock-based compensation, accounting, legal and other professional service fees, and other general corporate expenses, such as our corporate regional headquarters office leases and some depreciation expense on back office systems.

Taxation as a REIT

We elected to be taxed as a REIT for U.S. federal income tax purposes beginning with our 2015 taxable year. As of December 31, 2019, our REIT structure included all of our data center operations in the U.S., Canada, Japan, Singapore and the data center operations in EMEA with the exception of Bulgaria, the United Arab Emirates, and the data center operations outside Amsterdam in the Netherlands. Our data center operations in other jurisdictions are operated as TRSs. We included our interest in the Joint Venture in our REIT structure.

As a REIT, we generally are permitted to deduct from our U.S. taxable income the dividends we pay to our stockholders. The income represented by such dividends is not subject to U.S. federal income taxes at the entity level but is taxed, if at all, at the stockholder level. Nevertheless, the income of our TRSs which hold our U.S. operations that may not be REIT compliant is subject to U.S. corporate federal and state income taxes, as applicable. Likewise, our foreign subsidiaries continue to be subject to foreign income taxes in jurisdictions in which they hold assets or conduct operations, regardless of whether held or conducted through TRSs or through QRSs. We are also subject to a separate U.S. federal corporate income tax on any gain recognized from a sale of a REIT asset where our basis in the asset is determined by reference to the basis of the asset in the hands of a C corporation (such as an asset held by us or a QRS following the liquidation or other conversion of a former TRS). This built-in-gains tax is generally applicable to any disposition of such an asset during the five-year period after the date we first owned the asset as a REIT asset to the extent of the built-in-gain based on the fair market value of such asset on the date we first held the asset as a REIT asset. If we fail to remain qualified for U.S. federal income taxation as a REIT, we will be subject to U.S. federal income taxes at regular corporate income tax rates. Even if we remain qualified for U.S. federal income taxation as a REIT, we may be subject to some federal, state, local and foreign taxes on our income and property in addition to taxes owed with respect to our TRSs' operations. In particular, while state income tax regimes often parallel the U.S. federal income tax regime for REITs, many states do not completely follow federal rules, and some may not follow them at all.

We continue to monitor our REIT compliance in order to maintain our qualification for U.S. federal income taxation as a REIT. For this and other reasons, as necessary, we may convert some of our data center operations in other countries into the REIT structure in future periods. We converted our data center operations in Singapore into the REIT structure effective September 30, 2019.

On each of March 20, June 19, September 18, and December 11, 2019, we paid quarterly cash dividends of $2.46 per share. We expect these quarterly and other applicable distributions to equal or exceed the REIT taxable income that we recognized in 2019.

2019 Highlights:

- In March, we issued and sold 2,985,575 shares of common stock for net proceeds of approximately $1,213.4 million, after underwriting discounts, commissions and offering expenses. See Note 12 within the Consolidated Financial Statements.
- In April, we completed the acquisition of Switch Datacenters' AMS1 data center business in Amsterdam, Netherlands (the "AM11 data center"), for a cash purchase price of approximately €30.6 million, or approximately $34.3 million. See Note 3 within the Consolidated Financial Statements.
- In October, we closed our Joint Venture with GIC to develop and operate xScale data centers in Europe. Upon closing, we sold certain data center facilities in Europe to the Joint Venture. See Note 5 and Note 6 within the Consolidated Financial Statements.
- In November, we issued $2.8 billion in Senior Notes due 2024, 2026 and 2029 with a weighted average interest rate of 2.93% and redeemed $1.9 billion in Senior Notes due 2022, 2023 and 2025 with a weighted average interest rate of 5.47% in November and December 2019. See Note 11 within the Consolidated Financial Statements.

- By the end of December, we had sold 903,555 shares of our common stock for approximately $447.7 million in proceeds, net of payment of commissions and other offering expenses, under our current ATM program. See Note 12 within the Consolidated Financial Statements.

Results of Operations

Our results of operations for the year ended December 31, 2019 include the results of operations from the acquisition of the AM11 data center from April 18, 2019 within the EMEA region. Our results of operations for the year ended December 31, 2018 include the results of operations from the acquisition of Metronode from April 18, 2018 within the Asia-Pacific region and the acquisition of Infomart Dallas from April 2, 2018 within the Americas region.

Our results of operations for the year ended December 31, 2019 reflect the adoption of Topic 842, Leases, while the comparative information has not been restated and continues to be reported under the lease accounting standard in effect for those periods. See Note 1 within the Consolidated Financial Statements for further discussion.

In order to provide a framework for assessing our performance excluding the impact of foreign currency fluctuations, we supplement the year-over-year actual change in operating results with comparative changes on a constant currency basis. Presenting constant currency results of operations is a non-GAAP financial measure. See "Non-GAAP Financial Measures" below for further discussion.

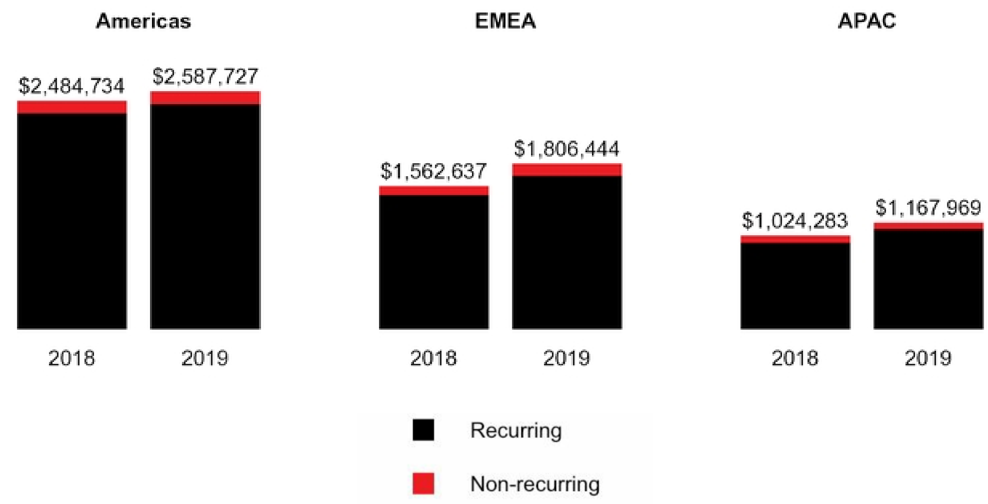
Years ended December 31, 2019 and 2018

Revenues. Our revenues for the years ended December 31, 2019 and 2018 were generated from the following revenue classifications and geographic regions (dollars in thousands):

	Years Ended December 31,				% Change	
	2019	%	2018	%	Actual	Constant Currency
Americas:						
Recurring revenues	$ 2,456,368	44%	$ 2,357,326	46%	4%	5%
Non-recurring revenues	131,359	3%	127,408	3%	3%	4%
	2,587,727	47%	2,484,734	49%	4%	5%
EMEA:						
Recurring revenues	1,680,746	30%	1,467,492	29%	15%	12%
Non-recurring revenues	125,698	2%	95,145	2%	32%	39%
	1,806,444	32%	1,562,637	31%	16%	14%
Asia-Pacific:						
Recurring revenues	1,101,072	20%	951,684	19%	16%	17%
Non-recurring revenues	66,897	1%	72,599	1%	(8)%	(6)%
	1,167,969	21%	1,024,283	20%	14%	16%
Total:						
Recurring revenues	5,238,186	94%	4,776,502	94%	10%	10%
Non-recurring revenues	323,954	6%	295,152	6%	10%	13%
	$ 5,562,140	100%	$ 5,071,654	100%	10%	10%

Revenues

(dollars in thousands)



Americas Revenues. During the year ended December 31, 2019, Americas revenue increased by 4% (5% on a constant currency basis). Growth in Americas revenues was primarily due to:

- approximately $10.6 million of incremental revenues from the Infomart Dallas acquisition;
- $52.6 million of incremental revenues generated from our recently-opened IBX data centers or IBX data center expansions; and
- an increase in orders from both our existing customers and new customers during the period.

EMEA Revenues. During the year ended December 31, 2019, EMEA revenue increased by 16% (14% on a constant currency basis). Growth in EMEA revenues was primarily due to:

- approximately $76.0 million of incremental revenues generated from our recently-opened IBX data centers or IBX data center expansions;
- an increase in orders from both our existing customers and new customers during the period; and
- a net increase of $110.6 million of realized cash flow hedge gains from foreign currency forward contracts.

Asia-Pacific Revenues. During the year ended December 31, 2019, Asia-Pacific revenue increased by 14% (16% on a constant currency basis). Growth in Asia-Pacific revenue was primarily due to:

- approximately $16.6 million of incremental revenues from the Metronode acquisition;
- approximately $35.4 million of incremental revenues generated from our recently-opened IBX data centers or IBX data center expansions; and
- an increase in orders from both our existing customers and new customers during the period.

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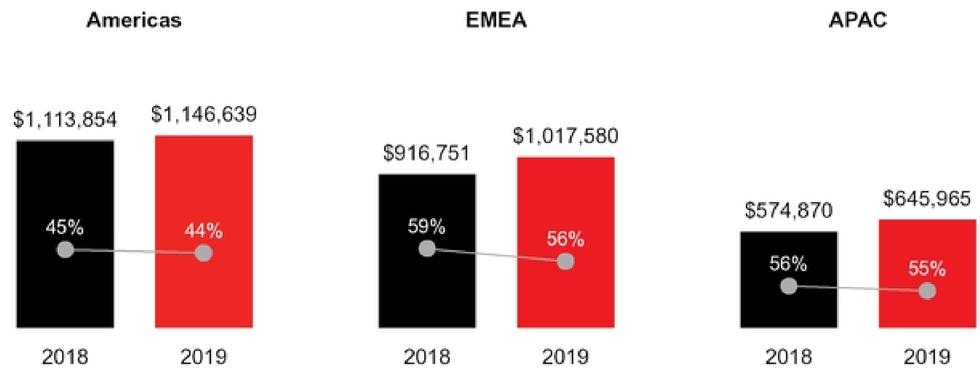
Cost of Revenues. Our cost of revenues for the years ended December 31, 2019 and 2018 were split among the following geographic regions (dollars in thousands):

	Years Ended December 31,						% Change	
	2019		%	2018		%	Actual	Constant Currency
Americas	$	1,146,639	41%	$	1,113,854	43%	3%	4%
EMEA		1,017,580	36%		916,751	35%	11%	12%
Asia-Pacific		645,965	23%		574,870	22%	12%	14%
Total	$	2,810,184	100%	$	2,605,475	100%	8%	9%

Cost of Revenues

(dollars in thousands; percentages indicate expenses as a percentage of revenues)



Americas Cost of Revenues. During the year ended December 31, 2019, Americas cost of revenues increased by 3% (4% on a constant currency basis). The increase in our Americas cost of revenues was primarily due to:

- $11.3 million of higher utilities costs driven by IBX data center expansions, increased utility usage and utility price increases;
- $10.0 million of higher bandwidth costs in support of our business growth;
- approximately $9.9 million of incremental cost of revenues from the Infomart Dallas acquisition;
- $8.6 million of higher compensation costs, including salaries, bonuses, and stock-based compensation; and
- $7.2 million of higher depreciation expense primarily due to IBX expansion activity.

This increase was partially offset by:

- $8.9 million of reduced property tax expenses, primarily due to accrual releases based on tax appeal settlements; and
- $6.9 million of reduced office expenses.

EMEA Cost of Revenues. During the year ended December 31, 2019, EMEA cost of revenues increased by 11% (12% on a constant currency basis). The increase in our EMEA cost of revenues was primarily due to:

- a net increase of $40.6 million of realized cash flow hedge losses from foreign currency forward contracts;
- $30.5 million of higher utilities costs driven by increased utility usage to support IBX data center expansions and utility price increases, primarily in Germany, the Netherlands and the United Kingdom;
- $21.3 million of higher costs from increased equipment resale activities, primarily in Germany and the United Kingdom;

- $7.9 million of higher depreciation expenses driven by IBX data center expansions in London, Frankfurt and Amsterdam; and
- $7.2 million of higher compensation costs, including salaries, bonuses, stock-based compensation and headcount growth.

This increase was partially offset by:

- $5.9 million of reduced outside services consulting expenses.

Asia-Pacific Cost of Revenues. During the year ended December 31, 2019, Asia-Pacific cost of revenues increased by 12% (14% on a constant currency basis). The increase in our Asia-Pacific cost of revenues was primarily due to:

- $45.3 million of higher rent and facility costs and utilities costs, primarily driven by expansions and higher utility usage in Hong Kong, Singapore, Australia and Japan;
- $20.5 million of higher depreciation expense, primarily from IBX data center expansions in Singapore, Japan, Australia and Hong Kong;
- approximately $11.2 million of incremental cost of revenues from the Metronode acquisition; and
- $4.3 million of higher outside services consulting expenses.

This increase was partially offset by:

- $12.8 million of reduced costs due to lower equipment resale activities in the current period as compared to the prior year.

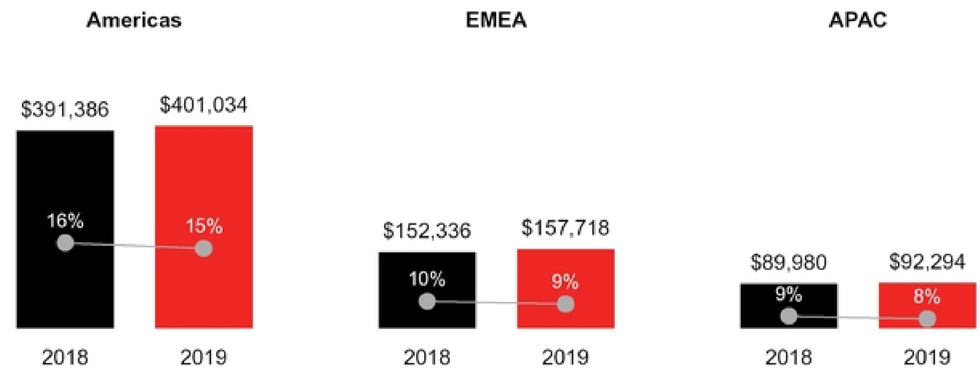
We expect Americas, EMEA and Asia-Pacific cost of revenues to increase as we continue to grow our business, including from the impact of acquisitions.

Sales and Marketing Expenses. Our sales and marketing expenses for the years ended December 31, 2019 and 2018 were split among the following geographic regions (dollars in thousands):

	Years ended December 31,				% Change	
	2019	**%**	**2018**	**%**	**Actual**	**Constant Currency**
Americas	$ 401,034	62%	$ 391,386	62%	2%	3%
EMEA	157,718	24%	152,336	24%	4%	4%
Asia-Pacific	92,294	14%	89,980	14%	3%	4%
Total	$ 651,046	100%	$ 633,702	100%	3%	3%

Sales and Marketing Expenses

(dollars in thousands; percentages indicate expenses as a percentage of revenues)



Americas Sales and Marketing Expenses. During the year ended December 31, 2019, Americas sales and marketing expenses increased by 2% (3% on a constant currency basis). The increase in our Americas sales and marketing expenses was primarily due to:

- $7.4 million of higher compensation costs, including sales compensation, salaries and stock-based compensation and headcount growth; and
- $3.7 million of higher travel and entertainment expenses.

EMEA Sales and Marketing Expenses. During the year ended December 31, 2019, EMEA sales and marketing increased by 4% (and also 4% on a constant currency basis). The increase in our EMEA sales and marketing expenses was primarily due to:

- a net increase of $7.2 million of realized cash flow hedge losses from foreign currency forward contracts; and
- $5.6 million increase in compensation costs, including sales compensation, salaries and stock-based compensation and headcount growth.

This increase was partially offset by:

- $6.2 million of reduced amortization expense driven by certain intangibles being fully amortized in the current year.

Asia-Pacific Sales and Marketing Expenses. Our Asia-Pacific sales and marketing expense did not materially change during the year ended December 31, 2019 as compared to the year ended December 31, 2018.

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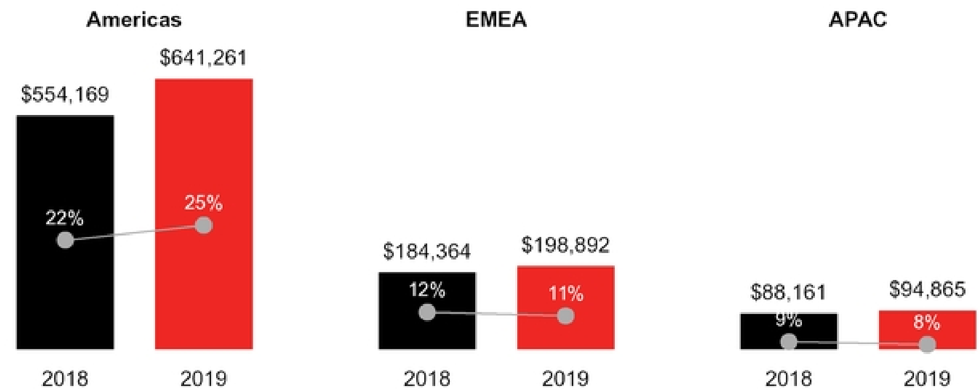
We anticipate that we will continue to invest in Americas, EMEA and Asia-Pacific sales and marketing initiatives and expect our Americas, EMEA and Asia-Pacific sales and marketing expenses to increase as we grow our business. Additionally, given that certain global sales and marketing functions are located within the U.S., we expect Americas sales and marketing expenses as a percentage of revenues to be higher than our other regions.

General and Administrative Expenses. Our general and administrative expenses for the years ended December 31, 2019 and 2018 were split among the following geographic regions (dollars in thousands):

	Years Ended December 31,				% Change	
	2019	%	2018	%	Actual	Constant Currency
Americas	$ 641,261	69%	$ 554,169	67%	16%	16%
EMEA	198,892	21%	184,364	22%	8%	7%
Asia-Pacific	94,865	10%	88,161	11%	8%	9%
Total	$ 935,018	100%	$ 826,694	100%	13%	13%

General and Administrative Expenses

(dollars in thousands; percentages indicate expenses as a percentage of revenues)



Americas General and Administrative Expenses. During the year ended December 31, 2019, Americas general and administrative expenses increased by 16% (and also 16% on a constant currency basis). The increase in our Americas general and administrative expenses was primarily due to:

- $51.1 million of higher compensation costs, including salaries, bonuses, stock-based compensation, and headcount growth;
- $22.3 million of higher depreciation expense associated with the implementation of certain systems to support the integration and growth of our business; and
- $10.7 million of higher consulting expenses in support of our business growth.

EMEA General and Administrative Expenses. During the year ended December 31, 2019, EMEA general and administrative expenses increased by 8% (7% on a constant currency basis). The increase in our EMEA general and administrative expenses was primarily due to:

- a net increase of $8.8 million of realized cash flow hedge losses from foreign currency forward contracts; and
- $3.9 million of higher compensation costs, including salaries, bonuses, stock-based compensation and headcount growth.

Asia-Pacific General and Administrative Expenses. During the year ended December 31, 2019, Asia-Pacific general and administrative expenses increased by 8% (9% on a constant currency basis). The increase in our Asia-Pacific general and administrative expense was primarily due to:

- $3.8 million of higher compensation costs, including salaries, bonuses, stock-based compensation and headcount growth.

Going forward, although we are carefully monitoring our spending, we expect Americas, EMEA and Asia-Pacific general and administrative expenses to increase as we continue to further scale our operations to support our growth, including investments in our back office systems and investments to maintain our qualification for taxation as a REIT and to integrate recent acquisitions. Additionally, given that our corporate headquarters is located within the U.S., we expect Americas general and administrative expenses as a percentage of revenues to be higher than our other regions.

Transaction Costs. During the year ended December 31, 2019, we recorded transaction costs totaling $24.8 million primarily related to costs incurred in connection with the formation of the new Joint Venture in the EMEA region. During the year ended December 31, 2018, we recorded transaction costs totaling $34.4 million, primarily in the Asia-Pacific and Americas regions, due to our acquisitions of Metronode and Infomart Dallas.

Impairment Charges. During the year ended December 31, 2019, we recorded impairment charges totaling $15.8 million in the Americas region primarily as a result of the fair value adjustment for the New York 12 ("NY12") data center, which was classified as a held for sale asset before it was sold in October 2019. We did not have impairment charges during the year ended December 31, 2018.

Gain on Asset Sales. During the year ended December 31, 2019, we recorded a gain on asset sales of $44.3 million primarily relating to the sale of both the London 10 and Paris 8 data centers, as well as certain construction development and leases in London and Frankfurt, as part of the closing of the Joint Venture. During the year ended December 31, 2018, we recorded gain on asset sales of $6.0 million primarily relating to the sale of a data center in Frankfurt.

Income from Operations. Our income from operations for the years ended December 31, 2019 and 2018 was split among the following geographic regions (dollars in thousands):

	Years Ended December 31,				% Change	
	2019	%	2018	%	Actual	Constant Currency
Americas	$ 413,936	35%	$ 412,610	42%	—%	1%
EMEA	421,786	36%	312,163	32%	35%	24%
Asia-Pacific	333,909	29%	252,610	26%	32%	35%
Total	$ 1,169,631	100%	$ 977,383	100%	20%	17%

Americas Income from Operations. Our Americas income from operations did not materially change during the year ended December 31, 2019 as compared to the year ended December 31, 2018.

EMEA Income from Operations. During the year ended December 31, 2019, EMEA income from operations increased by 35% (24% on a constant currency basis). The increase in our EMEA income from operations was primarily due to higher revenues as a result of our IBX data center expansion activity and organic growth, as described above, as well as lower operating expenses as a percentage of revenues.

Asia-Pacific Income from Operations. During the year ended December 31, 2019, Asia-Pacific income from operations increased by 32% (35% on a constant currency basis). The increase in our Asia-Pacific income from operations was primarily due to higher revenues as a result of our IBX data center expansion activity, acquisition and organic growth as described above, lower operating expenses as a percentage of revenues and lower transaction costs in the current period as compared to the prior year.

Interest Income. Interest income was $27.7 million and $14.5 million for the years ended December 31, 2019 and 2018, respectively. The average yield for the year ended December 31, 2019 was 1.85% versus 1.24% for the year ended December 31, 2018.

Interest Expense. Interest expense decreased to $479.7 million for the year ended December 31, 2019 from $521.5 million for the year ended December 31, 2018, primarily attributable to the reduction in lease interest expense due to the conversion of certain build-to-suit leases to operating leases upon the adoption of ASC 842 and the utilization of cross-currency interest rate swaps in 2019. During the years ended December 31, 2019 and 2018, we capitalized $32.2 million and $19.9 million, respectively, of interest expense to construction in progress.

Other Income. We recorded net other income of $27.8 million and $14.0 million for the years ended December 31, 2019 and 2018, respectively. Other income is primarily comprised of foreign currency exchange gains and losses during the periods.

Loss on Debt Extinguishment. During the year ended December 31, 2019, the Company recorded $52.8 million of loss on debt extinguishment primarily related to the loss on debt extinguishment from the redemption of the Senior Notes due 2022, 2023 and 2025.

During the year ended December 31, 2018, the Company recorded $51.4 million of loss on debt extinguishment comprised of:

- $17.1 million of loss on debt extinguishment as a result of amendments to leases impacting the related financing obligations;
- $19.5 million of loss on debt extinguishment from the settlement of financing obligations as a result of the Infomart Dallas acquisition;
- $12.6 million of loss on debt extinguishment as a result of the settlement of financing obligations for properties purchased; and
- $2.2 million of loss on debt extinguishment as a result of the redemption of the Japanese Yen Term Loan.

Income Taxes. We operate as a REIT for U.S. federal income tax purposes. As a REIT, we are generally not subject to U.S. federal and state income taxes on our taxable income distributed to stockholders. We intend to distribute or have distributed the entire taxable income generated by the operations of our REIT and QRSs for the tax years ended December 31, 2019 and 2018, respectively. As such, other than tax attributable to built-in-gains recognized and withholding taxes, no provision for U.S. federal income taxes for the REIT and QRSs has been included in the accompanying consolidated financial statements for the years ended December 31, 2019 and 2018.

We have made TRS elections for some of our subsidiaries in and outside the U.S. In general, a TRS may provide services that would otherwise be considered impermissible for REITs to provide and may hold assets that may not be REIT compliant.

U.S. federal income taxes for the TRS entities located in the U.S. and foreign income taxes for our foreign operations regardless of whether the foreign operations are operated as QRSs or TRSs have been accrued, as necessary, for the years ended December 31, 2019 and 2018.

For the years ended December 31, 2019 and 2018, we recorded $185.4 million and $67.7 million of income tax expenses, respectively. Our effective tax rates were 26.8% and 15.6%, respectively, for the years ended December 31, 2019 and 2018. The higher effective tax rate in 2019 as compared to 2018 is primarily due to a release of valuation allowance in 2018 as a result of a legal entity reorganization in our Americas region.

Adjusted EBITDA. Adjusted EBITDA is a key factor in how we assess the operating performance of our segments and develop regional growth strategies such as IBX data center expansion decisions. We define adjusted EBITDA as income or loss from operations excluding depreciation, amortization, accretion, stock-based compensation expense, restructuring charges, impairment charges, transaction costs and gain on asset sales. See "Non-GAAP Financial Measures" below for more information about adjusted EBITDA and a reconciliation of adjusted EBITDA to income or loss from operations. Our adjusted EBITDA for the years ended December 31, 2019 and 2018 was split among the following geographic regions (dollars in thousands):

	Years Ended December 31,				% Change	
	2019	%	2018	%	Actual	Constant Currency
Americas	$ 1,237,622	46%	$ 1,183,831	49%	5%	5%
EMEA	827,980	31%	698,280	29%	19%	17%
Asia-Pacific	622,125	23%	531,129	22%	17%	19%
Total	$ 2,687,727	100%	$ 2,413,240	100%	11%	12%

Americas Adjusted EBITDA. During the year ended December 31, 2019, Americas adjusted EBITDA increased by 5% (and also 5% on a constant currency basis). The increase in our Americas adjusted EBITDA was primarily due to higher revenues as a result of our IBX data center expansion activity, acquisition and organic growth as described above.

EMEA Adjusted EBITDA. During the year ended December 31, 2019, EMEA adjusted EBITDA increased by 19% (17% on a constant currency basis). The increase in our EMEA adjusted EBITDA was primarily due to higher revenues as a result of our IBX data center expansion activity and organic growth, as described above, as well as lower operating expenses as a percentage of revenues.

Asia-Pacific Adjusted EBITDA. During the year ended December 31, 2019, Asia-Pacific adjusted EBITDA increased by 17% (19% on a constant currency basis). The increase in our Asia-Pacific adjusted EBITDA was primarily due to higher revenues as a result of our IBX data center expansion activity, acquisition and organic growth as described above and lower operating expenses as a percentage of revenues.

Non-GAAP Financial Measures

We provide all information required in accordance with GAAP, but we believe that evaluating our ongoing operating results may be difficult if limited to reviewing only GAAP financial measures. Accordingly, we use non-GAAP financial measures to evaluate our operations.

Non-GAAP financial measures are not a substitute for financial information prepared in accordance with GAAP. Non-GAAP financial measures should not be considered in isolation, but should be considered together with the most directly comparable GAAP financial measures and the reconciliation of the non-GAAP financial measures to the most directly comparable GAAP financial measures. We have presented such non-GAAP financial measures to provide investors with an additional tool to evaluate our operating results in a manner that focuses on what management believes to be our core, ongoing business operations. We believe that the inclusion of these non-GAAP financial measures provides consistency and comparability with past reports and provides a better understanding of the overall performance of the business and ability to perform in subsequent periods. We believe that if we did not provide such non-GAAP financial information, investors would not have all the necessary data to analyze Equinix effectively.

Investors should note that the non-GAAP financial measures used by us may not be the same non-GAAP financial measures, and may not be calculated in the same manner, as those of other companies. Investors should therefore exercise caution when comparing non-GAAP financial measures used by us to similarly titled non-GAAP financial measures of other companies.

Our primary non-GAAP financial measures, adjusted EBITDA and adjusted funds from operations ("AFFO"), exclude depreciation expense as these charges primarily relate to the initial construction costs of our IBX data centers and do not reflect our current or future cash spending levels to support our business. Our IBX data centers are long-lived assets and have an economic life greater than 10 years. The construction costs of an IBX data center do not recur with respect to such data center, although we may incur initial construction costs in future periods with respect to additional IBX data centers, and future capital expenditures remain minor relative to our initial investment. This is a trend we expect to continue. In addition, depreciation is also based on the estimated useful lives of our IBX data centers. These estimates could vary from actual performance of the asset, are based on historical costs incurred to build out our IBX data centers and are not indicative of current or expected future capital expenditures. Therefore, we exclude depreciation from our operating results when evaluating our operations.

In addition, in presenting adjusted EBITDA and AFFO, we exclude amortization expense related to acquired intangible assets. Amortization expense is significantly affected by the timing and magnitude of our acquisitions and these charges may vary in amount from period to period. We exclude amortization expense to facilitate a more meaningful evaluation of our current operating performance and comparisons to our prior periods. We exclude accretion expense, both as it relates to asset retirement obligations as well as accrued restructuring charge liabilities, as these expenses represent costs which we believe are not meaningful in evaluating our current operations. We exclude stock-based compensation expense, as it can vary significantly from period to period based on share price, the timing, size and nature of equity awards. As such, we, and many investors and analysts, exclude stock-based compensation expense to compare our operating results with those of other companies. We also exclude restructuring charges. The restructuring charges relate to our decisions to exit leases for excess space adjacent to several of our IBX data centers, which we did not intend to build out, or our decision to reverse such restructuring charges. We also exclude impairment charges related to certain long-lived assets. The impairment charges are related to expense recognized whenever events or changes in circumstances indicate that the carrying amount of long-lived assets are not recoverable. We also exclude gain or loss on asset sales as it represents profit or loss that is not meaningful in evaluating the current or future operating performance. Finally, we exclude transaction costs from AFFO and adjusted EBITDA to allow more comparable comparisons of our financial results to our historical operations. The transaction costs relate to costs we incur in connection with business combinations and the formation of joint ventures, including advisory, legal, accounting, valuation, and other professional or consulting fees. Such charges generally are not relevant to assessing the long-term performance of the company. In addition, the frequency and amount of such charges vary significantly based on the size and timing of the transactions. Management believes items such as restructuring charges, impairment charges, gain or loss on asset sales and transaction costs are non-core transactions; however, these types of costs may occur in future periods.

Adjusted EBITDA

We define adjusted EBITDA as income from operations excluding depreciation, amortization, accretion, stock-based compensation expense, restructuring charges, impairment charges, transaction costs, and gain on asset sales as presented below (in thousands):

	Years Ended December 31,		
	2019	2018	2017
Income from operations	$ 1,169,631	$ 977,383	$ 809,014
Depreciation, amortization, and accretion expense	1,285,296	1,226,741	1,028,892
Stock-based compensation expense	236,539	180,716	175,500
Transaction costs	24,781	34,413	38,635
Impairment charges	15,790	—	—
Gain on asset sales	(44,310)	(6,013)	—
Adjusted EBITDA	$ 2,687,727	$ 2,413,240	$ 2,052,041

Our adjusted EBITDA results have improved each year and in each region in total dollars due to the improved operating results discussed earlier in "Results of Operations", as well as the nature of our business model consisting of a recurring revenue stream and a cost structure which has a large base that is fixed in nature also discussed earlier in "Overview".

Funds from Operations ("FFO") and AFFO

We use FFO and AFFO, which are non-GAAP financial measures commonly used in the REIT industry. FFO is calculated in accordance with the standards established by the National Association of Real Estate Investment Trusts. FFO represents net income (loss), excluding gain (loss) from the disposition of real estate assets, depreciation and amortization on real estate assets and adjustments for unconsolidated joint ventures' and non-controlling interests' share of these items.

In presenting AFFO, we exclude certain items that we believe are not good indicators of our current or future operating performance. AFFO represents FFO excluding depreciation and amortization expense on non-real estate assets, accretion, stock-based compensation, restructuring charges, impairment charges, transaction costs, an installation revenue adjustment, a straight-line rent expense adjustment, a contract cost adjustment, amortization of deferred financing costs and debt discounts and premiums, gain (loss) on debt extinguishment, an income tax expense adjustment, recurring capital expenditures, net income (loss) from discontinued operations, net of tax, and adjustments from FFO to AFFO for unconsolidated joint ventures' and noncontrolling interests' share of these items. The adjustments for installation revenue, straight-line rent expense and contract costs are intended to isolate the cash activity included within the straight-lined or amortized results in the consolidated statement of operations. We exclude the amortization of deferred financing costs and debt discounts and premiums as these expenses relate to the initial costs incurred in connection with debt financings that have no current or future cash obligations. We exclude gain (loss) on debt extinguishment since it generally represents the write-off of initial costs incurred in connection with debt financings or a cost that is incurred to reduce future interest costs and is not a good indicator of our current or future operating performance. We include an income tax expense adjustment, which represents the non-cash tax impact due to changes in valuation allowances, uncertain tax positions and deferred taxes that do not relate to current period's operations. We deduct recurring capital expenditures, which represent expenditures to extend the useful life of its IBX data centers or other assets that are required to support current revenues. We also exclude net income (loss) from discontinued operations, net of tax, which represents results that may not recur and are not a good indicator of our current future operating performance.

Our FFO and AFFO were as follows (in thousands):

	Years Ended December 31,		
	2019	2018	2017
Net income	$ 507,245	$ 365,359	$ 232,982
Net loss attributable to non-controlling interests	205	—	—
Net income attributable to Equinix	507,450	365,359	232,982
Adjustments:			
Real estate depreciation	845,798	883,118	754,351
(Gain) loss on disposition of real estate property	(39,337)	4,643	4,945
Adjustments for FFO from unconsolidated joint ventures	645	—	85
FFO	$ 1,314,556	$ 1,253,120	$ 992,363

	Years Ended December 31,		
	2019	2018	2017
FFO	$ 1,314,556	$ 1,253,120	$ 992,363
Adjustments:			
Installation revenue adjustment	11,031	10,858	24,496
Straight-line rent expense adjustment	8,167	7,203	8,925
Contract cost adjustment	(40,861)	(20,358)	—
Amortization of deferred financing costs and debt discounts and premiums	13,042	13,618	24,449
Stock-based compensation expense	236,539	180,716	175,500
Non-real estate depreciation expense	242,761	140,955	111,121
Amortization expense	196,278	203,416	177,008
Accretion expense (adjustment)	459	(748)	(13,588)
Recurring capital expenditures	(186,002)	(203,053)	(167,995)
Loss on debt extinguishment	52,825	51,377	65,772
Transaction costs	24,781	34,413	38,635
Impairment charges	15,790	—	—
Income tax expense adjustment	39,676	(12,420)	371
Adjustments for AFFO from unconsolidated joint ventures	2,080	—	(17)
AFFO	$ 1,931,122	$ 1,659,097	$ 1,437,040

Our AFFO results have improved due to the improved operating results discussed earlier in "Results of Operations," as well as due to the nature of our business model which consists of a recurring revenue stream and a cost structure which has a large base that is fixed in nature as discussed earlier in "Overview."

Constant Currency Presentation

Our revenues and certain operating expenses (cost of revenues, sales and marketing and general and administrative expenses) from our international operations have represented and will continue to represent a significant portion of our total revenues and certain operating expenses. As a result, our revenues and certain operating expenses have been and will continue to be affected by changes in the U.S. dollar against major international currencies. During the year ended December 31, 2019 as compared to the same period in 2018, the U.S. dollar was stronger relative to the Brazilian real, Euro, British Pound, Singapore dollar and Australian dollar, which resulted in an unfavorable foreign currency impact on revenue, operating income and adjusted EBITDA, and a favorable foreign currency impact on operating expenses. In order to provide a framework for assessing how each of our business segments performed excluding the impact of foreign currency fluctuations, we present period-over-period percentage changes in our revenues and certain operating expenses on a constant currency basis in addition to the historical amounts as reported. Our constant currency presentation excludes the impact of our foreign currency cash flow hedging activities. Presenting constant currency results of operations is a non-GAAP financial measure and is not meant to be considered in isolation or as an alternative to GAAP results of operations. However, we have presented this non-GAAP financial measure to provide investors with an additional tool to evaluate our operating results. To present this information, our current period revenues and certain operating expenses from entities reporting in currencies other than the U.S. dollar are converted into U.S. dollars at constant exchange rates rather than the actual exchange rates in effect during the respective periods (i.e. average rates in effect for the year ended December 31, 2018 are used as exchange rates for the year ended December 31, 2019 when comparing the year ended December 31, 2019 with the year ended December 31, 2018).

Liquidity and Capital Resources

As of December 31, 2019, our total indebtedness was comprised of debt and lease obligations totaling approximately $11.9 billion (gross of debt issuance cost, debt discount, plus mortgage premium) consisting of:

- approximately $9,029.2 million of principal from our senior notes;
- approximately $1,506.1 million from our finance lease liabilities; and
- $1,371.9 million of principal from our loans payable and mortgage.

We believe we have sufficient cash, coupled with anticipated cash generated from operating activities, to meet our operating requirements, including repayment of the current portion of our debt as it becomes due, payment of regular dividend distributions and completion of our publicly-announced expansion projects.

During 2019, we completed the following significant financing activities:

- issued $2,800.0 million in Senior Notes due 2024, 2026 and 2029;
- redeemed $1,906.3 million of Senior Notes due 2022, 2023 and 2025;
- repaid $300.0 million of 5.0% Infomart Senior Notes according to their repayment terms;
- issued and sold 2,985,575 shares of common stock in a public equity offering and received net proceeds of approximately $1,213.4 million, net of underwriting discounts, commissions and offering expenses; and
- issued and sold 903,555 shares of common stock under our ATM Program, for proceeds of approximately $447.5 million, net of payment of commissions to sales agents and other offering expenses.

As of December 31, 2019, we had $1,879.9 million of cash, cash equivalents and short-term investments, of which approximately $1,456.8 million was held in the U.S. In addition to our cash and investment portfolio, we had $1.9 billion of additional liquidity available to us from our $2.0 billion revolving facility and $300.0 million of shares issuance available for sale under our ATM Program.

Besides any further financing activity we may pursue, customer collections are our primary source of cash. While we believe we have a strong customer base, and have continued to experience relatively strong collections, if the current market conditions were to deteriorate, some of our customers may have difficulty paying us and we may experience increased churn in our customer base, including reductions in their commitments to us, all of which could have a material adverse effect on our liquidity. Additionally, we may pursue additional expansion opportunities, primarily the build out of new IBX data centers, in certain of our existing markets which are at or near capacity within the next year, as well as potential acquisitions and joint ventures. While we expect to fund these plans with our existing resources, additional financing, either debt or equity, may be required, and if current market conditions were to deteriorate, we may be unable to secure additional financing, or any such additional financing may only be available to us on unfavorable terms. An inability to pursue additional expansion opportunities will have a material adverse effect on our ability to maintain our desired level of revenue growth in future periods.

Sources and Uses of Cash

	Years Ended December 31,	
	2019	2018
	(in thousands)	
Net cash provided by operating activities	$ 1,992,728	$ 1,815,426
Net cash used in investing activities	(1,944,567)	(3,075,528)
Net cash provided by financing activities	1,202,082	470,912

Operating Activities

Our cash provided by our operations is generated by colocation, interconnection, managed infrastructure and other revenues. Our primary uses of cash from our operating activities include compensation and related costs, interest payments, other general corporate expenditures and taxes. The increase in net cash provided by operating activities during 2019 compared to 2018 was primarily due to improved operating results combined with the inclusion of full year operating results of the acquisitions of Infomart Dallas and Metronode closed in April 2018, offset by increases in cash paid for cost of revenues, operating expenses, interest expense and income taxes.

Investing Activities

The decrease in net cash used in investing activities during 2019 compared to 2018 was primarily due to the decrease in spending for business acquisitions of approximately $795.5 million, primarily due to the Metronode and Infomart Dallas acquisitions in 2018 combined with an increase in proceeds from asset sales of approximately $346.6 million, primarily due to the sale of xScale data center facilities in connection with the closing of the Joint Venture.

During 2020, we anticipate our IBX expansion construction activity will increase from our 2019 levels. If the opportunity to expand is greater than planned and we have sufficient funding to pursue such expansion opportunities, we may further increase the level of capital expenditure to support this growth as well as pursue additional business and real estate acquisitions or joint ventures.

Financing Activities

Net cash provided by financing activities during 2019 was primarily due to:

- the issuance of $2,800.0 million in Senior Notes due 2024, 2026 and 2029;
- the sale and issuance of 2,985,575 shares of common stock in a public equity offering and receipt of net proceeds of approximately $1,213.4 million, net of underwriting discounts, commissions and offering expenses;
- the sale of 903,555 shares under our ATM Program, for net proceeds of $447.5 million; and
- proceeds from employee awards of $52.0 million.

The proceeds were partially offset by:

- the redemption of $1,906.3 million in Senior Notes due 2022, 2023 and 2025;
- the repayment of $300.0 million of 5.0% Infomart Senior Notes according to the repayment terms;
- dividend distributions of $836.2 million;
- repayments of capital lease and other financing obligations totaling $126.5 million;
- repayments of mortgage and loans payable totaling $73.2 million;
- payments of debt extinguishment costs of $43.3 million, primarily related to redemption premium paid related to the redemption of Senior Notes due 2022, 2023 and 2025; and
- payments of debt issuance costs of $23.3 million.

Net cash provided by financing activities during 2018 was primarily due to:

- the issuance of €750.0 million 2.875% Euro Senior Notes due 2024, or approximately $929.9 million in U.S. dollars, at the exchange rate in effect on March 14, 2018;
- borrowing of the JPY Term Loan of ¥47.5 billion, or approximately $424.7 million at the exchange rate effective on July 31, 2018;
- the sale of 930,934 shares under our ATM Program, for net proceeds of $388.2 million; and
- proceeds from employee awards of $50.1 million.

The proceeds were partially offset by:

- dividend distributions of $738.6 million;
- repayments of capital lease and other financing obligations of $103.8 million;
- repayments of mortgage and loans payable of $447.5 million, primarily related to the prepayment of the remaining principal of our existing Japanese Yen Term Loan;
- payments of debt extinguishment costs of $20.6 million; and
- payments of debt issuance costs of $12.2 million.

Contractual Obligations and Off-Balance-Sheet Arrangements

We lease a majority of our IBX data centers and certain equipment under long-term lease agreements. The following represents our debt maturities, financings, leases and other contractual commitments as of December 31, 2019 (in thousands):

	2020	2021	2022	2023	2024	Thereafter	Total
Term loans and other loans payable (1)	$ 77,603	$ 77,654	$ 1,180,017	$ 6,683	$ 6,214	$ 23,715	$ 1,371,886
Senior notes (1)	643,711	150,000	—	—	1,841,500	6,394,000	9,029,211
Interest (2)	359,383	333,710	327,222	303,722	291,496	574,633	2,190,166
Finance leases (3)	173,994	176,357	176,992	178,289	177,338	1,739,235	2,622,205
Operating leases (3)	193,663	191,954	183,908	168,353	156,502	1,106,944	2,001,324
Other contractual commitments (4)	1,133,948	256,508	51,137	33,587	30,267	277,739	1,783,186
Asset retirement obligations (5)	2,081	4,667	12,365	5,442	6,978	70,882	102,415
	$ 2,584,383	$ 1,190,850	$ 1,931,641	$ 696,076	$ 2,510,295	$ 10,187,148	$ 19,100,393

(1) Represents principal of senior notes, term loans and other loans payable, as well as premium on mortgage payable.

(2) Represents interest on mortgage payable, senior notes, term loan facilities and other loans payable based on their approximate interest rates as of December 31, 2019, as well as the credit facility fee for the revolving credit facility.

(3) Represents lease payments under finance and operating lease arrangements, including renewal options that are certain to be exercised.

(4) Represents unaccrued contractual commitments. Other contractual commitments are described below.

(5) Represents liability, net of future accretion expense.

In connection with certain of our leases and other contracts requiring deposits, we entered into 41 irrevocable letters of credit totaling $84.0 million under the revolving credit facility. These letters of credit were provided in lieu of cash deposits. If the landlords for these IBX leases decide to draw down on these letters of credit triggered by an event of default under the lease, we will be required to fund these letters of credit either through cash collateral or borrowing under the revolving credit facility. These contingent commitments are not reflected in the table above.

We had accrued liabilities related to uncertain tax positions totaling approximately $132.2 million as of December 31, 2019. These liabilities, which are reflected on our balance sheet, are not reflected in the table above since it is unclear when these liabilities will be paid.

Primarily as a result of our various IBX data center expansion projects, as of December 31, 2019, we were contractually committed for $795.0 million of unaccrued capital expenditures, primarily for IBX equipment not yet delivered and labor not yet provided in connection with the work necessary to complete construction and open these IBX data centers prior to making them available to customers for installation. This amount, which is expected to be paid during 2020 and thereafter, is reflected in the table above as "other contractual commitments."

We had other non-capital purchase commitments in place as of December 31, 2019, such as commitments to purchase power in select locations and other open purchase orders, which contractually bind us for goods, services or arrangements to be delivered or provided during 2020 and beyond. Such other purchase commitments as of December 31, 2019, which total $988.2 million, are also reflected in the table above as "other contractual commitments."

In connection with the Joint Venture which closed in October 2019, we agreed to make future equity contributions to the Joint Venture of €17.6 million and £15.7 million, or $40.6 million in total at the exchange rate in effect on December 31, 2019, to fund the Joint Venture's future development over the next 3 years, which are not reflected in the table above.

Additionally, we entered into lease agreements with various landlords primarily for data center spaces and ground leases which have not yet commenced as of December 31, 2019. These leases will commence between fiscal years 2020 and 2022, with lease terms of 10 to 49 years and total lease commitments of approximately $608.1 million, which are not reflected in the table above.

Other Off-Balance-Sheet Arrangements

We have various guarantor arrangements with both our directors and officers and third parties, including customers, vendors and business partners. As of December 31, 2019, there were no significant liabilities recorded for these arrangements. For additional information, see "Guarantor Arrangements" in Note 15 within the Consolidated Financial Statements.

Concurrent with the closing of the Joint Venture, the Joint Venture entered into a credit agreement with a group of lenders for secured credit facilities of €850.0 million, or $953.7 million in total at the exchange rate in effect on December 31, 2019, consisting of two secured term loan facilities and a secured revolving credit facility. The Joint Venture's debt is secured by net assets of the Joint Venture, is without recourse to the partners, and does not represent a liability of the partners. We do not provide any guarantees to make principle payment to the lenders for the Joint Ventures' indebtedness. Under the Joint Venture agreement, we and our joint venture partner GIC are also required to make additional equity contribution proportionately to the Joint Venture upon situations such as interest shortfall, cost-overrun or capital shortfall to complete certain construction phases.

Critical Accounting Policies and Estimates

Our consolidated financial statements are prepared in accordance with U.S. GAAP. The preparation of our financial statements requires management to make estimates and assumptions about future events that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. On an ongoing basis, management evaluates the accounting policies, assumptions, estimates and judgments to ensure that our consolidated financial statements are presented fairly and in accordance with GAAP. Management bases its assumptions, estimates and judgments on historical experience, current trends and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. However, because future events and their effects cannot be determined with certainty, actual results may differ from these assumptions and estimates, and such differences could be material.

Our significant accounting policies are discussed in Note 1 to Consolidated Financial Statements in Item 8 of this Annual Report on Form 10-K. Management believes that the following critical accounting policies and estimates are the most critical to aid in fully understanding and evaluating our consolidated financial statements, and they require significant judgments, resulting from the need to make estimates about the effect of matters that are inherently uncertain:

- Accounting for income taxes;
- Accounting for business combinations;
- Accounting for impairment of goodwill;
- Accounting for property, plant and equipment; and
- Accounting for leases.

Description	Judgments and Uncertainties	Effect if Actual Results Differ from Assumptions
Accounting for Income Taxes.		
Deferred tax assets and liabilities are recognized based on the future tax consequences attributable to temporary differences that exist between the financial statement carrying value of assets and liabilities and their respective tax bases, and operating loss and tax credit carryforwards on a taxing jurisdiction basis. We measure deferred tax assets and liabilities using enacted tax rates that will apply in the years in which we expect the temporary differences to be recovered or settled. The accounting standard for income taxes requires a reduction of the carrying amounts of deferred tax assets by recording a valuation allowance if, based on the available evidence, it is more likely than not (defined by the accounting standard as a likelihood of more than 50%) that such assets will not be realized. A tax benefit from an uncertain income tax position may be recognized in the financial statements only if it is more likely than not that the position is sustainable, based solely on its technical merits and consideration of the relevant taxing authority's widely understood administrative practices and precedents. The Company recognizes interest and penalties related to unrecognized tax benefits within income tax benefit (expense) in the consolidated statements of operations.	The valuation of deferred tax assets requires judgment in assessing the likely future tax consequences of events that have been recognized in our financial statements or tax returns. Our accounting for deferred tax consequences represents our best estimate of those future tax consequences. In assessing the need for a valuation allowance, we consider both positive and negative evidence related to the likelihood of realization of the deferred tax assets. If, based on the weight of that available evidence, it is more likely than not the deferred tax assets will not be realized, we record a valuation allowance. The weight given to the positive and negative evidence is commensurate with the extent to which the evidence may be objectively verified. This assessment, which is completed on a taxing jurisdiction basis, takes into account a number of types of evidence, including the following: 1) the nature, frequency and severity of current and cumulative financial reporting losses, 2) sources of future taxable income and 3) tax planning strategies. In assessing the tax benefit from an uncertain income tax position, the tax position that meets the more-likely-than-not recognition threshold is initially and subsequently measured as the largest amount of tax benefit that is greater than 50% likely of being realized upon ultimate settlement with a taxing authority that has full knowledge of all relevant information. For purposes of the quarterly REIT asset tests, we estimate the fair market value of assets within our QRSs and TRSs using a discounted cash flow approach, by calculating the present value of forecasted future cash flows. We apply discount rates based on industry benchmarks relative to the market and forecasting risks. Other significant assumptions used to estimate the fair market value of assets in QRSs and TRSs include projected revenue growth, projected operating margins and projected capital expenditure. We revisit significant assumptions periodically to reflect any changes due to business or economic environment.	As of December 31, 2019 and 2018, we had net total deferred tax liabilities of $211.4 million and $189.6 million, respectively. As of December 31, 2019 and 2018, we had a total valuation allowance of $57.8 million and $57.0 million, respectively. If and when we reduce our remaining valuation allowances, it may have a favorable impact to our financial position and results of operations in the periods when such determinations are made. We will continue to assess the need for our valuation allowances, by jurisdiction, in the future. During the year ended December 31, 2019, we released the full valuation allowances against the deferred tax assets of one of our Brazilian legal entities due to the evidence of achieving sustainable profitability. For the Metronode Acquisition, we increased the valuation allowance that was assessed in prior year as a result of finalizing the provisional estimates related to the realizability of certain deferred tax assets. During the year ended December 31, 2018, we released the full or partial valuation allowances against the deferred tax assets in certain jurisdictions in the Americas, Asia-Pacific and EMEA regions. As part of the purchase accounting determination for the Metronode Acquisition, we provided full valuation allowance against certain deferred tax assets in Australia that are not expected to be realizable in the foreseeable future. As of December 31, 2019 and 2018, we had unrecognized tax benefits of $173.7 million and $150.9 million, respectively, exclusive of interest and penalties. During the year ended December 31, 2019, the unrecognized tax benefit increased by $22.8 million primarily due to integrations, which was partially offset by the recognition of unrecognized tax benefits related to the Company's tax positions in France as a result of a lapse in statutes of limitations and the partial payment of the Metronode pre-acquisition tax audit assessment which was fully indemnified by the seller. During the year ended December 31, 2018, the unrecognized tax benefits increased by $68.5 million primarily due to the Metronode Acquisition and the reorganization of the Spanish entities from the Itconic acquisition. The unrecognized tax benefits of $173.7 million as of December 31, 2019, if subsequently recognized, will affect our effective tax rate favorably at the time when such a benefit is recognized, of which $30.8 million is subject to an indemnification agreement.

Description	Judgments and Uncertainties	Effect if Actual Results Differ from Assumptions
Accounting for Business Combinations In accordance with the accounting standard for business combinations, we allocate the purchase price of an acquired business to its identifiable assets and liabilities based on estimated fair values. The excess of the purchase price over the fair value of the assets acquired and liabilities assumed, if any, is recorded as goodwill. We use all available information to estimate fair values. We typically engage outside appraisal firms to assist in determining the fair value of identifiable intangible assets such as customer contracts, leases and any other significant assets or liabilities and contingent consideration, as well as the estimated useful life of intangible assets. We adjust the preliminary purchase price allocation, as necessary, up to one year after the acquisition closing date if we obtain more information regarding asset valuations and liabilities assumed.	Our purchase price allocation methodology contains uncertainties because it requires assumptions and management's judgment to estimate the fair value of assets acquired and liabilities assumed at the acquisition date. Key judgments used to estimate the fair value of intangible assets include projected revenue growth and operating margins, discount rates, customer attrition rates, as well as the estimated useful life of intangible assets. Management estimates the fair value of assets and liabilities based upon quoted market prices, the carrying value of the acquired assets and widely accepted valuation techniques, including discounted cash flows and market multiple analyses. Our estimates are inherently uncertain and subject to refinement. Unanticipated events or circumstances may occur which could affect the accuracy of our fair value estimates, including assumptions regarding industry economic factors and business strategies.	During the last three years, we have completed a number of business combinations, including the acquisition of Switch Datacenters' AMS1 data center business in Amsterdam, Netherlands in April 2019, the Metronode Acquisition and the Infomart Dallas Acquisition in April 2018, the Itconic Acquisition and the Zenium data center acquisition in October 2017, the Verizon Data Center Acquisition in May 2017, and the IO Acquisition in February 2017. The purchase price allocation for these acquisitions has been finalized. As of December 31, 2019 and 2018, we had net intangible assets of $2.1 billion and $2.3 billion, respectively. We recorded amortization expense for intangible assets of $196.3 million, $203.4 million and $177.0 million for the years ended December 31, 2019, 2018 and 2017, respectively. We do not believe there is a reasonable likelihood that there will be a material change in the estimates or assumptions we used to complete the purchase price allocations and the fair value of assets acquired and liabilities assumed. However, if actual results are not consistent with our estimates or assumptions, we may be exposed to losses or gains that could be material, which would be recorded in our consolidated statements of operations in 2019 or beyond.

Description	Judgments and Uncertainties	Effect if Actual Results Differ from Assumptions
Accounting for Impairment of Goodwill and Other Intangible Assets In accordance with the accounting standard for goodwill and other intangible assets, we perform goodwill and other intangible assets impairment reviews annually, or whenever events or changes in circumstances indicate that the carrying value of an asset may not be recoverable. We complete the annual goodwill impairment assessment for the Americas, EMEA and Asia-Pacific reporting units to determine if the fair values of the reporting units exceeded their carrying values. We perform a review of other intangible assets for impairment by assessing events or changes in circumstances that indicate the carrying amount of an asset may not be recoverable.	To perform annual goodwill impairment assessment, we elected to assess qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value. This analysis requires assumptions and estimates before performing the quantitative goodwill impairment test, where the assessment requires assumptions and estimates derived from a review of our actual and forecasted operating results, approved business plans, future economic conditions and other market data. There were no specific factors present in 2019 or 2018 that indicated a potential goodwill impairment. We performed our annual review of other intangible assets by assessing if there were events or changes in circumstances indicating that the carrying amount of an asset may not be recoverable, such as a significant decrease in market price of an asset, a significant adverse change in the extent or manner in which an asset is being used, a significant adverse change in legal factors or business climate that could affect the value of an asset or a continuous deterioration of our financial condition. This assessment requires assumptions and estimates derived from a review of our actual and forecasted operating results, approved business plans, future economic conditions and other market data. There were no specific events in 2019 or 2018 that indicated a potential impairment.	As of December 31, 2019, goodwill attributable to the Americas, the EMEA and the Asia-Pacific reporting units was $1.7 billion, $2.4 billion and $0.6 billion, respectively. Future events, changing market conditions and any changes in key assumptions may result in an impairment charge. While we have not recorded an impairment charge against our goodwill to date, the development of adverse business conditions in our Americas, EMEA or Asia-Pacific reporting units, such as higher than anticipated customer churn or significantly increased operating costs, or significant deterioration of our market comparables that we use in the market approach, could result in an impairment charge in future periods. The balance of our other intangible assets, net, for the year ended December 31, 2019 and 2018 was $2.1 billion and $2.3 billion, respectively. While we have not recorded an impairment charge against our other intangible assets to date, future events or changes in circumstances, such as a significant decrease in market price of an asset, a significant adverse change in the extent or manner in which an asset is being used, a significant adverse change in legal factors or business climate, may result in an impairment charge in future periods. Any potential impairment charge against our goodwill and other intangible assets would not exceed the amounts recorded on our consolidated balance sheets.

Description	Judgments and Uncertainties	Effect if Actual Results Differ from Assumptions
Accounting for Property, Plant and Equipment We have a substantial amount of property, plant and equipment recorded on our consolidated balance sheet. The vast majority of our property, plant and equipment represent the costs incurred to build out or acquire our IBX data centers. Our IBX data centers are long-lived assets. We depreciate our property, plant and equipment using the straight-line method over the estimated useful lives of the respective assets (subject to the term of the lease in the case of leased assets or leasehold improvements and integral equipment located in leased properties). Accounting for property, plant and equipment includes determining the appropriate period in which to depreciate such assets, assessing such assets for potential impairment, capitalizing interest during periods of construction and assessing the asset retirement obligations required for certain leased properties that require us to return the leased properties back to their original condition at the time we decide to exit a leased property.	Judgments are required in arriving at the estimated useful life of an asset and changes to these estimates would have significant impact on our financial position and results of operations. When we lease a property for our IBX data centers, we generally enter into long-term arrangements with initial lease terms of at least 8-10 years and with renewal options generally available to us. In the next several years, a number of leases for our IBX data centers will come up for renewal. As we start approaching the end of these initial lease terms, we will need to reassess the estimated useful lives of our property, plant and equipment. In addition, we may find that our estimates for the useful lives of non-leased assets may also need to be revised periodically. We periodically review the estimated useful lives of certain of our property, plant and equipment and changes in these estimates in the future are possible. The assessment of long-lived assets for impairment requires assumptions and estimates of undiscounted and discounted future cash flows. These assumptions and estimates require significant judgment and are inherently uncertain.	As of December 31, 2019 and 2018, we had property, plant and equipment of $12.2 billion and $11.0 billion, respectively. During the years ended December 31, 2019, 2018 and 2017, we recorded depreciation expense of $1.1 billion, $1.0 billion, and $0.9 billion, respectively. While we evaluated the appropriateness, we did not revise the estimated useful lives of our property, plant and equipment during the years ended December 31, 2019, 2018 and 2017. Further changes in our estimated useful lives of our property, plant and equipment could have a significant impact on our results of operations.
Accounting for Leases A significant portion of our data center spaces, office spaces and equipment are leased. Each time we enter into a new lease or lease amendments, we analyze each lease or lease amendment for the proper accounting, including determining if an arrangement is or contains a lease at inception and making assessment of the leased properties to determine if they are operating or finance leases.	Determination of accounting treatment, including the result of the lease classification test for each new lease or lease amendment, is dependent on a variety of judgments, such as identification of lease and non-lease components, allocation of total consideration between lease and non-lease components, determination of lease term, including assessing the likelihood of lease renewals, valuation of leased property, and establishing the incremental borrowing rate to calculate the present value of the minimum lease payment for the lease test. The judgments used in the accounting for leases are inherently subjective; different assumptions or estimates could result in different accounting treatment for a lease.	As of December 31, 2019, we recorded operating lease right-of-use assets of $1.5 billion, finance lease assets of $1.3 billion, operating lease liabilities of $1.5 billion, and finance lease liabilities of $1.5 billion. Additionally, during the years ended December 31, 2019, 2018 and 2017, we recorded rent expense of approximately $219.0 million, $185.4 million and $157.9 million respectively.

Recent Accounting Pronouncements

See "Recent Accounting Pronouncements" in Note 1 within the Consolidated Financial Statements.

ITEM 7A. Quantitative and Qualitative Disclosures About Market Risk

Market Risk

The following discussion about market risk involves forward-looking statements. Actual results could differ materially from those projected in the forward-looking statements. We may be exposed to market risks related to changes in interest rates and foreign currency exchange rates and fluctuations in the prices of certain commodities, primarily electricity.

We employ foreign currency forward and option contracts, cross-currency interest rate swaps and interest rate locks for the purpose of hedging certain specifically-identified exposures. The use of these financial instruments is intended to mitigate some of the risks associated with fluctuations in currency exchange and interest rates, but does not eliminate such risks. We do not use financial instruments for trading or speculative purposes.

Investment Portfolio Risk

We maintain an investment portfolio of various holdings, types, and maturities that is prioritized on meeting REIT asset requirements. All of our marketable securities are recorded on our consolidated balance sheets at fair value with changes in fair values recognized in net income. We consider various factors in determining whether we should recognize an impairment charge for our securities, including the length of time and extent to which the fair value has been less than our cost basis and our intent and ability to hold the investment for a period of time sufficient to allow for any anticipated recovery. We anticipate that we will recover the entire cost basis of these securities and have determined that no other-than-temporary impairments associated with credit losses were required to be recognized during the year ended December 31, 2019.

As of December 31, 2019, our investment portfolio of cash equivalents and marketable securities consisted of money market funds, certificates of deposits and publicly traded equity securities. The amount in our investment portfolio that could be susceptible to market risk totaled $896.9 million.

Interest Rate Risk

We are exposed to interest rate risk related to our outstanding debt. An immediate 10% increase or decrease in current interest rates from their position as of December 31, 2019 would not have a material impact on our interest expense due to the fixed coupon rate on the majority of our debt obligations. However, the interest expense associated with our senior credit facility and term loans, that bear interest at variable rates, could be affected. For every 100 basis point change in interest rates, our annual interest expense could increase by a total of approximately $11.5 million or decrease by a total of approximately $4.8 million based on the total balance of our primary borrowings under the Term Loan Facility as of December 31, 2019. As of December 31, 2019, we had no outstanding interest rate derivative hedges against our debt obligations. However, we may enter into interest rate hedging agreements in the future to mitigate our exposure to interest rate risk.

The fair value of our long-term fixed interest rate debt is subject to interest rate risk. Generally, the fair value of fixed interest rate debt will increase as interest rates fall and decrease as interest rates rise. These interest rate changes may affect the fair value of the fixed interest rate debt but do not impact our earnings or cash flows. The fair value of our mortgage and loans payable and 5.000% Infomart Senior Notes, which are not traded in the market, is estimated by considering our credit rating, current rates available to us for debt of the same remaining maturities and the terms of the debt. The fair value of our other senior notes, which are traded in the market, was based on quoted market prices. The following table represents the carrying value and estimated fair value of our mortgage and loans payable and senior notes as of (in thousands):

	December 31, 2019		December 31, 2018	
	Carrying Value (1)	Fair Value	Carrying Value (1)	Fair Value
Mortgage and loans payable	$ 1,370,118	$ 1,378,429	$ 1,388,524	$ 1,389,632
Senior notes	9,029,211	9,339,497	8,500,125	8,422,211

(1) The carrying value is gross of debt issuance cost, debt discount and debt premium.

Foreign Currency Risk

A significant portion of our revenue is denominated in U.S. dollars, however, approximately 58% of our revenues and 55% of our operating costs are attributable to Brazil, Canada, Colombia and the EMEA and Asia-Pacific regions, and a large portion of those revenues and costs are denominated in a currency other than the U.S. dollar, primarily the Euro, British pound, Japanese yen, Singapore dollar, Hong Kong dollar, Australian dollar and Brazilian real. To help manage the exposure to foreign currency exchange rate fluctuations, we have implemented a number of hedging programs, in particular:

- a cash flow hedging program to hedge the forecasted revenues and expenses in our EMEA region;
- a balance sheet hedging program to hedge the remeasurement of monetary assets and liabilities denominated in foreign currencies; and
- a net investment hedging program to hedge the long term investments in our foreign subsidiaries.

Our hedging programs reduce, but do not entirely eliminate, the impact of currency exchange rate movements on our consolidated balance sheets, statements of operations and statements of cash flows.

We have entered into various foreign currency debt obligations. As of December 31, 2019, the total principal amount of foreign currency debt obligations was $4.4 billion, including $3.1 billion denominated in Euro, $604.3 million denominated in British Pound, $410.1 million denominated in Japanese Yen and $272.7 million denominated in Swedish Krona. As of December 31, 2019, we have designated $4.1 billion of the total principal amount of foreign currency debt obligations as net investment hedges against our net investments in foreign subsidiaries. For a net investment hedge, changes in the fair value of the hedging instrument designated as a net investment hedge are recorded as a component of other comprehensive income (loss) in the consolidated balance sheets. Fluctuations in the exchange rates between these foreign currencies and the U.S. Dollar will impact the amount of U.S. Dollars that we will require to settle the foreign currency debt obligations at maturity. If the U.S. Dollar would have been weaker or stronger by 10% in comparison to these foreign currencies as of December 31, 2019, we estimate our obligation to cash settle the principal of these foreign currency debt obligations in U.S. Dollars would have increased or decreased by approximately $485.9 million and $397.5 million, respectively.

In 2019, we also entered into cross-currency interest rate swaps where we receive a fixed amount of U.S. Dollars and pay a fixed amount of Euros, with a total notional amount of $750.0 million. The cross-currency interest rate swaps are designated as hedges of our net investment in European operations and changes in the fair value of these swaps are recorded as a component of accumulated other comprehensive income (loss) in the condensed consolidated balance sheet. If the U.S. Dollar weakened or strengthened by 10% in comparison to Euro, we would have recorded an additional loss of $93.1 million or gain of $76.2 million, respectively, within accumulated other comprehensive income (loss) as of December 31, 2019.

The U.S. Dollar strengthened relative to certain of the currencies of the foreign countries in which we operate during the year ended December 31, 2019. This has impacted our condensed consolidated financial position and results of operations during this period, including the amount of revenues that we reported. Continued strengthening or weakening of the U.S. Dollar will continue to impact us in future periods.

With the existing cash flow hedges in place, a hypothetical additional 10% strengthening of the U.S. dollar during the year ended December 31, 2019 would have resulted in a reduction of our revenues and operating expenses, including depreciation and amortization expenses, by approximately $153.7 million and $152.5 million, respectively.

With the existing cash flow hedges in place, a hypothetical additional 10% weakening of the U.S. dollar during the year ended December 31, 2019 would have resulted in an increase of our revenues and operating expenses, including depreciation and amortization expenses, by approximately $188.2 million and $188.4 million, respectively.

We may enter into additional hedging activities in the future to mitigate our exposure to foreign currency risk as our exposure to foreign currency risk continues to increase due to our growing foreign operations; however, we do not currently intend to eliminate all foreign currency transaction exposure.

Commodity Price Risk

Certain operating costs incurred by us are subject to price fluctuations caused by the volatility of underlying commodity prices. The commodities most likely to have an impact on our results of operations in the event of price changes are electricity, supplies and equipment used in our IBX data centers. We closely monitor the cost of electricity at all of our locations. We have entered into several power contracts to purchase power at fixed prices in certain locations in the U.S., Switzerland, Italy, Sweden, Ireland, Bulgaria, Poland, Spain, Portugal, Australia, Brazil, France, Germany, Japan, the Netherlands, Singapore and the United Kingdom.

In addition, as we are building new, or expanding existing, IBX data centers, we are subject to commodity price risk for building materials related to the construction of these IBX data centers, such as steel and copper. In addition, the lead-time to procure certain pieces of equipment, such as generators, is substantial. Any delays in procuring the necessary pieces of equipment for the construction of our IBX data centers could delay the anticipated openings of these new IBX data centers and, as a result, increase the cost of these projects.

We do not currently employ forward contracts or other financial instruments to address commodity price risk other than the power contracts discussed above.

ITEM 8. Financial Statements and Supplementary Data

The financial statements and supplementary data required by this Item 8 are listed in Item 15(a)(1) and begin at page F-1 of this Annual Report on Form 10-K.

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

There is no disclosure to report pursuant to Item 9.

ITEM 9A. Controls and Procedures

Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures

Under the supervision and with the participation of our management, including our Chief Executive Officer and our Chief Financial Officer, we conducted an evaluation of our disclosure controls and procedures, as such term is defined under Rule 13a-15(e) promulgated under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Based on this evaluation, our Chief Executive Officer and our Chief Financial Officer concluded that our disclosure controls and procedures were effective at the reasonable assurance level as of December 31, 2019.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). 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.

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in *Internal Control – Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Based on our evaluation under the framework in *Internal Control – Integrated Framework* (2013), our management concluded that our internal control over financial reporting was effective as of December 31, 2019.

The effectiveness of our internal control over financial reporting as of December 31, 2019 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which is included herein on page F-1 of this Annual Report on Form 10-K.

Limitations on the Effectiveness of Controls

Our management, including our Chief Executive Officer and Chief Financial Officer, believes that our disclosure controls and procedures and internal control over financial reporting are designed and operated to be effective at the reasonable assurance level. However, our management does not expect that our disclosure controls and procedures or our internal control over financial reporting will prevent all errors and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. These inherent limitations include the realities that judgments in decision making can be faulty, and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by management override of the controls. The design of any system of controls is also based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, controls may become inadequate because of changes in conditions, or the degree of compliance with policies or procedures may deteriorate. Because of the inherent limitations in a cost effective control system, misstatements due to error or fraud may occur and not be detected.

Changes in Internal Control Over Financial Reporting

There was no change in our internal controls over financial reporting during the fourth quarter of fiscal 2019 that has materially affected, or is reasonable likely to affect, our internal controls over financial reporting. While we implemented certain internal controls related to the adoption of ASC 842, Leases, to ensure we adequately assessed the impact of the new lease accounting standard on our financial statements to facilitate the adoption effective January 1, 2019, we do not believe these have had a material effect on our internal control over financial reporting.

ITEM 9B. Other Information

There is no disclosure to report pursuant to Item 9B.

PART III

ITEM 10. Directors, Executive Officers and Corporate Governance

Information required by this item is incorporated by reference to the Equinix proxy statement for the 2020 Annual Meeting of Stockholders.

We have adopted a Code of Ethics applicable for the Chief Executive Officer and Senior Financial Officers and a Code of Business Conduct. This information is incorporated by reference to the Equinix proxy statement for the 2020 Annual Meeting of Stockholders and is also available on our website, www.equinix.com.

ITEM 11. Executive Compensation

Information required by this item is incorporated by reference to the Equinix proxy statement for the 2020 Annual Meeting of Stockholders.

ITEM 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Information required by this item is incorporated by reference to the Equinix proxy statement for the 2020 Annual Meeting of Stockholders.

ITEM 13. Certain Relationships and Related Transactions, and Director Independence

Information required by this item is incorporated by reference to the Equinix proxy statement for the 2020 Annual Meeting of Stockholders.

ITEM 14. Principal Accountant Fees and Services

Information required by this item is incorporated by reference to the Equinix proxy statement for the 2020 Annual Meeting of Stockholders.

PART IV

ITEM 15. Exhibits, Financial Statement Schedules

(a)(1) Financial Statements:

(a)(2) Financial statements and schedules:

(a)(3) Exhibits:

		Incorporated by Reference			
Exhibit Number	**Exhibit Description**	**Form**	**Filing Date/ Period End Date**	**Exhibit**	**Filed Herewith**
2.1	Rule 2.7 Announcement, dated as May 29, 2015. Recommended Cash and Share Offer for Telecity Group plc by Equinix, Inc.	8-K	5/29/2015	2.1	
2.2	Cooperation Agreement, dated as of May 29, 2015, by and between Equinix, Inc. and Telecity Group plc.	8-K	5/29/2015	2.2	
2.3	Amendment to Cooperation Agreement, dated as of November 24, 2015, by and between Equinix, Inc. and Telecity Group plc.	10-K	12/31/2015	2.3	
2.4	Transaction Agreement, dated as of December 6, 2016, by and between Verizon Communications Inc. and Equinix, Inc.	8-K	12/6/2016	2.1	
2.5	Amendment No. 1 to the Transaction Agreement, dated February 23, 2017, by and between Verizon Communications Inc. and Equinix, Inc.	10-K	12/31/2016	2.5	
2.6	Amendment No.2 to the Transaction Agreement, dated April 30, 2017, by and between Verizon Communications Inc. and Equinix, Inc.	8-K	5/1/2017	2.1	
2.7	Amendment No.3 to the Transaction Agreement, dated June 29, 2018, by and between Verizon Communications Inc. and Equinix, Inc.	10-Q	8/8/2018	2.7	
3.1	Amended and Restated Certificate of Incorporation of the Registrant, as amended to date.	10-K/A	12/31/2002	3.1	

Exhibit Number	Exhibit Description	Incorporated by Reference			Filed Herewith
		Form	Filing Date/ Period End Date	Exhibit	
3.2	Certificate of Amendment to the Amended and Restated Certificate of Incorporation of the Registrant.	8-K	6/14/2011	3.1	
3.3	Certificate of Amendment to the Amended and Restated Certificate of Incorporation of the Registrant.	8-K	6/11/2013	3.1	
3.4	Certificate of Amendment to the Amended and Restated Certificate of Incorporation of the Registrant.	10-Q	6/30/2014	3.4	
3.5	Certificate of Designation of Series A and Series A-1 Convertible Preferred Stock.	10-K/A	12/31/2002	3.3	
3.6	Amended and Restated Bylaws of the Registrant.	8-K	3/29/2016	3.1	
4.1	Reference is made to Exhibits 3.1, 3.2, 3.3, 3.4, 3.5 and 3.6.				
4.2	Indenture for the 2023 Notes dated March 5, 2013 between Equinix, Inc. and U.S. Bank National Association as trustee.	8-K	3/5/2013	4.3	
4.3	Form of 5.375% Senior Note due 2023 (see Exhibit 4.2).				
4.4	Indenture, dated as of November 20, 2014, between Equinix, Inc. and U.S. Bank National Association, as trustee.	8-K	11/20/2014	4.1	
4.5	First Supplemental Indenture, dated as of November 20, 2014, between Equinix, Inc. and U.S. Bank National Association, as trustee.	8-K	11/20/2014	4.2	
4.6	Form of 5.375% Senior Note due 2022 (see Exhibit 4.5).				
4.7	Second Supplemental Indenture, dated as of November 20, 2014, between Equinix, Inc. and U.S. Bank National Association, as trustee.	8-K	11/20/2014	4.4	
4.8	Form of 5.750% Senior Note due 2025 (see Exhibit 4.7).				
4.9	Third Supplemental Indenture, dated as of December 4, 2015, between Equinix, Inc. and U.S. Bank National Association, as trustee.	8-K	12/4/2015	4.2	
4.10	Form of 5.875% Senior Note due 2026 (see Exhibit 4.9).				
4.11	Fourth Supplemental Indenture, dated as of March 22, 2017 between Equinix, Inc. and U.S. Bank National Association, as trustee.	8-K	3/22/2017	4.2	
4.12	Form of 5.375% Senior Notes due 2027 (see Exhibit 4.11).				

Exhibit Number	Exhibit Description	Incorporated by Reference: Form	Filing Date/ Period End Date	Exhibit	Filed Herewith
4.13	Fifth Supplemental Indenture, dated as of September 20, 2017 among Equinix, Inc. and U.S. Bank National Association, as trustee, and Elavon Financial Services DAC, UK Branch, as paying agent.	8-K	9/20/2017	4.2	
4.14	Form of 2.875% Senior Notes due 2025 (see Exhibit 4.13).				
4.15	Indenture, dated as of December 12, 2017, between Equinix, Inc. and U.S. Bank National Association, as trustee.	8-K	12/5/2017	4.1	
4.16	Supplemental Indenture, dated as of December 12, 2017, among Equinix, Inc. and U.S. Bank National Association, as trustee, and Elavon Financial Services DAC, UK Branch, as paying agent.	8-K	12/5/2017	4.2	
4.17	Form of 2.875% Senior Notes due 2026 (see Exhibit 4.16).				
4.18	Second Supplemental Indenture, dated as of March 14, 2018, among Equinix, Inc. and U.S. Bank National Association, as trustee, and Elavon Financial Services DAC, UK Branch, as paying agent.	8-K	3/14/2018	4.2	
4.19	Form of 2.875% Senior Notes due 2024 (see Exhibit 4.18).				
4.20	Third Supplemental Indenture, dated as of April 2, 2018, among Equinix, Inc. and U.S. Bank National Association, as trustee.	8-K	4/3/2018	4.2	
4.21	Form of 5.00% Senior Notes due April 2020 (see Exhibit 4.20).				
4.22	Form of 5.00% Senior Notes due October 2020 (see Exhibit 4.20).				
4.23	Form of 5.00% Senior Notes due April 2021 (see Exhibit 4.20).				
4.24	Fourth Supplemental Indenture, dated as of November 18,2019, among Equinix, Inc and U.S. Bank National Association, as trustee.	8-K	11/18/2019	4.2	
4.25	Form of 2.625% Senior Notes due 2024 (See Exhibit 4.26).				
4.26	Fifth Supplemental Indenture, dated as of November 18, 2019, among Equinix, Inc. and U.S. Bank National Association, as trustee.	8-K	11/18/2019	4.4	
4.27	Form of 2.900% Senior Notes due 2026 (See Exhibit 4.28).				
4.28	Sixth Supplemental Indenture, dated as of November 18, 2019, among Equinix, Inc. and U.S. Bank National Association, as trustee.	8-K	11/18/2019	4.6	
4.29	Form of 3.200% Senior Notes due 2029 (See Exhibit 4.30)				

Exhibit Number	Exhibit Description	Incorporated by Reference Form	Filing Date/ Period End Date	Exhibit	Filed Herewith
4.30	Form of Registrant's Common Stock Certificate.	10-K	12/31/2014	4.13	
4.31	Description of Securities				X
10.1**	Form of Indemnification Agreement between the Registrant and each of its officers and directors.	S-4 (File No. 333-93749)	12/29/1999	10.5	
10.2**	2000 Equity Incentive Plan, as amended.	10-K	12/31/2016	10.2	
10.3**	2000 Director Option Plan, as amended.	10-K	12/31/2016	10.3	
10.4**	2001 Supplemental Stock Plan, as amended.	10-K	12/31/2016	10.4	
10.5**	Equinix, Inc. 2004 Employee Stock Purchase Plan, as amended.	10-Q	6/30/2014	10.5	
10.6**	Switch & Data 2007 Stock Incentive Plan.	S-1/A (File No. 333-137607) filed by Switch & Data Facilities Company	2/5/2007	10.9	
10.7**	Repatriation Agreement by and between Equinix, Inc. and Eric Schwartz dated June 5.	10-Q	6/30/2019	10.17	
10.8**	2017 Form of Revenue/AFFO Restricted Stock Unit Agreement for Executives.	10-Q	3/31/2017	10.35	
10.9**	2017 Form of TSR Restricted Stock Unit Agreement for Executives.	10-Q	3/31/2017	10.36	
10.10**	2017 Form of Time-Based Restricted Stock Unit Agreement for Executives.	10-Q	3/31/2017	10.37	
10.11**	2018 Form of Revenue/AFFO Restricted Stock Unit Agreement for Executives.	10-Q	3/31/2018	10.31	
10.12**	2018 Form of TSR Restricted Stock Unit Agreement for Executives.	10-Q	3/31/2018	10.32	
10.13**	2018 Form of Time-Based Restricted Stock Unit Agreement for Executives.	10-Q	3/31/2018	10.33	
10.14**	2019 Equinix, Inc. Annual Incentive Plan.	10-Q	3/31/2019	10.28	
10.15**	2019 Form of Revenue/AFFO per Share Restricted Stock Unit Agreement for Executives.	10-Q	3/31/2019	10.29	
10.16**	2019 Form of TSR Restricted Stock Unit Agreement for Executives.	10-Q	3/31/2019	10.30	
10.17**	2019 Form of Time-Based Restricted Stock Unit Agreement for Executives.	10-Q	3/31/2019	10.31	

Exhibit Number	Exhibit Description	Incorporated by Reference Form	Filing Date/ Period End Date	Exhibit	Filed Herewith
10.18	Agreement for Purchase and Sale of Shares Among RW Brasil Fundo de Investimentos em Participação, Antônio Eduardo Zago De Carvalho and Sidney Victor da Costa Breyer, as Sellers, and Equinix Brasil Participaçãoes Ltda., as Purchaser, and Equinix South America Holdings LLC., as a Party for Limited Purposes and ALOG Soluções de Tecnologia em Informática S.A. as Intervening Consenting Party dated July 18, 2014.	10-Q	9/30/2014	10.67	
10.19	Share Purchase Agreement with Digital Realty Trust, L.P., relating to the sale and purchase of shares in TelecityGroup UK LON Limited, Telecity Netherlands AMS01 AMS04 BV, Equinix Real Estate (TCY AMS04) B.V. and TelecityGroup Germany Fra2 GmbH, dated May 14, 2016.	10-Q	6/30/2016	10.55	
10.20	Credit Agreement dated as of December 12, 2017 among Equinix, Inc. as Borrower, The Guarantors Parties (defined therein), Bank of America, N.A., as Administrative Agent, Lender and L/C issuer, Barclays Bank PLS, Goldman Sachs Bank USA, HSBC Securities (USA) Inc. ING Capital LLC, TD Securities (USA) LLC, and Wells Fargo Bank, National Association as Co-Documentation Agents, the Other Lenders Party (defined therein) and Bank of America, N.A., Citibank, N.A., JPMorgan Chase Bank, N.A., MUFG, and RBC Capital Markets as Joint Lead Arrangers and Joint Book Runners.	10-K	12/31/2017	10.40	
10.21	Consent and First Amendment to Credit Agreement, dated as of June 28, 2018 by and among Equinix, Inc. as Borrower, the Guarantors (defined therein), the Lenders (as such term is defined in the Credit Agreement referred to therein), and BANK OF AMERICA, N.A., as Administrative Agent.	10-Q	8/8/2018	10.35	
10.22	Second Amendment to Credit Agreement, dated as of July 26, 2018, by and between Equinix, Inc. as Borrower, the financial institutions defined therein, MUFG Bank, Ltd., as Technical Agent and Bank of America, N.A. as Administrative Agent, under that certain Credit Agreement dated December 12, 2017.	10-Q	8/8/2018	10.36	
10.23	Third Amendment to Credit Agreement, dated as of April 26, 2019, by and among Equinix, Inc., Delaware corporation ("Equinix" or the "Borrower"), each "Lender" (as such term is defined in the Credit Agreement referred to therein) party hereto, and BANK OF AMERICA, N.A., as Administrative Agent, under that certain Credit Agreement dated December 12, 2017.	10-Q	6/30/2019	10.34	
10.24**	Relocation Letter Agreement by and between Equinix, Inc. and Charles Meyers dated October 12, 2018.	10-K	2/22/2019	10.37	

Exhibit Number	Exhibit Description	Incorporated by Reference			Filed Herewith
		Form	Filing Date/ Period End Date	Exhibit	
10.25**	Change in Control Severance Agreement between Equinix, Inc and Mike Campbell dated October 3, 2019.	10-Q	9/30/2019	10.25	
10.26**	Change in Control Severance Agreement between Equinix, Inc and Brandi Galvin Morandi dated October 3, 2019.	10-Q	9/30/2019	10.26	
10.27**	Change in Control Severance Agreement between Equinix, Inc and Karl Strohmeyer dated October 3, 2019.	10-Q	9/30/2019	10.27	
10.28**	Change in Control Severance Agreement between Equinix, Inc and Peter Van Camp dated October 3, 2019.	10-Q	9/30/2019	10.28	
10.29**	Change in Control Severance Agreement between Equinix, Inc and Charles Meyers dated October 4, 2019.	10-Q	9/30/2019	10.29	
10.30**	Change in Control Severance Agreement between Equinix, Inc and Eric Schwartz dated October 3, 2019.	10-Q	9/30/2019	10.30	
10.31**	Change in Control Severance Agreement between Equinix, Inc and Keith Taylor dated October 3, 2019.	10-Q	9/30/2019	10.31	
10.32**	Change in Control Severance Agreement between Equinix, Inc and Sara Baack dated October 3, 2019.	10-Q	9/30/2019	10.32	
10.33**	Side Letter Agreement Regarding RSUs between Equinix, Inc. and Sara Baack dated October 3, 2019.	10-Q	9/30/2019	10.33	
10.34**	Side Letter Agreement Regarding RSUs between Equinix, Inc. and Charles Meyers dated October 4, 2019.	10-Q	9/30/2019	10.34	
10.35**	Side Letter Agreement Regarding RSUs between Equinix, Inc. and Eric Schwartz dated October 3, 2019.	10-Q	9/30/2019	10.35	
10.36**	Side Letter Agreement Regarding RSUs between Equinix, Inc. and Keith Taylor dated October 3, 2019.	10-Q	9/30/2019	10.36	
10.37**	Side Letter Agreement Regarding RSUs between Equinix, Inc. and Mike Campbell dated October 3, 2019.	10-Q	9/30/2019	10.37	
10.38**	Side Letter Agreement Regarding RSUs between Equinix, Inc. and Brandi Galvin Morandi dated October 3, 2019.	10-Q	9/30/2019	10.38	
10.39**	Side Letter Agreement Regarding RSUs between Equinix, Inc. and Karl Strohmeyer dated October 3, 2019.	10-Q	9/30/2019	10.39	
10.40**	Side Letter Agreement Regarding RSUs between Equinix, Inc. and Peter Van Camp dated October 3, 2019.	10-Q	9/30/2019	10.4	
21.1	Subsidiaries of Equinix, Inc.				X

Exhibit Number	Exhibit Description	Incorporated by Reference			Filed Herewith
		Form	Filing Date/ Period End Date	Exhibit	
23.1	Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm.				X
31.1	Chief Executive Officer Certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				X
31.2	Chief Financial Officer Certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				X
32.1	Chief Executive Officer Certification pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				X
32.2	Chief Financial Officer Certification pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				X
101.INS	XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.				X
101.SCH	Inline XBRL Taxonomy Extension Schema Document.				X
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.				X
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.				X
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document.				X
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document.				X
104	Cover Page Interactive Data File - the cover page interactive data file does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.				X

** Management contracts or compensation plans or arrangements in which directors or executive officers are eligible to participate.

(b) Exhibits.

See (a) (3) above.

(c) Financial Statement Schedule.

See (a) (2) above.

ITEM 16. Form 10-K Summary

Not applicable.

Signatures

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

EQUINIX, INC.
(Registrant)

February 21, 2020	By	/s/ CHARLES MEYERS
		Charles Meyers
		Chief Executive Officer and President

Power of Attorney

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Charles Meyers or Keith D. Taylor, or either of them, each with the power of substitution, their attorney-in-fact, to sign any amendments to this Annual Report on Form 10-K (including post-effective amendments), and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact, or their substitute or substitutes, may do or cause to be done by virtue hereof.

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

Signature	Title	Date
/s/ CHARLES MEYERS Charles Meyers	Chief Executive Officer and President (Principal Executive Officer)	February 21, 2020
/s/ KEITH D. TAYLOR Keith D. Taylor	Chief Financial Officer (Principal Financial Officer)	February 21, 2020
/s/ SIMON MILLER Simon Miller	Chief Accounting Officer (Principal Accounting Officer)	February 21, 2020
/s/ PETER F. VAN CAMP Peter F. Van Camp	Executive Chairman	February 21, 2020
/s/ THOMAS A. BARTLETT Thomas A. Bartlett	Director	February 21, 2020
/s/ NANCI CALDWELL Nanci Caldwell	Director	February 21, 2020
/s/ ADAIRE FOX-MARTIN Adaire Fox-Martin	Director	February 21, 2020
/s/ GARY F. HROMADKO Gary F. Hromadko	Director	February 21, 2020
/s/ SCOTT G. KRIENS Scott G. Kriens	Director	February 21, 2020
/s/ WILLIAM K. LUBY William K. Luby	Director	February 21, 2020
/s/ IRVING F. LYONS, III Irving F. Lyons, III	Director	February 21, 2020
/s/ CHRISTOPHER B. PAISLEY Christopher B. Paisley	Director	February 21, 2020
/s/ SANDRA RIVERA Sandra Rivera	Director	February 21, 2020

Index to Exhibits

Exhibit Number	Description of Document
4.31	Description of Securities
21.1	Subsidiaries of Equinix, Inc.
23.1	Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm.
31.1	Chief Executive Officer Certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
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104	Cover Page Interactive Data File - the cover page interactive data file does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.

** Management contracts or compensation plans or arrangements in which directors or executive officers are eligible to participate.

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of Equinix, Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Equinix, Inc. and its subsidiaries (the "Company") as of December 31, 2019 and 2018, and the related consolidated statements of operations, of comprehensive income (loss), of stockholders' equity and other comprehensive income (loss) and of cash flows for each of the three years in the period ended December 31, 2019, including the related notes and financial statement schedule listed in the index appearing under Item 15(a)(2) (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2019, 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, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019 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, 2019, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Changes in Accounting Principles

As discussed in Note 1 to the consolidated financial statements, the Company changed the manner in which it accounts for leases as of January 1, 2019 and the manner in which it accounts for revenue from contracts with customers as of January 1, 2018.

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.

Critical Audit Matters

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

Income taxes - Real estate investment trust asset tests

As described in Notes 1 and 14 to the consolidated financial statements, the Company recorded income tax expense of $185.4 million for the year ended December 31, 2019. The Company has been operating as a real estate investment trust for federal income tax purposes (“REIT”) effective January 1, 2015. As a result, the Company may deduct the distributions made to its stockholders from taxable income generated by the Company and its qualified REIT subsidiaries ("QRSs"). The Company’s qualification and taxation as a REIT depends on its satisfaction of certain asset, income, organizational, distribution, stockholder ownership and other requirements on a continuing basis. The Company’s ability to satisfy quarterly asset tests depends upon its analysis and the fair market values of its REIT and non-REIT assets. For purposes of the quarterly REIT asset tests, management estimates the fair market value of assets within its QRSs and taxable REIT subsidiaries (“TRSs”) using a discounted cash flow approach, by calculating the present value of forecasted future cash flows. Management applies discount rates based on industry benchmarks relative to the market and forecasting risks. Other significant assumptions used by management to estimate the fair market value of assets in QRSs and TRSs include projected revenue growth, projected operating margins, and projected capital expenditures. Management revisits significant assumptions periodically to reflect any changes due to business or economic environment.

The principal considerations for our determination that performing procedures relating to the REIT asset tests is a critical audit matter are (i) there was significant judgment by management in determining the fair market value of REIT and non-REIT assets, which in turn led to a high degree of subjectivity in performing procedures relating to the REIT asset test, (ii) there was significant audit effort and judgment in evaluating audit evidence related to the significant assumptions used in the REIT asset test, including the discount rates, projected revenue growth, projected operating margins, and projected capital expenditures, and (iii) the audit effort involved the use of professionals with specialized skill and knowledge to assist in performing these procedures.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to the REIT asset test, including controls over the determination of the fair market value of REIT and non-REIT assets. These procedures also included, among others, testing management’s process for estimating the fair market value of the REIT and non-REIT assets; evaluating the appropriateness of the discounted cash flow approach; testing the completeness and accuracy of underlying data used in the approach; and evaluating the significant assumptions used by management, including the discount rates, projected revenue growth, projected operating margins, and projected capital expenditures. Evaluating management's assumptions related to projected revenue growth, projected operating margins, and projected capital expenditures involved considering the current and past performance of the Company, economic and industry trends, as well as whether these assumptions were consistent with evidence obtained in other areas of the audit. Professionals with specialized skill and knowledge were used to assist in the evaluation of the Company's discounted cash flow approach and certain significant assumptions, including the discount rates.

/s/ PricewaterhouseCoopers LLP

San Jose, California

February 21, 2020

We have served as the Company's auditor since 2000.

EQUINIX, INC.
Consolidated Balance Sheets
(in thousands, except share and per share data)

	December 31, 2019	December 31, 2018
Assets		
Current assets:		
Cash and cash equivalents	$ 1,869,577	$ 606,166
Short-term investments	10,362	4,540
Accounts receivable, net of allowance for doubtful accounts of $13,026 and $15,950	689,134	630,119
Other current assets	303,543	274,857
Total current assets	2,872,616	1,515,682
Property, plant and equipment, net	12,152,597	11,026,020
Operating lease right-of-use assets	1,475,367	—
Goodwill	4,781,858	4,836,388
Intangible assets, net	2,102,389	2,333,296
Other assets	580,788	533,252
Total assets	$ 23,965,615	$ 20,244,638
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable and accrued expenses	$ 760,718	$ 756,692
Accrued property, plant and equipment	301,535	179,412
Current portion of operating lease liabilities	145,606	—
Current portion of finance lease liabilities	75,239	77,844
Current portion of mortgage and loans payable	77,603	73,129
Current portion of senior notes	643,224	300,999
Other current liabilities	153,938	126,995
Total current liabilities	2,157,863	1,515,071
Operating lease liabilities, less current portion	1,315,656	—
Finance lease liabilities, less current portion	1,430,882	1,441,077
Mortgage and loans payable, less current portion	1,289,434	1,310,663
Senior notes, less current portion	8,309,673	8,128,785
Other liabilities	621,725	629,763
Total liabilities	15,125,233	13,025,359
Commitments and contingencies (Note 15)		
Equinix stockholders' equity:		
Preferred stock, $0.001 par value per share: 100,000,000 shares authorized in 2019 and 2018; zero shares issued and outstanding	—	—
Common stock, $0.001 par value per share: 300,000,000 shares authorized in 2019 and 2018; 85,700,953 issued and 85,308,386 outstanding in 2019 and 81,119,117 issued and 80,722,258 outstanding in 2018	86	81
Additional paid-in capital	12,696,433	10,751,313
Treasury stock, at cost; 392,567 shares in 2019 and 396,859 shares in 2018	(144,256)	(145,161)
Accumulated dividends	(4,168,469)	(3,331,200)
Accumulated other comprehensive loss	(934,613)	(945,702)
Retained earnings	1,391,425	889,948
Total Equinix stockholders' equity	8,840,606	7,219,279
Non-controlling interests	(224)	—
Total stockholders' equity	8,840,382	7,219,279
Total liabilities and stockholders' equity	$ 23,965,615	$ 20,244,638

See accompanying notes to consolidated financial statements.

EQUINIX, INC.
Consolidated Statements of Operations
(in thousands, except per share data)

	Years Ended December 31,		
	2019	2018	2017
Revenues	$ 5,562,140	$ 5,071,654	$ 4,368,428
Costs and operating expenses:			
Cost of revenues	2,810,184	2,605,475	2,193,149
Sales and marketing	651,046	633,702	581,724
General and administrative	935,018	826,694	745,906
Transaction costs	24,781	34,413	38,635
Impairment charges	15,790	—	—
Gain on asset sales	(44,310)	(6,013)	—
Total costs and operating expenses	4,392,509	4,094,271	3,559,414
Income from operations	1,169,631	977,383	809,014
Interest income	27,697	14,482	13,075
Interest expense	(479,684)	(521,494)	(478,698)
Other income	27,778	14,044	9,213
Loss on debt extinguishment	(52,825)	(51,377)	(65,772)
Income before income taxes	692,597	433,038	286,832
Income tax expense	(185,352)	(67,679)	(53,850)
Net income	507,245	365,359	232,982
Net loss attributable to non-controlling interests	205	—	—
Net income attributable to Equinix	$ 507,450	$ 365,359	$ 232,982
Earnings per share ("EPS") attributable to Equinix:			
Basic EPS	$ 6.03	$ 4.58	$ 3.03
Weighted-average shares for basic EPS	84,140	79,779	76,854
Diluted EPS	$ 5.99	$ 4.56	$ 3.00
Weighted-average shares for diluted EPS	84,679	80,197	77,535

See accompanying notes to consolidated financial statements.

EQUINIX, INC.
Consolidated Statements of Comprehensive Income (Loss)
(in thousands)

	Years Ended December 31,		
	2019	**2018**	**2017**
Net income	$ 507,245	$ 365,359	$ 232,982
Other comprehensive income (loss), net of tax:			
Foreign currency translation adjustment ("CTA") gain (loss), net of tax effects of $(51), $4,419 and $0	(58,334)	(421,743)	454,269
Net investment hedge CTA gain (loss), net of tax effects of $10, $1,358 and $0	73,294	219,628	(235,292)
Unrealized gain on available-for-sale securities, net of tax effects of $0, $0 and $(10)	—	—	14
Unrealized gain (loss) on cash flow hedges, net of tax effects of $2,938, $(14,557) and $18,542	(3,842)	43,671	(54,895)
Net actuarial gain (loss) on defined benefit plans, net of tax effects of $(9), $(15) and $39	(48)	55	(143)
Total other comprehensive income (loss), net of tax	11,070	(158,389)	163,953
Comprehensive income, net of tax	518,315	206,970	396,935
Net loss attributable to non-controlling interests	205	—	—
Other comprehensive loss attributable to non-controlling interests	19	—	—
Comprehensive income attributable to Equinix	$ 518,539	$ 206,970	$ 396,935

See accompanying notes to consolidated financial statements.

EQUINIX, INC.
Consolidated Statements of Stockholders' Equity and Other Comprehensive Income (Loss)
For the Three Years Ended December 31, 2019
(in thousands, except share data)

	Common stock		Treasury stock		Additional Paid-in Capital	Accumulated Dividends	AOCI (Loss)	Retained Earnings	Equinix Stockholders' Equity	Non-controlling Interests	Total Stockholders' Equity
	Shares	Amount	Shares	Amount							
Balance as of December 31, 2016	71,817,430	$ 72	(408,415)	$(147,559)	$7,413,519	$(1,969,645)	$(949,142)	$ 18,584	$ 4,365,829	$ —	$ 4,365,829
Adjustment from adoption of new accounting standard	—	—	—	—	—	—	—	1,123	1,123	—	1,123
Net income	—	—	—	—	—	—	—	232,982	232,982	—	232,982
Other comprehensive income	—	—	—	—	—	—	163,953	—	163,953	—	163,953
Issuance of common stock in public offering of common stock, net	6,069,444	6	—	—	2,126,333	—	—	—	2,126,339	—	2,126,339
Issuance of common stock and release of treasury stock for employee equity awards	790,329	1	6,073	1,239	40,449	—	—	—	41,689	—	41,689
Issuance of common stock under ATM Program	763,201	—	—	—	355,082	—	—	—	355,082	—	355,082
Dividend distribution on common stock, $8.00 per share	—	—	—	—	—	(612,085)	—	—	(612,085)	—	(612,085)
Settlement of accrued dividends on vested equity awards	—	—	—	—	4,280	(890)	—	—	3,390	—	3,390
Accrued dividends on unvested equity awards	—	—	—	—	—	(10,172)	—	—	(10,172)	—	(10,172)
Stock-based compensation, net of estimated forfeitures	—	—	—	—	181,660	—	—	—	181,660	—	181,660
Balance as of December 31, 2017	79,440,404	79	(402,342)	(146,320)	10,121,323	(2,592,792)	(785,189)	252,689	6,849,790	—	6,849,790
Adjustment from adoption of new accounting standard	—	—	—	—	—	—	(2,124)	271,900	269,776	—	269,776
Net income	—	—	—	—	—	—	—	365,359	365,359	—	365,359
Other comprehensive loss	—	—	—	—	—	—	(158,389)	—	(158,389)	—	(158,389)
Issuance of common stock and release of treasury stock for employee equity awards	747,779	1	5,483	1,159	48,976	—	—	—	50,136	—	50,136
Issuance of common stock under ATM Program	930,934	1	—	—	388,171	—	—	—	388,172	—	388,172
Dividend distribution on common stock, $9.12 per share	—	—	—	—	—	(727,448)	—	—	(727,448)	—	(727,448)
Settlement of accrued dividends on vested equity awards	—	—	—	—	2,319	(876)	—	—	1,443	—	1,443
Accrued dividends on unvested equity awards	—	—	—	—	—	(10,084)	—	—	(10,084)	—	(10,084)
Stock-based compensation, net of estimated forfeitures	—	—	—	—	189,799	—	—	—	189,799	—	189,799
Noncontrolling interests	—	—	—	—	725	—	—	—	725	—	725

EQUINIX, INC.
Consolidated Statements of Stockholders' Equity and Other Comprehensive Income (Loss) - continued
For the Three Years Ended December 31, 2019
(in thousands, except share data)

	Common stock		Treasury stock		Additional Paid-in Capital	Accumulated Dividends	AOCI (Loss)	Retained Earnings	Equinix Stockholders' Equity	Non-controlling Interests	Total Stockholders' Equity
	Shares	Amount	Shares	Amount							
Balance as of December 31, 2018	81,119,117	81	(396,859)	(145,161)	10,751,313	(3,331,200)	(945,702)	889,948	7,219,279	—	7,219,279
Adjustment from adoption of new accounting standard	—	—	—	—	—	—	—	(5,973)	(5,973)	—	(5,973)
Net income (loss)	—	—	—	—	—	—	—	507,450	507,450	(205)	507,245
Other comprehensive income (loss)	—	—	—	—	—	—	11,089	—	11,089	(19)	11,070
Issuance of common stock and release of treasury stock for employee equity awards	692,706	1	4,292	905	51,111	—	—	—	52,017	—	52,017
Issuance of common stock for equity offering	2,985,575	3	—	—	1,213,431	—	—	—	1,213,434	—	1,213,434
Issuance of common stock under ATM Program	903,555	1	—	—	447,541	—	—	—	447,542	—	447,542
Dividend distribution on common stock, $9.84 per share	—	—	—	—	—	(825,893)	—	—	(825,893)	—	(825,893)
Settlement of accrued dividends on vested equity awards	—	—	—	—	308	(688)	—	—	(380)	—	(380)
Accrued dividends on unvested equity awards	—	—	—	—	—	(10,688)	—	—	(10,688)	—	(10,688)
Stock-based compensation, net of estimated forfeitures	—	—	—	—	232,729	—	—	—	232,729	—	232,729
Balance as of December 31, 2019	85,700,953	$ 86	(392,567)	$(144,256)	$12,696,433	$(4,168,469)	$(934,613)	$1,391,425	$ 8,840,606	$ (224)	$ 8,840,382

See accompanying notes to consolidated financial statements.

EQUINIX, INC.
Consolidated Statements of Cash Flows
(in thousands)

	Years Ended December 31,		
	2019	2018	2017
Cash flows from operating activities:			
Net income	$ 507,245	$ 365,359	$ 232,982
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation	1,088,559	1,024,073	865,472
Stock-based compensation	236,539	180,716	175,500
Amortization of intangible assets	196,278	203,416	177,008
Amortization of debt issuance costs and debt discounts and premiums	13,042	13,618	24,449
Provision for allowance for doubtful accounts	8,459	7,236	5,627
Impairment charges	15,790	—	—
Gain on asset sales	(44,310)	(6,013)	—
Loss on debt extinguishment	52,825	51,377	65,772
Other items	11,620	19,660	(11,243)
Changes in operating assets and liabilities:			
Accounts receivable	(26,909)	(52,931)	(161,774)
Income taxes, net	32,495	(10,670)	(34,936)
Other assets	(100,144)	(47,635)	20,180
Operating lease right-of-use assets	149,031	—	—
Operating lease liabilities	(152,091)	—	—
Accounts payable and accrued expenses	(27,928)	35,495	74,488
Other liabilities	32,227	31,725	5,708
Net cash provided by operating activities	1,992,728	1,815,426	1,439,233
Cash flows from investing activities:			
Purchases of investments	(60,909)	(65,180)	(57,926)
Sales and maturities of investments	40,386	85,777	46,421
Business acquisitions, net of cash and restricted cash acquired	(34,143)	(829,687)	(3,963,280)
Purchases of real estate	(169,153)	(182,418)	(95,083)
Purchases of other property, plant and equipment	(2,079,521)	(2,096,174)	(1,378,725)
Proceeds from sale of assets, net of cash transferred	358,773	12,154	47,767
Net cash used in investing activities	(1,944,567)	(3,075,528)	(5,400,826)
Cash flows from financing activities:			
Proceeds from employee equity awards	52,018	50,136	41,696
Payment of dividends and special distribution	(836,164)	(738,600)	(621,497)
Proceeds from public offering of common stock, net of issuance costs	1,660,976	388,172	2,481,421
Proceeds from senior notes, net of debt discounts	2,797,906	929,850	3,628,701
Proceeds from loans payable	—	424,650	2,056,876
Repayment of senior notes	(2,206,289)	—	(500,000)
Repayment of finance lease liabilities	(126,486)	(103,774)	(93,470)
Repayment of mortgage and loans payable	(73,227)	(447,473)	(2,277,798)
Debt extinguishment costs	(43,311)	(20,556)	(26,122)
Debt issuance costs	(23,341)	(12,218)	(81,047)
Other financing activities	—	725	(900)
Net cash provided by financing activities	1,202,082	470,912	4,607,860
Effect of foreign currency exchange rates on cash, cash equivalents and restricted cash	8,766	(33,907)	31,187
Net increase (decrease) in cash, cash equivalents and restricted cash	1,259,009	(823,097)	677,454
Cash, cash equivalents and restricted cash at beginning of period	627,604	1,450,701	773,247
Cash, cash equivalents and restricted cash at end of period	$ 1,886,613	$ 627,604	$ 1,450,701
Supplemental cash flow information			
Cash paid for taxes	$ 136,583	$ 93,375	$ 72,641
Cash paid for interest	$ 553,815	$ 496,795	$ 444,793

Cash and cash equivalents	$ 1,869,577	$ 606,166	$ 1,412,517
Current portion of restricted cash included in other current assets	7,090	10,887	26,919
Non-current portion of restricted cash included in other assets	9,946	10,551	11,265
Total cash, cash equivalents, and restricted cash shown in the consolidated statement of cash flows	$ 1,886,613	$ 627,604	$ 1,450,701

See accompanying notes to consolidated financial statements.

EQUINIX, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Nature of Business and Summary of Significant Accounting Policies

Nature of Business

Equinix, Inc. ("Equinix" or the "Company") was incorporated in Delaware on June 22, 1998. Equinix provides colocation space and related offerings. Global enterprises, content providers, financial companies and network service providers rely upon Equinix's insight and expertise to safehouse and connect their most valued information assets. The Company operates International Business Exchange™ ("IBX®") data centers, or IBX data centers, across the Americas; Europe, Middle East and Africa ("EMEA") and Asia-Pacific geographic regions where customers directly interconnect with a network ecosystem of partners and customers. More than 1,800 network service providers offer access to the world's internet routes inside the Company's IBX data centers. This access to internet routes provides Equinix customers improved reliability and streamlined connectivity while significantly reducing costs by reaching a critical mass of networks within a centralized physical location. As of December 31, 2019, the Company operated 204 IBX data centers in 53 markets across five continents.

The Company has been operating as a real estate investment trust for federal income tax purposes ("REIT") effective January 1, 2015. See "Income Taxes" in Note 14 below for additional information.

Basis of Presentation, Consolidation and Foreign Currency

The accompanying consolidated financial statements include the accounts of Equinix and its subsidiaries, including the acquisitions of:

- Switch Datacenters' AMS1 data center business in Amsterdam, Netherlands from April 18, 2019;
- Metronode from the Ontario Teachers' Pension Plan Board (the "Metronode Acquisition") from April 18, 2018;
- Infomart Dallas, including its operations and tenants, from ASB Real Estate Investments (the "Infomart Dallas Acquisition") from April 2, 2018;
- Itconic, a data center business in Spain and Portugal from October 9, 2017;
- Zenium's data center business in Istanbul from October 6, 2017;
- certain colocation business from Verizon Communications Inc. ("Verizon") consisting of 29 data center buildings located in the United States ("U.S."), Brazil and Colombia (the "Verizon Data Center Acquisition") from May 1, 2017;
- IO UK's data center operating business in Slough, United Kingdom ("IO Acquisition") from February 3, 2017.

All intercompany accounts and transactions have been eliminated in consolidation. Foreign exchange gains or losses resulting from foreign currency transactions, including intercompany foreign currency transactions, that are anticipated to be repaid within the foreseeable future, are reported within other income (expense) on the Company's accompanying consolidated statements of operations. For additional information on the impact of foreign currencies to the Company's consolidated financial statements, see "Accumulated Other Comprehensive Loss" in Note 12.

Use of Estimates

The preparation of consolidated financial statements in conformity with the accounting principles generally accepted in the United States of America ("GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from these estimates. On an ongoing basis, the Company evaluates its estimates, including, but not limited to, those related to the allowance for doubtful accounts, fair values of financial instruments, intangible assets and goodwill, and assets acquired and liabilities assumed from acquisitions, useful lives of intangible assets and property, plant and equipment, leases, asset retirement obligations, other accruals, and income taxes. The Company bases its estimates on historical experience and on various other assumptions that are believed to be reasonable.

Cash, Cash Equivalents and Short-Term Investments

The Company considers all highly liquid instruments with an original maturity from the date of purchase of 90 days or less to be cash equivalents. Cash equivalents consist of money market mutual funds and certificates of deposit with original maturities up to 90 days. Short-term investments generally consist of certificates of deposit with original maturities of between 90 days and 1 year. Publicly traded equity securities are measured at fair value with changes in the fair values recognized within other income (expense) in the Company's consolidated statements of operations. The Company reviews its investment portfolio quarterly to determine if any securities may be other-than-temporarily impaired due to increased credit risk, changes in industry or sector of a certain instrument or ratings downgrades.

Equity Method Investments

The Company enters into joint venture or partnership arrangements to invest in certain entities for business development objectives. At the inception of these arrangements, the Company assesses its interests with other entities to determine whether any of such entities meet the definition of a variable interest entity ("VIE"). A VIE is an entity that either (i) has insufficient equity to permit the entity to finance its activities without additional subordinated financial support, or (ii) has equity investors who lack the characteristics of a controlling financial interest. The Company is required to consolidate the assets and liabilities of VIEs when it is deemed to be the primary beneficiary. The primary beneficiary of a VIE is the entity that meets both of the following criteria: (i) has the power to make decisions that most significantly affect the economic performance of the VIE; and (ii) has the obligation to absorb losses or the right to receive benefits that in either case could potentially be significant to the VIE. As of December 31, 2019, the Company concluded that it did not have any significant investments in entities that are deemed to be VIEs.

The Company’s investments in joint ventures and partnerships are generally accounted for under the equity method of accounting, as the Company concluded it does not have control, but has the ability to exercise significant influence over the investees. Equity method investments are initially measured at cost, or at fair value for a retained investment in the common stock of an investee in a deconsolidation transaction. Equity investments are subsequently adjusted for cash contributions, distributions and the Company's share of the income and losses of the investees. The Company records its equity method investments in other assets in the consolidated balance sheet. The Company's proportionate share of the income or loss from its equity method investments are recorded in other income in the consolidated statement of operations. The Company reviews its investments periodically to determine if any investments may be impaired considering both qualitative and quantitative factors that may have a significant impact on the investees' fair value. The Company did not record any impairment charges related to its equity method investments for the years ended December 31, 2019, 2018 and 2017.

Non-marketable Equity Investments

The Company also has investments in non-marketable equity securities, where the Company does not have the ability to exercise significant influence over the investees. The Company elected the measurement alternative under which the securities are measured at cost minus impairment, if any, and adjusted for changes resulting from qualifying observable price changes. The Company records non-marketable equity investment in other assets in the consolidated balance sheet. The Company reviews its non-marketable equity investments quarterly to determine if any investments may be impaired considering both qualitative and quantitative factors that may have a significant impact on the investees' fair value. The Company did not record any impairment charges related to its non-marketable equity investments for the years ended December 31, 2019, 2018 and 2017.

Financial Instruments and Concentration of Credit Risk

Financial instruments which potentially subject the Company to concentrations of credit risk consist of cash and cash equivalents, short-term investments and accounts receivable. Risks associated with cash and cash equivalents and short-term investments are mitigated by the Company's investment policy, which limits the Company's investing to only those marketable securities rated at least A-1/P-1 Short Term Rating or A-/A3 Long Term Rating, as determined by independent credit rating agencies.

A significant portion of the Company's customer base is comprised of businesses throughout the Americas. However, a portion of the Company's revenues are derived from the Company's EMEA and Asia-Pacific operations.

The following table sets forth percentages of the Company's revenues by geographic region for the years ended December 31:

	2019	2018	2017
Americas	47%	49%	50%
EMEA	32%	31%	31%
Asia-Pacific	21%	20%	19%

No single customer accounted for greater than 10% of accounts receivable or revenues as of or for the years ended December 31, 2019, 2018 and 2017.

Property, Plant and Equipment

Property, plant and equipment are stated at the Company's original cost or at fair value for property, plant and equipment acquired through acquisitions, net of depreciation. Depreciation is computed using the straight-line method over the estimated useful lives of the respective assets. Leasehold improvements and integral equipment at leased locations are amortized over the shorter of the lease term or the estimated useful life of the asset or improvement. Leasehold improvements acquired through acquisition are amortized over the shorter of the useful life of the assets or terms that include required lease periods and renewals that are deemed to be reasonably assured at the date of acquisition. Leasehold improvements that are placed into service significantly after and not contemplated at or near the beginning of the lease term are amortized over the shorter of the useful life of the assets or a term that includes required lease periods and renewals that are deemed to be reasonably assured at the date the leasehold improvements are purchased.

The Company's estimated useful lives of its property, plant and equipment are as follows:

Core systems	3-40 years
Buildings	12-58 years
Leasehold improvements	12-40 years
Personal Property	3-10 years

The Company's construction in progress includes direct and indirect expenditures for the construction and expansion of IBX data centers and is stated at original cost. The Company has contracted out substantially all of the construction and expansion efforts of its IBX data centers to independent contractors under construction contracts. Construction in progress includes costs incurred under construction contracts including project management services, engineering and schematic design services, design development, construction services and other construction-related fees and services. In addition, the Company has capitalized interest costs during the construction phase. Once an IBX data center or expansion project becomes operational, these capitalized costs are allocated to certain property, plant and equipment categories and are depreciated over the estimated useful life of the underlying assets.

The Company reviews its property, plant and equipment for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable such as a significant decrease in market price of an asset, a significant adverse change in the extent or manner in which an asset is being used or in its physical condition, a significant adverse change in legal factors or business climate that could affect the value of an asset or a continuous deterioration of the Company's financial condition. Recoverability of assets to be held and used is assessed by comparing the carrying amount of an asset to estimated undiscounted future net cash flows expected to be generated by the asset. If the carrying amount of the asset exceeds its estimated undiscounted future cash flows, an impairment charge is recognized by the amount by which the carrying amount of the asset exceeds the fair value of the asset. The Company did not record any impairment charges related to its property, plant and equipment during the years ended December 31, 2019, 2018 and 2017.

The Company enters into non-cancellable lease arrangements as the lessee primarily for its data center spaces, office spaces and equipment. Assets acquired through finance leases are included in property, plant and equipment, net on the consolidated balance sheets. In addition, a portion of the Company's property, plant and equipment are used for revenue arrangements which are accounted for as operating leases where the Company is the lessor.

Assets Held for Sale

Assets and liabilities to be disposed of that meet all of the criteria to be classified as held for sale are reported at the lower of their carrying amounts or fair values less costs to sell. The Company recorded an impairment charge of $15.8 million relating to assets held for sale for the year ended December 31, 2019. Assets are not depreciated or amortized while they are classified as held for sale. For further information on the Company's assets held for sale, see Note 5.

Asset Retirement Costs and Asset Retirement Obligations

The fair value of a liability for an asset retirement obligation is recognized in the period in which it is incurred. The associated retirement costs are capitalized and included as part of the carrying value of the long-lived asset and amortized over the useful life of the asset. Subsequent to the initial measurement, the Company accretes the liability in relation to the asset retirement obligations over time and the accretion expense is recorded as a cost of revenue. The Company's asset retirement obligations are primarily related to its IBX data centers, of which the majority are leased under long-term arrangements and are required to be returned to the landlords in their original condition. The majority of the Company's IBX data center leases have been subject to significant development by the Company in order to convert them from, in most cases, vacant buildings or warehouses into IBX data centers. For further information on the Company's leases, see Note 10.

Goodwill and Other Intangible Assets

The Company has three reportable segments comprised of the 1) Americas, 2) EMEA and 3) Asia-Pacific geographic regions, which the Company also determined are its reporting units. Goodwill is not amortized and is tested for impairment at least annually or more often if and when circumstances indicate that goodwill is not recoverable.

The Company assesses qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value. Qualitative factors considered in the assessment include industry and market conditions, overall financial performance, and other relevant events and factors affecting the reporting unit. If, after assessing the qualitative factors, the Company determines that it is not more likely than not that the fair value of a reporting unit is less than its carrying value, then performing a quantitative impairment test is unnecessary. However, if the Company concludes otherwise, then it is required to perform a quantitative goodwill impairment test. The quantitative impairment test, which is used to identify both the existence of impairment and the amount of impairment loss, compares the fair value of a reporting unit with its carrying amount, including goodwill. If the fair value of a reporting unit exceeds its carrying amount, goodwill of the reporting unit is not considered impaired. If the carrying value of the reporting unit exceeds its fair value, any excess of the reporting unit goodwill carrying value over the respective implied fair value is recognized as an impairment loss.

As of December 31, 2019, 2018 and 2017, the Company concluded that it was more likely than not that goodwill attributed to the Company's Americas, EMEA and Asia-Pacific reporting units was not impaired as the fair value of each reporting unit exceeded the carrying value of its respective reporting unit, including goodwill.

Substantially all of the Company's intangible assets are subject to amortization and are amortized using the straight-line method over their estimated period of benefit. The Company performs a review of intangible assets for impairment by assessing events or changes in circumstances that indicate the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is assessed by comparing the carrying amount of an asset to estimated undiscounted future net cash flows expected to be generated by the asset. If the carrying amount of the asset exceeds its estimated undiscounted future cash flows, an impairment charge is recognized by the amount by which the carrying amount of the asset exceeds the fair value of the asset. The Company did not record any impairment charges related to its other intangible assets during the years ended December 31, 2019, 2018 and 2017.

For further information on goodwill and other intangible assets, see Note 3 and Note 7 below.

Debt Issuance Costs

Costs and fees incurred upon debt issuances are capitalized and are amortized over the life of the related debt based on the effective interest method. Such amortization is included as a component of interest expense. Debt issuance costs related to outstanding debt are presented as a reduction of the carrying amount of the debt obligation and debt issuance costs related to the revolving credit facility are presented as other assets.

Derivatives and Hedging Activities

The Company uses derivative instruments, including foreign currency forwards and options and cross-currency interest rate swaps, to manage certain foreign currency exposures. Derivative instruments are viewed as risk management tools by the Company and are not used for speculative purposes. The Company recognizes all derivatives on the Company's consolidated balance sheets at fair value. The accounting for changes in the value of a derivative depends on whether the contract qualifies and has been designated for hedge accounting. In order to qualify for hedge accounting, a derivative must be considered highly effective at reducing the risk associated with the exposure being hedged and there must be documentation of the risk management objective and strategy, including identification of the hedging instrument, the hedged item and the risk exposure, and the effectiveness assessment methodology. For cash flow hedges, the Company uses regression analysis at the time they are designated to assess their effectiveness. Hedge designations are reviewed on a quarterly basis to assess whether circumstances have changed that would disrupt the hedge instrument's relationship to the forecasted transactions or net investment.

The Company uses the forward method to assess effectiveness of qualifying foreign currency forwards that are designated as cash flow hedges, whereby, the change in the fair value of the derivative is recorded in other comprehensive income (loss) and reclassified to the same line item in the consolidated statement of operations that is used to present the earnings effect of the hedged item when the hedged item affects earnings. The Company uses the spot method to assess effectiveness of qualifying foreign currency exchange options that are designated as cash flow hedges, whereby, the change in fair value due to foreign currency exchange spot rates is recorded in other comprehensive income (loss) and reclassified to the same line item in the consolidated statement of operations that is used to present the earnings effect of the hedged item when the hedged item affects earnings, and the change in fair value of the excluded component is recorded in other comprehensive income (loss) and amortized on a straight-line basis to the same line item in the consolidated statement of operations that is used to present the earnings effect of the hedged item. When two or more derivative instruments in combination are jointly designated as a cash flow hedging instrument, as with foreign currency exchange option collars, they are treated as a single instrument. If the hedge relationship is terminated for any derivatives designated as cash flow hedges, then the change in fair value of the derivative recorded in other comprehensive income (loss) is recognized in earnings when the previously hedged item affects earnings, consistent with the original hedge strategy. For hedge relationships that are discontinued because the forecasted transaction is not expected to occur according to the original strategy, then any related derivative amounts recorded in other comprehensive income (loss) are immediately recognized in earnings.

From time to time, the Company enters into treasury lock agreements to add stability to interest expense and to manage its exposure to interest rate movements. A treasury lock is a synthetic forward sale of a U.S. treasury note which is settled in cash based upon the difference between an agreed upon treasury rate and the prevailing treasury rate at settlement. It is entered into to effectively fix the treasury rate component of an upcoming debt issuance. The treasury lock transactions are designated as cash flow hedges, with all changes in value reported in other comprehensive income (loss). Subsequent to settlement, amounts in other comprehensive income are reclassified to interest expense as interest payments are accrued on the debt.

The Company uses the spot method to assess effectiveness of cross-currency interest rate swaps that are designated as net investment hedges, whereby, the change in fair value due to foreign currency exchange spot rates is recorded in other comprehensive income (loss) and the change in fair value of the excluded component is recorded in other comprehensive income (loss) and amortized to interest expense on a straight-line basis.

From time to time, the Company also uses foreign exchange forward contracts to hedge against the effect of foreign exchange rate fluctuations on a portion of its net investment in the foreign subsidiaries. The Company uses the spot method to assess effectiveness of qualifying foreign currency forwards that are designated as net investment hedges, whereby, the change in fair value due to foreign currency exchange spot rates is recorded in other comprehensive income (loss) and the change in fair value of the excluded component is recorded in other comprehensive income (loss) and amortized to interest expense on a straight-line basis.

Foreign currency gains or losses associated with derivatives that are not designated as hedging instruments for accounting purposes are recorded within other income (expense) in the Company's condensed consolidated statements of operations, with the exception of (i) foreign currency embedded derivatives contained in certain of the Company's customer contracts and (ii) foreign exchange forward contracts that are entered into to hedge the accounting impact of the foreign currency embedded derivatives, which are recorded within revenues in the Company's condensed consolidated statements of operations.

For further information on derivatives and hedging activities, see Note 8 below.

Fair Value of Financial Instruments

The carrying value of the Company's cash and cash equivalents, short-term investments and derivative instruments represent their fair value, while the Company's accounts receivable, accounts payable and accrued expenses and accrued property, plant and equipment approximate their fair value due primarily to the short-term maturity of the related instruments. The fair value of the Company's debt, which is traded in the public debt market, is based on quoted market prices. The fair value of the Company's debt, which is not publicly traded, is estimated by considering the Company's credit rating, current rates available to the Company for debt of the same remaining maturities and terms of the debt.

Fair Value Measurements

The Company measures and reports certain financial assets and liabilities at fair value on a recurring basis, including its investments in money market funds, certificates of deposit, publicly traded equity securities and derivatives.

The Company also follows the accounting standard for the measurement of fair value for non-financial assets and liabilities on a nonrecurring basis. These include:

- Non-financial assets and non-financial liabilities initially measured at fair value in a business combination or other new basis event, but not measured at fair value in subsequent reporting periods;
- Reporting units and non-financial assets and non-financial liabilities measured at fair value for goodwill impairment tests;
- Indefinite-lived intangible assets measured at fair value for impairment assessments;
- Non-financial long-lived assets or asset groups measured at fair value for impairment assessments or disposal; and
- Asset retirement obligations initially measured at fair value but not subsequently measured at fair value.

For further information on fair value measurements, see Note 9 below.

Leases

The Company determines if an arrangement is or contains a lease at its inception. The Company enters into lease arrangements primarily for data center spaces, office spaces and equipment. The Company recognizes a right-of-use ("ROU") asset and lease liability on the consolidated balance sheet for all leases with a term longer than 12 months, including renewals.

ROU assets represent the Company's right to use an underlying asset for the lease term. Lease liabilities represent the Company's obligation to make lease payments arising from the lease. ROU assets and liabilities are classified and recognized at the commencement date. ROU liabilities are measured based on the present value of fixed lease payments over the lease term. ROU assets consist of (i) initial measurement of the lease liability; (ii) lease payments made to the lessor at or before the commencement date less any lease incentives received; and (iii) initial direct costs incurred by the Company. Lease payments may vary because of changes in facts or circumstances occurring after the commencement, including changes in inflation indices. Variable lease payments that depend on an index or a rate (such as the Consumer Price Index or a market interest rate) are included in the measurement of ROU assets and lease liabilities using the index or rate at the commencement date. Variable lease payments that do not depend on an index or a rate are excluded from the measurement of ROU assets and lease liabilities and are recognized in the period in which the obligation for those payments is incurred. Since most of the Company's leases do not provide an implicit rate, the Company uses its own incremental borrowing rate ("IBR") on a collateralized basis in determining the present value of lease payments. The Company utilizes a market-based approach to estimate the IBR. The approach requires significant judgment. Therefore, the Company utilizes different data sets to estimate IBRs via an analysis of (i) yields on comparable credit rating composite curves; (ii) sovereign rates; (iii) yields on our outstanding public debt; and (iv) historical difference in yields on the curves of our secured and unsecured rated debt. The Company also applies adjustments to account for considerations related to (i) tenor; and (ii) country credit rating that may not be fully incorporated by the aforementioned data sets.

The majority of the Company's lease arrangements include options to extend the lease. If the Company is reasonably certain to exercise such options, the periods covered by the options are included in the lease term. The depreciable lives of certain fixed assets and leasehold improvements are limited by the expected lease term. The Company has certain leases with an initial term of 12 months or less. For such leases, the Company elected not to recognize any ROU asset or lease liability on the consolidated balance sheet. The Company has lease agreements with lease and non-lease components. The Company elected to account for the lease and non-lease components as a single lease component for all classes of underlying assets for which the Company has identified lease arrangements.

Revenue

Revenue Recognition

Equinix derives more than 90% of its revenues from recurring revenue streams, consisting primarily of (1) colocation, which includes the licensing of cabinet space and power; (2) interconnection offerings, such as cross connects and Equinix Exchange ports; (3) managed infrastructure solutions and (4) other revenues consisting of rental income from tenants or subtenants. The remainder of the Company's revenues are from non-recurring revenue streams, such as installation revenues, professional services, contract settlements and equipment sales. Revenues by service lines and geographic areas are included in segment information (see Note 17).

Under the revenue accounting guidance, revenues are recognized when control of these products and services is transferred to its customers, in an amount that reflects the consideration it expects to be entitled to in exchange for the products and services. Revenues from recurring revenue streams are generally billed monthly and recognized ratably over the term of the contract, generally 1 to 3 years for IBX data center colocation customers. Non-recurring installation fees, although generally paid upfront upon installation, are deferred and recognized ratably over the contract term. Professional service fees and equipment sales are recognized in the period when the services were provided. For the contracts with customers that contain multiple performance obligations, the Company accounts for individual performance obligations separately if they are distinct or as a series of distinct obligations if the individual performance obligations meet the series criteria. Determining whether products and services are considered distinct performance obligations that should be accounted for separately versus together may require significant judgment. The transaction price is allocated to the separate performance obligation on a relative standalone selling price basis. The standalone selling price is determined based on overall pricing objectives, taking into consideration market conditions, geographic locations and other factors. Other judgments include determining if any variable consideration should be included in the total contract value of the arrangement such as price increases.

Revenue is generally recognized on a gross basis as a principal versus on a net basis as an agent, as the Company is primarily responsible for fulfilling the contract, bears inventory risk and has discretion in establishing the price when selling to the customer. To the extent the Company does not meet the criteria for recognizing revenue on a gross basis, the Company records the revenue on a net basis. Revenue from contract settlements, when a customer wishes to terminate their contract early, is treated as a contract modification and recognized ratably over the remaining term of the contract, if any.

The Company guarantees certain service levels, such as uptime, as outlined in individual customer contracts. If these service levels are not achieved due to any failure of the physical infrastructure or offerings, or in the event of certain instances of damage to customer infrastructure within the Company's IBX data centers, the Company would reduce revenue for any credits or cash payments given to the customer. Historically, these credits and cash payments have not been significant.

The Company enters into revenue contracts with customers for data centers and office spaces, which contain both lease and non-lease components. The Company elected to adopt the practical expedient which allows lessors to combine lease and non-lease components, by underlying class of asset, and account for them as one component if they have the same timing and pattern of transfer. The combined component is accounted for in accordance with the current lease accounting guidance ("Topic 842") if the lease component is predominant, and in accordance with the current revenue accounting guidance ("Topic 606") if the non-lease component is predominant. Lessors are permitted to adopt this practical expedient on a retrospective or prospective basis. The Company elected to apply the practical expedient prospectively based on classes of underlying assets. In general, customer contracts for data centers are accounted for under Topic 606 and Customer contracts for the use of office space are accounted for under Topic 842, which are generally classified as operating leases and are recognized on a straight-line basis over the lease term.

Certain customer agreements are denominated in currencies other than the functional currencies of the parties involved. Under applicable accounting rules, the Company is deemed to have foreign currency forward contracts embedded in these contracts. The Company assessed these embedded contracts and concluded them to be foreign currency embedded derivatives (see Note 8). These instruments are separated from their host contracts and held on the Company's consolidated balance sheet at their fair value. The majority of these foreign currency embedded derivatives arise in certain of the Company's subsidiaries where the local currency is the subsidiary's functional currency and the customer contract is denominated in the U.S. dollar. Changes in their fair values are recognized within revenues in the Company's consolidated statements of operations.

Contract Balances

The timing of revenue recognition, billings and cash collections result in accounts receivables, contract assets and deferred revenues. A receivable is recorded at the invoice amount, net of an allowance for doubtful account and is recognized in the period when the Company has transferred products or provided services to its customers and when its right to consideration is unconditional. Payment terms and conditions vary by contract type, although terms generally include a requirement of payment within 30 to 45 days. In instances where the timing of revenue recognition differs from the timing of invoicing, the Company has determined that the Company's contracts generally do not include a significant financing component. The Company assesses collectability based on a number of factors, including past transaction history with the customer and the credit-worthiness of the customer. The Company generally does not request collateral from its customers although in certain cases the Company obtains a security interest in a customer's equipment placed in its IBX data centers or obtains a deposit. The Company also maintains an allowance for doubtful accounts for estimated losses resulting from the inability of its customers to make required payments for which the Company had expected to collect the revenues. If the financial condition of the Company's customers were to deteriorate or if they became insolvent, resulting in an impairment of their ability to make payments, greater allowances for doubtful accounts may be required. Management specifically analyzes accounts receivable and current economic news and trends, historical bad debts, customer concentrations, customer credit-worthiness and changes in customer payment terms when evaluating revenue recognition and the adequacy of the Company's reserves. Any amounts that were previously recognized as revenue and subsequently determined to be uncollectable are charged to bad debt expense included in sales and marketing expense in the consolidated statements of operations. A specific bad debt reserve of up to the full amount of a particular invoice value is provided for certain problematic customer balances. An additional reserve is established for all other accounts based on the age of the invoices and an analysis of historical credits issued. Delinquent account balances are written off after management has determined that the likelihood of collection is not probable.

A contract asset exists when the Company has transferred products or provided services to its customers, but customer payment is contingent upon satisfaction of additional performance obligations. Certain contracts include terms related to price arrangements such as price increases and free months. The Company recognizes revenues ratably over the contract term, which could potentially give rise to contract assets during certain periods of the contract term. Contract assets are recorded in other current assets and other assets in the consolidated balance sheet.

Deferred revenue (a contract liability) is recognized when the Company has an unconditional right to a payment before it transfers products or services to customers. Deferred revenue is included in other current liabilities and other liabilities, respectively, in the consolidated balance sheet.

Contract Costs

Direct and indirect incremental costs solely related to obtaining revenue contracts are capitalized as costs of obtaining a contract, when they are incremental and if they are expected to be recovered. Such costs consist primarily of commission fees and sales bonuses, as well as indirect related payroll costs. Contract costs are amortized over the estimated period of benefit on a straight-line basis. The Company elected to apply the practical expedient which allows the Company to expense contract costs when incurred, if the amortization period is one year or less.

For further information on revenue recognition, see Note 2 below.

Income Taxes

Income taxes are accounted for under the asset and liability method. Under this method, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credits carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the year in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. Valuation allowances are established when necessary to reduce deferred tax assets to the amounts that are expected more likely than not to be realized in the future. A tax benefit from an uncertain income tax position may be recognized in the financial statements only if it is more likely than not that the position is sustainable, based solely on its technical merits and consideration of the relevant taxing authority's widely understood administrative practices and precedents. Recognized income tax positions are measured at the largest amount that has a greater than 50 percent likelihood of being realized. Any subsequent changes in recognition or measurement are reflected in the period in which the change in judgment occurs.

The Company elected to be taxed as a REIT for U.S. federal income tax purposes beginning with its 2015 taxable year. As a result, the Company may deduct the distributions made to its stockholders from taxable income generated by the Company and its qualified REIT subsidiaries ("QRSs"). The Company's dividends paid deduction generally eliminates the U.S. federal taxable income of the Company and its QRSs, resulting in no U.S. income tax due. However, the Company's taxable REIT subsidiaries ("TRSs") will continue to be subject to the U.S. corporate income taxes on any taxable income generated by them. In addition, the foreign operations of the Company will continue to be subject to local income taxes regardless of whether the foreign operations are operated as QRSs or TRSs.

The Company's qualification and taxation as a REIT depends on its satisfaction of certain asset, income, organizational, distribution, stockholder ownership and other requirements on a continuing basis. The Company's ability to satisfy quarterly asset tests depends upon its analysis and the fair market values of its REIT and non-REIT assets. For purposes of the quarterly REIT asset tests, the Company estimates the fair market value of assets within its QRSs and TRSs using a discounted cash flow approach, by calculating the present value of forecasted future cash flows. The Company applies discount rates based on industry benchmarks relative to the market and forecasting risks. Other significant assumptions used to estimate the fair market value of assets in QRSs and TRSs include projected revenue growth, projected operating margins, and projected capital expenditures. The Company revisits significant assumptions periodically to reflect any changes due to business or economic environment.

Stock-Based Compensation

Stock-based compensation cost is measured at the grant date for all stock-based awards made to employees and directors based on the fair value of the award. The Company generally recognizes stock-based compensation expense on a straight-line basis over the requisite service period of the awards, which is generally the vesting period. However, for awards with market conditions or performance conditions, stock-based compensation expense is recognized on a straight-line basis over the requisite service period for each vesting tranche of the award. The Company elected to estimate forfeitures based on historical forfeiture rates.

The Company grants restricted stock units to its employees and these equity awards generally have only a service condition. The Company grants restricted stock units to its executives and these awards generally have a service and performance condition or a service and market condition. To date, any performance conditions contained in an equity award are tied to the financial performance of the Company or a specific region of the Company. The Company assesses the probability of meeting these performance conditions on a quarterly basis. The majority of the Company's equity awards vest over 4 years, although certain of the equity awards for executives vest over a range of 2 to 4 years. The valuation of restricted stock units with only a service condition or a service and performance condition requires no significant assumptions as the fair value for these types of equity awards is based solely on the fair value of the Company's stock price on the date of grant. The Company uses a Monte Carlo simulation option-pricing model to determine the fair value of restricted stock units with a service and market condition.

The Company uses the Black-Scholes option-pricing model to determine the fair value of its employee stock purchase plan. The determination of the fair value of shares purchased under the employee stock purchase plan is affected by assumptions regarding a number of complex and subjective variables including the Company's expected stock price volatility over the term of the awards and actual and projected employee stock purchase behaviors. The Company estimated the expected volatility by using the average historical volatility of its common stock that it believed was best representative of future volatility. The risk-free interest rate used was based on U.S. Treasury zero-coupon issues with remaining terms similar to the expected term of the equity awards. The expected dividend rate used was based on average dividend yields and the expected term used was equal to the term of each purchase window.

The accounting standard for stock-based compensation does not allow the recognition of unrealized tax benefits associated with the tax deductions in excess of the compensation recorded (excess tax benefit) until the excess tax benefit is realized (i.e., reduces taxes payable). The Company records the excess tax benefits from stock-based compensation as income tax expense through the statement of operations.

For further information on stock-based compensation, see Note 13 below.

Foreign Currency Translation

The financial position of foreign subsidiaries is translated using the exchange rates in effect at the end of the period, while income and expense items are translated at average rates of exchange during the period. Gains or losses from translation of foreign operations where the local currency is the functional currency are included as other comprehensive income (loss). The net gains and losses resulting from foreign currency transactions are recorded in net income in the period incurred and recorded within other income (expense). Certain inter-company balances are designated as loans of a long-term investment-type nature. Accordingly, exchange gains and losses associated with these long-term inter-company balances are recorded as a component of other comprehensive income (loss), along with translation adjustments.

Earnings Per Share

The Company computes basic and diluted EPS for net income. Basic EPS is computed using net income and the weighted-average number of common shares outstanding. Diluted EPS is computed using net income and the weighted-average number of common shares outstanding plus any dilutive potential common shares outstanding. Dilutive potential common shares include the assumed exercise, vesting and issuance activity of employee equity awards using the treasury stock method. See Note 4 below.

Treasury Stock

The Company accounts for treasury stock under the cost method. When treasury stock is re-issued at a higher price than its cost, the difference is recorded as a component of additional paid-in capital to the extent that there are gains to offset the losses. If there are no treasury stock gains in additional paid-in capital, the losses are recorded as a component of retained earnings.

Recent Accounting Pronouncements

Accounting Standards Not Yet Adopted

In December 2019, Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2019-12, Income Taxes ("Topic 740"): Simplifying the Accounting for Income Taxes. The ASU simplifies accounting for income taxes by removing certain exceptions to the general principles in Topic 740. The ASU also improves consistent application of and simplifies GAAP for other areas of Topic 740 by clarifying and amending existing guidance. For public entities, the ASU is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2020, with early adoption permitted including adoption in any interim period for periods for which financial statements have not yet been issued. The Company is currently evaluating the extent of the impact that the adoption of this standard will have on its condensed consolidated financial statements.

In June 2016, FASB issued ASU 2016-13, Financial Instruments - Credit Losses ("Topic 326"): Measurement of Credit Losses on Financial Instruments. The ASU requires the measurement of all expected credit losses for financial assets held at the reporting date based on historical experience, current conditions, and reasonable and supportable forecasts. The ASU requires enhanced qualitative and quantitative disclosures to help investors and other financial statement users better understand significant estimates and judgments used in estimating credit losses, as well as the credit quality and underwriting standards of an organization's portfolio. In addition, the ASU amends the accounting for credit losses on available-for-sale debt securities and purchased financial assets with credit deterioration. The ASU is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019, with early adoption permitted for all organizations for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. The Company will adopt this new ASU on January 1, 2020. The Company is assessing the impact of this ASU on its accounting for allowances for doubtful accounts, but does not expect the adoption of this standard to have a significant impact on its condensed consolidated financial statements.

Accounting Standards Recently Adopted

Revenue

In May 2014, the FASB issued ASU 2014-09, Revenue from Contracts with Customers ("ASU 2014-09") and issued subsequent amendments to the initial guidance, collectively referred as "Topic 606." On January 1, 2018, the Company adopted Topic 606 using the modified retrospective approach applied to those contracts, which were not completed as of January 1, 2018, and recognized a net increase to the opening retained earnings of $269.8 million, net of tax impacts. Results for reporting periods beginning after January 1, 2018 are presented under Topic 606, while the comparative information has not been restated and continues to be reported under accounting standards in effect for those periods.

Derivatives and Hedging

In August 2017, FASB issued ASU 2017-12 Derivatives and Hedging ("Topic 815"): Targeted Improvements to Accounting for Hedging Activities. This ASU was issued to improve the financial reporting of hedging relationships to better portray the economic results of an entity's risk management activities in its financial statements and to simplify the application of the hedge accounting guidance in current GAAP. This ASU permits hedge accounting for risk components involving nonfinancial risk and interest rate risk, requires an entity to present the earnings effect of the hedging instrument in the same income statement line item in which the hedged item is reported, no longer requires separate measurement and reporting of hedge ineffectiveness, eases the requirement for hedge effectiveness assessment, and requires a tabular disclosure related to the effect on the income statement of fair value and cash flow hedges. This ASU is effective for annual or any interim reporting periods beginning after December 15, 2018 with early adoption permitted.

The Company adopted ASU 2017-12 on January 1, 2019 using the modified retrospective approach. For cash flow hedges existing on the date of adoption, the Company recognized the cumulative effect of the change on the opening balance of accumulated other comprehensive income (loss) with a corresponding adjustment to the opening balance of retained earnings for amounts previously recognized in earnings related to ineffectiveness. The adoption of this standard did not have a material impact on the Company's condensed consolidated financial statements.

Leases

In February 2016, FASB issued ASU 2016-02, Leases and issued subsequent amendments to the initial guidance, collectively referred to as "Topic 842." Topic 842 replaces the guidance in former ASC Topic 840, Leases. The new lease guidance increases transparency and comparability among organizations by requiring the recognition of the following for all leases (with the exception of short-term leases) at the commencement date: (1) a lease liability, which is a lessee's future obligation to make lease payments arising from a lease, measured on a discounted basis; and (2) a right-of-use ("ROU") asset, which is an asset that represents the lessee's right to use, or control the use of, a specified asset for the lease term. Topic 842 allows entities to adopt with one of two methods: the modified retrospective transition method or the alternative transition method.

On January 1, 2019, the Company adopted Topic 842 using the alternative transition method. Therefore, results for reporting periods beginning after January 1, 2019 are presented under Topic 842, while comparative information has not been restated and continues to be reported under accounting standards in effect for those periods. The Company recognized the cumulative effects of initially applying the standard as an adjustment to the opening balance of retained earnings in the period of adoption.

In adopting the new guidance, the Company elected to apply the package of practical expedients permitted under the transition guidance which allows the Company not to reassess (1) whether any expired or existing contracts contain leases under the new definition of a lease; (2) lease classification for any expired or existing leases; and (3) whether previously capitalized initial direct costs would qualify for capitalization under Topic 842. The Company also elected to apply the land easements practical expedient which permits the Company not to assess at transition whether any expired or existing land easements are, or contain, leases if they were not previously accounted for as leases under Topic 840.

Adoption of the standard had a significant impact on the Company's financial results, including the (1) recognition of new ROU assets and liabilities on its balance sheet for all operating leases; and (2) de-recognition of existing build-to-suit assets and liabilities with cumulative effects of initially applying the standard as an adjustment to the retained earnings. The cumulative effect of the changes made to its consolidated January 1, 2019 balance sheet from the adoption of Topic 842 was as follows (in thousands):

Balance Sheet	Balances at December 31, 2018	Adjustments due to adoption of Topic 842	Balances at January 1, 2019
Assets			
Other current assets	$ 274,857	$ (15,949)	$ 258,908
Property, plant and equipment, net	11,026,020	(293,111)	10,732,909
Operating lease right-of-use assets	—	1,468,762	1,468,762
Intangible assets, net	2,333,296	(23,205)	2,310,091
Other assets	533,252	(63,468)	469,784
Liabilities			
Current portion of operating lease liabilities	—	144,405	144,405
Current portion of finance lease liabilities	—	70,795	70,795
Current portion of capital lease and other financing obligations	77,844	(77,844)	—
Other current liabilities	126,995	(6,455)	120,540
Operating lease liabilities, less current portion	—	1,312,262	1,312,262
Finance lease liabilities, less current portion	—	1,165,188	1,165,188
Capital lease and other financing obligations, less current portion	1,441,077	(1,441,077)	—
Other liabilities	629,763	(88,272)	541,491
Equity			
Retained Earnings	889,948	(5,973)	883,975

2. Revenue Recognition

Contract Balances

The following table summarizes the opening and closing balances of the Company's accounts receivable, net; contract asset, current; contract asset, non-current; deferred revenue, current; and deferred revenue, non-current (in thousands):

	Accounts receivable, net	Contract asset, current	Contract asset, non-current	Deferred revenue, current	Deferred revenue, non-current
Beginning balances as of January 1, 2019	$ 630,119	$ 9,778	$ 16,396	$ 73,143	$ 46,641
Closing balances as of December 31, 2019	689,134	10,033	31,521	76,193	46,555
Increase/(decrease)	$ 59,015	$ 255	$ 15,125	$ 3,050	$ (86)
Beginning balances as of January 1, 2018 (1)	$ 576,313	$ 9,002	$ 16,186	$ 71,085	$ 53,101
Closing balances as of December 31, 2018	630,119	9,778	16,396	73,143	46,641
Increase/(decrease)	$ 53,806	$ 776	$ 210	$ 2,058	$ (6,460)

(1) Includes cumulative adjustments made to these accounts on January 1, 2018 from the adoption of Topic 606.

The difference between the opening and closing balances of the Company's accounts receivable, net, contract assets and deferred revenues primarily results from the timing difference between the satisfaction of the Company's performance obligation and the customer's payment, as well as business combinations closed during the years ended December 31, 2019 and 2018. The amounts of revenue recognized during the years ended December 31, 2019 and 2018 from the opening deferred revenue balance were approximately $87.3 million and $81.8 million, respectively. For the years ended December 31, 2019 and 2018, no impairment loss related to contract balances was recognized in the consolidated statement of operations.

Contract Costs

The ending balances of net capitalized contract costs as of December 31, 2019 and 2018 were $229.2 million and $188.2 million, respectively, which were included in other assets in the consolidated balance sheet. $72.9 million and $73.1 million of contract costs were amortized during years ended December 31, 2019 and 2018, respectively, which were included in sales and marketing expense in the consolidated statement of operations.

Remaining performance obligations

As of December 31, 2019, approximately $7.4 billion of total revenues and deferred installation revenues are expected to be recognized in future periods, the majority of which will be recognized over the next 24 months. While initial contract terms vary in length, substantially all contracts thereafter automatically renew in one-year increments. Included in the remaining performance obligations is either 1) remaining performance obligations under the initial contract terms or 2) remaining performance obligations related to contracts in the renewal period once the initial terms have lapsed. The remaining performance obligations do not include variable consideration related to unsatisfied performance obligations such as the usage of metered power, service fees from xScale data centers, which are calculated based on future events or actual costs incurred in the future, or any contracts that could be terminated without any significant penalties such as the majority of interconnection revenues. The remaining performance obligations above include revenues to be recognized in the future related to arrangements where the Company is considered the lessor.

3. Acquisitions

2019 Acquisitions

On April 18, 2019, the Company completed the acquisition of Switch Datacenters' AMS1 data center business in Amsterdam, Netherlands, for a cash purchase price of approximately €30.6 million or approximately $34.3 million, at the exchange rate in effect on April 18, 2019. As of September 30, 2019, the Company had completed the detailed valuation analysis to derive the fair value of assets acquired and liabilities assumed and updated the final allocation of purchase price. The operating results of the acquisition were reported in the EMEA region following the date of acquisition and were not significant to the Company's total operations for the year ended December 31, 2019.

2018 Acquisitions

On April 18, 2018, the Company acquired all of the equity interests in Metronode from the Ontario Teachers' Pension Plan Board for a cash purchase price of A$1.034 billion, or approximately $804.6 million at the exchange rate in effect on April 18, 2018. Metronode operated 10 data centers in six metro areas in Australia. The acquisition supports the Company's ongoing global expansion to meet customer demand in the Asia-Pacific region.

On April 2, 2018, the Company completed the acquisition of Infomart Dallas, including its operations and tenants, from ASB Real Estate Investments, for total consideration of approximately $804.0 million. The consideration was comprised of approximately $45.8 million in cash, subject to customary adjustments and $758.2 million aggregate fair value of 5.000% senior unsecured notes. Prior to the acquisition, a portion of the building was leased to the Company and was being used as its Dallas 1, 2, 3 and 6 data centers, which were all accounted for as build-to-suit leases. Upon acquisition, the Company effectively terminated the leases and settled the related financing obligations and other liabilities related to the leases for approximately $170.3 million and $1.9 million, respectively, and recognized a loss on debt extinguishment of $19.5 million. The acquisition of this highly interconnected facility and tenants adds to the Company's global platform and secures the ability to further expand in the Americas market in the future.

Both acquisitions constitute a business under the accounting standard for business combinations and, therefore, were accounted for as business combinations using the acquisition method of accounting. Under the acquisition method of accounting, the total purchase price is allocated to the assets acquired and liabilities assumed measured at fair value on the date of acquisition. During the three months ended March 31, 2019, the Company completed the detailed valuation analysis of Metronode and Infomart Dallas to derive the fair value of assets acquired and liabilities assumed and finalized the allocation of purchase price for Metronode and Infomart Dallas. For the Metronode Acquisition, the adjustments made during the three months ended March 31, 2019 primarily resulted in a decrease in deferred tax liability and goodwill of $4.2 million and $3.7 million, respectively. No purchase price allocation adjustments were made during the three months ended March 31, 2019 for the Infomart Dallas Acquisition.

For the Metronode Acquisition, the adjustments made from the provisional amounts reported as of June 30, 2018 primarily resulted in a decrease in property, plant and equipment, other assets, other liabilities and deferred tax assets of $10.1 million, $10.0 million, $9.7 million and $4.1 million, respectively, and an increase in goodwill, intangible assets and deferred tax liabilities of $41.6 million, $4.8 million and $31.3 million, respectively. The adjustments for the Infomart Dallas Acquisition made from the provisional amounts reported as of June 30, 2018 primarily resulted in a decrease in goodwill of $6.2 million and an increase in intangible assets of $4.6 million. The changes in fair value of acquired assets and liabilities assumed did not have a significant impact on the Company's results of operations for any reporting periods prior to March 31, 2019.

A summary of the final allocation of total purchase consideration is presented as follows (in thousands):

	Metronode	Infomart Dallas
Cash and cash equivalents	$ 3,206	$ 17,432
Accounts receivable	8,318	637
Other current assets	9,421	395
Property, plant and equipment	297,092	362,023
Intangible assets	128,229	65,847
Goodwill	410,188	197,378
Other assets [(1)]	44,373	—
Total assets acquired	900,827	643,712
Accounts payable and accrued liabilities	(17,104)	(5,056)
Other current liabilities	(2,038)	(2,141)
Deferred tax liabilities	(31,281)	—
Other liabilities [(1)]	(45,851)	(4,723)
Net assets acquired	$ 804,553	$ 631,792

(1) In connection with the Metronode Acquisition, the Company recorded indemnification assets of$44.4 million, which represented the seller's obligation under the purchase agreement to reimburse pre-acquisition tax liabilities settled after the acquisition.

The following table presents certain information on the acquired intangible assets (in thousands):

Intangible Assets	Fair Value	Estimated Useful Lives (Years)	Weighted-average Estimated Useful Lives (Years)
Customer relationships (Metronode)	$ 128,229	20.0	20.0
Customer relationships (Infomart Dallas)	35,860	20.0	20.0
In-place leases (Infomart Dallas)	19,960	3.6 - 7.5	6.8
Trade names (Infomart Dallas)	9,552	20.0	20.0
Favorable leases (Infomart Dallas)	475	3.6 - 7.5	7.0

The fair value of customer relationships was estimated by applying an income approach, by calculating the present value of estimated future operating cash flows generated from existing customers less costs to realize the revenue. The Company applied discount rates of 7.3% for Metronode and 8.2% for Infomart Dallas, which reflected the nature of the assets as they relate to the risk and uncertainty of the estimated future operating cash flows. Other assumptions used to estimate the fair value of customer relationships included projected revenue growth, capital expenditures, probability of renewal, customer attrition rates and operating margins. The fair value of Infomart Dallas' trade name was estimated using the relief from royalty method under the income approach. The Company applied a relief from royalty rate of 1.5% and a discount rate of 8.2%. The fair value of in-place leases was estimated by projecting the avoided costs, such as the cost of originating the acquired in-place leases, during a typical lease up period. The fair value measurements were based on significant inputs that are not observable in the market and thus represent Level 3 measurements as defined in the accounting standard for fair value measurements.

The fair value of property, plant and equipment was estimated by applying the cost approach, with the exception of land, which was estimated by applying the market approach, for the Metronode Acquisition. For the Infomart Dallas Acquisition, the fair values of land, building and personal property were estimated by applying the market approach, residual income method and cost approach, respectively. The cost approach uses the replacement or reproduction cost as an indicator of fair value. The premise of the cost approach is that a market participant would pay no more for an asset than the amount for which the asset could be replaced or reproduced. The key assumptions of the cost approach include replacement cost new, physical deterioration, functional and economic obsolescence, economic useful life, remaining useful life, age and effective age. The residual income method estimates the fair value of the Infomart Dallas building using an income approach less the fair values attributed to land, personal property, in-place leases and favorable and unfavorable leases.

Goodwill represents the excess of the purchase price over the fair value of the net tangible and intangible assets acquired and liabilities assumed. Goodwill is attributable to the workforce of the acquired business and the projected revenue increase expected to arise from future customers after the Metronode and Infomart Dallas acquisitions. Goodwill from the acquisition of Metronode is not amortizable for local tax purposes and is attributable to the Company's Asia-Pacific region. Goodwill from the acquisition of Infomart Dallas is expected to be deductible for local tax purposes and is attributable to the Company's Americas region. Operating results of Metronode and Infomart Dallas have been reported in the Asia-Pacific and Americas regions, respectively.

The Company incurred transaction costs of approximately $31.1 million during the year ended December 31, 2018 for both acquisitions. The Company's results of operations include $78.7 million of revenues and an insignificant amount of net income from operations from the combined operations of Metronode and Infomart Dallas during the year ended December 31, 2018.

Certain Verizon Data Center Assets Acquisition

On May 1, 2017, the Company completed the acquisition of certain colocation business from Verizon consisting of 29 data center buildings located in the United States, Brazil and Colombia, for a cash purchase price of approximately $3.6 billion. The addition of these facilities and customers adds to the Company's global platform, increases interconnections and assists with the Company's penetration of the enterprise and strategic markets, including government and energy. The Company funded the Verizon Data Center Acquisition with proceeds from debt and equity financings, which closed in January and March 2017.

Purchase Price Allocation

The Verizon Data Center Acquisition constitutes a business under the accounting standard for business combinations and, therefore, was accounted for as a business combination using the acquisition method of accounting. During the three months ended March 31, 2018, the Company had completed the detailed valuation analysis to derive the fair value of assets acquired and liabilities assumed and updated the final allocation of purchase price from provisional amounts reported as of June 30, 2017, which primarily resulted in a decrease in intangible assets of $9.0 million and an increase in goodwill of $7.7 million. The changes in fair value of acquired assets and liabilities assumed did not have a significant impact on the Company's results of operations for any reporting periods prior to and including December 31, 2018.

The final purchase price allocation is as follows (in thousands):

	Certain Verizon Data Center Assets
Cash and cash equivalents	$ 1,073
Accounts receivable	2,019
Other current assets	7,319
Property, plant and equipment	840,335
Intangible assets [(1)]	1,693,900
Goodwill	1,095,262
Total assets acquired	3,639,908
Accounts payable and accrued liabilities	(1,725)
Other current liabilities	(2,020)
Capital lease and other financing obligations	(17,659)
Deferred tax liabilities	(18,129)
Other liabilities	(5,689)
Net assets acquired	$ 3,594,686

(1) The nature of the intangible assets acquired is customer relationships with an estimated useful life of 15 years. Included in this amount is a customer relationship intangible asset for Verizon totaling $245.3 million. Pursuant to the acquisition agreement, the Company formalized agreements to provide pre-existing space and services to Verizon at the acquired data centers.

The fair value of customer relationships was estimated by applying an income approach. The Company applied discount rates ranging from 7.7% to 12.2%, which reflected the nature of the assets as they relate to the risk and uncertainty of the estimated future operating cash flows. Other assumptions used to estimate the fair value of customer relationships include projected revenue growth, customer attrition rates, sales and marketing expenses and operating margins. The fair value measurements were based on significant inputs that are not observable in the market and thus represent Level 3 measurements as defined in the accounting standard for fair value measurements.

The fair value of property, plant and equipment was estimated by applying the cost approach, with the exception of land which was estimated by applying the market approach. The cost approach is to use the replacement or reproduction cost as an indicator of fair value. The assumptions of the cost approach include replacement cost new, physical deterioration, functional and economic obsolescence, economic useful life, remaining useful life, age and effective age.

Goodwill is attributable to the workforce of the acquired business and the projected revenue increase expected to arise from future customers after the Verizon Data Center Acquisition. Goodwill is deductible for U.S. tax purposes and is attributable to the Company's Americas region. The Company incurred transaction costs of approximately $28.5 million during the year ended December 31, 2017 related to the Verizon Data Center Acquisition. The Company's results of operations include the Verizon Data Center Acquisition's revenues of $359.1 million and net income of $87.8 million for the period May 1, 2017 through December 31, 2017.

Other 2017 Acquisitions

In addition to the Verizon Data Center Acquisition, the Company also acquired Itconic, Zenium's data center business in Istanbul, Turkey and IO UK's data center business during 2017. The Company incurred transaction costs of approximately $8.1 million in total during the year ended December 31, 2017 related to these acquisitions.

On October 9, 2017, the Company completed the acquisition of Itconic for a cash purchase price of €220.5 million, or $259.1 million at the exchange rate in effect on October 9, 2017. Itconic is a data center provider in Spain and Portugal, and also includes CloudMas, an Itconic subsidiary which is focused on supporting enterprise adoption and use of cloud services. The acquisition includes five data centers in four metro areas, with two located in Madrid and one each in Barcelona, Seville and Lisbon. Itconic's operating results have been reported in the EMEA region following the date of acquisition.

The nature of the intangible assets acquired from the Itconic acquisition is customer relationships with an estimated useful life of 15 years. The fair value of customer relationships was estimated by applying an income approach. The Company applied a discount rate of 16.0%, which reflects the risk and uncertainty of the estimated future operating cash flows. Other assumptions include projected revenue growth, customer attrition rates and operating margins. The fair value measurements were based on significant inputs that are not observable in the market and thus represent Level 3 measurements as defined in the accounting standard for fair value measurements. Goodwill is attributable to the workforce of the acquired business and the projected revenue increase from future customers expected to arise after the acquisition.

On October 6, 2017, the Company acquired Zenium's data center business in Istanbul for a cash payment of approximately $92.0 million. Zenium's operating results have been reported in the EMEA region following the date of acquisition. The nature of the intangible assets acquired from this acquisition is customer relationships with an estimated useful life of 15 years.

As of December 31, 2018, the Company completed the detailed valuation analysis to derive the fair value of assets acquired and liabilities assumed from the Itconic and the Zenium data center acquisitions and updated the final allocation of purchase price from the provisional amounts reported as of December 31, 2017. The adjustments for the Zenium data center acquisition primarily resulted in an increase in property, plant and equipment of $5.2 million and a corresponding decrease in other assets of $5.2 million. The adjustments for Itconic primarily resulted in a decrease in property, plant and equipment of $3.6 million and an increase in goodwill of $2.6 million. The changes in fair value of acquired assets and liabilities assumed did not have a significant impact on the Company's results of operations for any reporting periods prior to and including December 31, 2018.

On February 3, 2017, the Company acquired IO UK's data center operating business in Slough, United Kingdom, for a cash payment of £29.1 million, or approximately $36.3 million at the exchange rate in effect on February 3, 2017. The acquired facility was renamed London 10 ("LD10") data center. LD10's operating results have been reported in the EMEA region following the date of acquisition. The nature of the intangible assets acquired from this acquisition is customer relationships with an estimated useful life of 10 years. As of December 31, 2017, the Company had finalized the allocation of purchase price for the IO Acquisition from the provisional amounts first reported as of March 31, 2017 and the adjustments made during the year ended December 31, 2017 were not significant. The changes in fair value of acquired assets and liabilities assumed did not have a significant impact on the Company's results of operations for any reporting periods prior to and including December 31, 2017.

The final purchase price allocations for the three acquisitions are as follows (in thousands):

	Itconic	Zenium data center	IO UK's data center
Cash and cash equivalents	$ 15,659	$ 692	$ 1,388
Accounts receivable	16,429	198	7
Other current assets	1,885	6,430	1,082
Property, plant and equipment	64,499	58,931	40,251
Intangible assets	101,755	7,900	6,252
Goodwill	127,711	21,834	15,804
Deferred tax assets	—	—	6,714
Other assets	4,025	313	3,396
Total assets acquired	331,963	96,298	74,894
Accounts payable and accrued liabilities	(15,846)	(1,012)	(439)
Other current liabilities	(12,374)	(451)	(168)
Capital lease and other financing obligations	(30,666)	—	(33,091)
Loans payable	(3,253)	—	(4,067)
Deferred tax liabilities	(3,198)	(2,227)	—
Other liabilities	(7,515)	(614)	(828)
Net assets acquired	$ 259,111	$ 91,994	$ 36,301

Goodwill from the acquisitions of Itconic, the Zenium data center and IO UK's data center is not deductible for local tax purposes and is attributable to the Company's EMEA region. The Company's results of operations include $22.4 million of revenues from the combined operations of Itconic, the Zenium data center and IO UK's data center and an insignificant net loss for the periods from their respective dates of acquisition through December 31, 2017.

4. Earnings Per Share

The following table sets forth the computation of basic and diluted EPS for the years ended December 31 (in thousands, except per share amounts):

	2019	2018	2017
Net income	$ 507,245	$ 365,359	$ 232,982
Net loss attributable to non-controlling interests	205	—	—
Net income attributable to Equinix	$ 507,450	$ 365,359	$ 232,982
Weighted-average shares used to calculate basic EPS	84,140	79,779	76,854
Effect of dilutive securities:			
Employee equity awards	539	418	681
Weighted-average shares used to calculate diluted EPS	84,679	80,197	77,535
EPS attributable to Equinix:			
Basic EPS	$ 6.03	$ 4.58	$ 3.03
Diluted EPS	$ 5.99	$ 4.56	$ 3.00

The following table sets forth potential shares of common stock that are not included in the diluted EPS calculation above because to do so would be anti-dilutive for the years ended December 31 (in thousands):

	2019	2018	2017
Common stock related to employee equity awards	21	265	63
Total	21	265	63

5. Assets Held for Sale

Sale of xScale™ data center facilities in Europe

In June 2019, the Company entered into an agreement to form a joint venture in the form of a limited liability partnership with GIC, Singapore's sovereign wealth fund (the "Joint Venture"), to develop and operate xScale data centers in Europe. The Company agreed to sell certain data center facilities in Europe to the Joint Venture. The assets and liabilities of these data center facilities, which were included within the Company's EMEA operating segment, were classified as held for sale as of June 30, 2019 and through September 30, 2019.

On October 8, 2019, the Company closed the Joint Venture and sold both its London 10 and Paris 8 data centers, as well as certain construction development and leases in London and Frankfurt, to the Joint Venture in exchange for a total consideration of $433.0 million, which is comprised of 1) net cash proceeds of $351.8 million, 2) a 20% partnership interest in the Joint Venture with a fair value of $41.9 million, and 3) a contingent consideration with fair value of approximately $39.3 million, receivable upon completion of certain performance milestones. As part of the transaction, the Company recorded liabilities of $41.4 million within other liabilities on the consolidated balance sheet, which represents its obligation to complete future construction for certain sites sold. During the year ended December 31, 2019, the Company recognized a total gain of $45.1 million on the sale of its xScale data center facilities in Europe to the Joint Venture.

The milestone payments are primarily contingent on the receipt of local regulatory approval for certain sites. The contingent consideration is considered a derivative and is remeasured at its fair value each reporting period using inputs such as probabilities of payment, discount rates, foreign currency forward rates and projected payment dates. The fair value measurements were based on significant inputs that are not observable in the market and thus represent Level 3 measurements. The fair value of the contingent consideration of $40.1 million at December 31, 2019, of which $34.3 million was included in other current assets and the remaining $5.8 million was included in other assets on the consolidated balance sheet. Future changes in the fair value of the contingent consideration will continue to be recorded in gain (loss) on asset sales on the consolidated statement of operations.

For further information on the Joint Venture, see Note 6 below.

Sale of New York 12 ("NY12") data center

In January 2019, the Company entered into an agreement to sell its NY12 data center, which was reported in its Americas' region. The assets of the NY12 data center to be divested were classified as held for sale. During the year ended December 31, 2019, the Company recorded an impairment charge of $15.8 million, reducing the carrying value of NY12 assets to the estimated fair value less cost to sell. The transaction closed in October 2019 and the gain on sale recognized was insignificant.

6. Equity Method Investments

As described in Note 5 above, the Company and GIC closed their Joint Venture on October 8, 2019. Upon closing, GIC contributed €152.6 million in cash, or $167.4 million at the exchange rate in effect on October 8, 2019, for an 80% partnership interest in the Joint Venture. Equinix sold certain xScale data center facilities to the Joint Venture in exchange for net cash proceeds of $351.8 million and a 20% partnership interest in the Joint Venture with a fair value of $41.9 million. The Company accounts for its investments in the Joint Venture using the equity method of accounting, whereby the investments were recorded initially at fair value, which equals to the cost of the Company's initial equity contribution, and subsequently adjusted for cash contributions and the Company's share of the income and losses of the investees.

As of December 31, 2019, the Company had equity method investments of $59.7 million within other assets on the consolidated balance sheet. The Company's share of the income and losses of the equity method investments was not significant for the years ended December 31, 2019, and was included in other income on the consolidated statement of operations.

7. Balance Sheet Components

Cash, Cash Equivalents and Short-Term Investments

Cash, cash equivalents and short-term investments consisted of the following as of December 31 (in thousands):

	2019	2018
Cash and cash equivalents:		
Cash	$ 983,030	$ 486,648
Cash equivalents:		
Money market funds	886,547	119,518
Total cash and cash equivalents	1,869,577	606,166
Short-term investments:		
Certificates of deposit	7,583	2,823
Publicly traded equity securities	2,779	1,717
Total short-term investments	10,362	4,540
Total cash, cash equivalents and short-term investments	$ 1,879,939	$ 610,706

As of December 31, 2019 and 2018, cash and cash equivalents included investments which were readily convertible to cash and had original maturity dates of 90 days or less. The maturities of certificates of deposit classified as short-term investments were one year or less as of December 31, 2019 and 2018. The Company does not have any certificates of deposits with maturities greater than one year as of December 31, 2019 and 2018.

Accounts Receivable

Accounts receivable, net, consisted of the following as of December 31 (in thousands):

	2019	2018
Accounts receivable	$ 702,160	$ 646,069
Allowance for doubtful accounts	(13,026)	(15,950)
Accounts receivable, net	$ 689,134	$ 630,119

Trade accounts receivable are recorded at the invoiced amount and generally do not bear interest.

The following table summarizes the activity of the Company's allowance for doubtful accounts (in thousands):

Balance as of December 31, 2016	$ 15,675
Provision for allowance for doubtful accounts	5,627
Net write-offs	(4,546)
Impact of foreign currency exchange	1,472
Balance as of December 31, 2017	18,228
Provision for allowance for doubtful accounts	7,236
Net write-offs	(8,396)
Impact of foreign currency exchange	(1,118)
Balance as of December 31, 2018	15,950
Provision for allowance for doubtful accounts	8,459
Net write-offs	(11,341)
Impact of foreign currency exchange	(42)
Balance as of December 31, 2019	$ 13,026

Other Current Assets

Other current assets consisted of the following as of December 31 (in thousands):

	2019	2018
Prepaid expenses	$ 55,954	$ 70,433
Taxes receivable	122,823	98,245
Restricted cash, current	7,090	10,887
Other receivables	36,350	12,611
Derivative instruments	25,426	62,170
Contract asset, current	10,033	9,778
Other current assets [(1)]	45,867	10,733
Total other current assets	$ 303,543	$ 274,857

(1) The December 31, 2019 balance included $34.3 million representing the current portion of the fair value of the contingent consideration from the sale of xScale data center facilities to the Joint Venture. See Note 5 for further discussion.

Property, Plant and Equipment, Net

Property, plant and equipment, net consisted of the following as of December 31 (in thousands):

	2019	2018
Core systems	$ 8,131,835	$ 7,073,912
Buildings	5,398,525	4,822,501
Leasehold improvements	1,764,058	1,637,133
Construction in progress	1,002,104	974,152
Personal property	1,009,701	857,585
Land	781,024	631,367
	18,087,247	15,996,650
Less accumulated depreciation	(5,934,650)	(4,970,630)
Property, plant and equipment, net	$ 12,152,597	$ 11,026,020

Goodwill and Other Intangibles

The following table presents goodwill and other intangible assets, net, for the years ended December 31, 2019 and 2018 (in thousands):

	2019	2018
Goodwill:		
Americas	$ 1,741,689	$ 1,745,804
EMEA	2,426,306	2,474,164
Asia-Pacific	613,863	616,420
	$ 4,781,858	$ 4,836,388
Intangible assets, net:		
Intangible assets - customer relationships	$ 2,712,701	$ 2,733,864
Intangible assets - trade names	46,601	71,778
Intangible assets - favorable leases	—	35,969
Intangible assets - in-place leases	33,295	33,671
Intangible assets - licenses	9,697	9,697
Intangible assets - other	6,402	—
	2,808,696	2,884,979
Accumulated amortization - customer relationships	(646,632)	(467,111)
Accumulated amortization - trade names	(37,885)	(62,585)
Accumulated amortization - favorable leases	—	(9,986)
Accumulated amortization - in-place leases	(14,329)	(8,118)
Accumulated amortization - licenses	(4,529)	(3,883)
Accumulated amortization - other	(2,932)	—
	(706,307)	(551,683)
Total intangible assets, net	$ 2,102,389	$ 2,333,296

Changes in the carrying amount of goodwill by geographic regions are as follows (in thousands):

	Americas	EMEA	Asia-Pacific	Total
Balance as of December 31, 2017	$ 1,561,512	$ 2,610,899	$ 239,351	$ 4,411,762
Purchase accounting - Infomart Dallas acquisition	197,378	—	—	197,378
Purchase accounting - Metronode acquisition	—	—	413,871	413,871
Purchase accounting - other acquisitions	333	1,357	—	1,690
Impact of foreign currency exchange	(13,419)	(138,092)	(36,802)	(188,313)
Balance as of December 31, 2018	1,745,804	2,474,164	616,420	4,836,388
Purchase accounting - acquisition	—	25,863	(3,683)	22,180
Asset sales - xScale data center facilities	—	(59,246)	—	(59,246)
Asset sales - NY12 data center	(950)	—	—	(950)
Impact of foreign currency exchange	(3,165)	(14,475)	1,126	(16,514)
Balance as of December 31, 2019	$ 1,741,689	$ 2,426,306	$ 613,863	$ 4,781,858

Changes in the net book value of intangible assets by geographic regions are as follows (in thousands):

	Americas	EMEA	Asia-Pacific	Total
Balance as of December 31, 2016	$ 40,117	$ 562,361	$ 116,753	$ 719,231
Verizon Data Center acquisition	1,693,900	—	—	1,693,900
Other 2017 acquisitions	—	112,645	—	112,645
Write-off of intangible asset	—	(725)	—	(725)
Amortization of intangibles	(84,749)	(79,105)	(13,154)	(177,008)
Impact of foreign currency exchange	(2,895)	36,043	3,781	36,929
Balance as of December 31, 2017	1,646,373	631,219	107,380	2,384,972
Infomart Dallas acquisition	65,847	—	—	65,847
Metronode acquisition	—	—	128,229	128,229
Other acquisitions	—	8,342	—	8,342
Write-off of intangible asset	(334)	(1,661)	(3)	(1,998)
Amortization of intangibles	(125,683)	(62,283)	(15,450)	(203,416)
Impact of foreign currency exchange	(7,232)	(31,757)	(9,691)	(48,680)
Balance as of December 31, 2018	1,578,971	543,860	210,465	2,333,296
ASC 842 adoption adjustment	(108)	(20,692)	(2,405)	(23,205)
Switch AMS1 data center acquisition	—	4,889	—	4,889
Asset sales - NY12 data center	(8,412)	—	—	(8,412)
Other	—	1,096	472	1,568
Amortization of intangibles	(125,390)	(54,432)	(16,456)	(196,278)
Impact of foreign currency exchange	(1,769)	(8,157)	457	(9,469)
Balance as of December 31, 2019	$ 1,443,292	$ 466,564	$ 192,533	$ 2,102,389

The Company's goodwill and intangible assets which are denominated in currencies other than the U.S. Dollar are subject to foreign currency fluctuations. The Company's foreign currency translation gains and losses, including goodwill and intangibles, are a component of other comprehensive income and loss.

Estimated future amortization expense related to these intangibles is as follows (in thousands):

Years ending:	
2020	$ 190,222
2021	182,765
2022	178,780
2023	178,513
2024	177,733
Thereafter	1,194,376
Total	$ 2,102,389

Other Assets

Other assets consisted of the following as of December 31 (in thousands):

	2019	2018
Deferred tax assets, net	$ 35,806	$ 58,300
Prepaid expenses	61,690	125,158
Debt issuance costs, net	6,395	8,532
Deposits	56,567	54,986
Restricted cash	9,946	10,551
Derivative instruments	32,280	10,904
Contract assets, non-current	31,521	16,396
Contract costs	229,205	188,200
Equity method investments	59,737	10,000
Other assets	57,641	50,225
Total other assets	$ 580,788	$ 533,252

Accounts Payable and Accrued Expenses

Accounts payable and accrued expenses consisted of the following as of December 31 (in thousands):

	2019	2018
Accounts payable	$ 52,232	$ 96,980
Accrued compensation and benefits	241,361	235,697
Accrued interest	103,345	126,142
Accrued taxes [(1)]	135,099	118,818
Accrued utilities and security	107,404	78,547
Accrued professional fees	20,741	17,010
Accrued repairs and maintenance	10,699	10,736
Accrued other	89,837	72,762
Total accounts payable and accrued expenses	$ 760,718	$ 756,692

(1) Includes income taxes payable of $57.7 million and $67.9 million, respectively, as of December 31, 2019 and 2018.

Other Current Liabilities

Other current liabilities consisted of the following as of December 31 (in thousands):

	2019	2018
Deferred revenue, current	$ 76,193	$ 73,143
Customer deposits	16,707	20,430
Derivative instruments	31,596	8,812
Deferred rent	—	6,466
Dividends payable	9,029	8,795
Asset retirement obligations	2,081	6,776
Other current liabilities	18,332	2,573
Total other current liabilities	$ 153,938	$ 126,995

Other Liabilities

Other liabilities consisted of the following as of December 31 (in thousands):

	2019	2018
Asset retirement obligations	$ 100,334	$ 89,887
Deferred tax liabilities, net	247,179	247,849
Deferred revenue, non-current	46,555	46,641
Deferred rent	—	108,693
Accrued taxes	146,046	116,735
Dividends payable	7,108	6,545
Customer deposits	9,306	9,671
Derivative instruments	4,017	928
Other liabilities [(1)]	61,180	2,814
Total other liabilities	$ 621,725	$ 629,763

(1) The balance as of December 31, 2019 includes $41.4 million of liabilities recorded upon the closing of the Joint Venture, which represents the Company's obligation to pay for future construction that was not completed at the close of the transaction. See Note 5 for further discussion.

The following table summarizes the activities of the Company's asset retirement obligation ("ARO") (in thousands):

Asset retirement obligations as of December 31, 2016	$ 103,015
Additions	17,736
Adjustments [(1)]	(34,576)
Accretion expense	7,335
Impact of foreign currency exchange	5,029
Asset retirement obligations as of December 31, 2017	98,539
Additions	5,126
Adjustments [(1)]	(11,288)
Accretion expense	6,285
Impact of foreign currency exchange	(1,999)
Asset retirement obligations as of December 31, 2018	96,663
Additions	6,980
Adjustments [(1)]	(7,969)
Accretion expense	6,290
Impact of foreign currency exchange	451
Asset retirement obligations as of December 31, 2019	$ 102,415

(1) The ARO adjustments are primarily due to lease amendments and acquisition of real estate assets, as well as other adjustments.

8. Derivatives and Hedging Instruments

Derivatives Designated as Hedging Instruments

Net Investment Hedges. The Company is exposed to the impact of foreign exchange rate fluctuations on the value of investments in its foreign subsidiaries whose functional currencies are other than the U.S. Dollar. In order to mitigate the impact of foreign currency exchange rates, the Company has entered into various foreign currency debt obligations, which are designated as hedges against the Company's net investments in foreign subsidiaries. As of December 31, 2019 and 2018, the total principal amounts of foreign currency debt obligations designated as net investment hedges were $4,078.7 million and $4,139.8 million, respectively.

The Company also uses cross-currency interest rate swaps to hedge a portion of its net investment in its European operations. As of December 31, 2019, U.S. Dollar to Euro cross-currency interest rate swap contracts with a total notional amount of $750.0 million were outstanding, with maturity dates in April 2022, January 2024 and January 2025. At maturity of each outstanding contract, the Company will receive U.S. Dollars from and pay Euros to the contract counterparty. During the term of each contract, the Company receives interest payments in U.S. Dollars and makes interest payments in Euros based on a notional amount and fixed interest rates determined at contract inception. The Company did not have any cross-currency interest rate swaps outstanding as of December 31, 2018.

The effect of net investment hedges on accumulated other comprehensive income and the consolidated statements of operations for the years ended December 31, 2019, 2018 and 2017 was as follows (in thousands):

Amount of gain or (loss) recognized in accumulated other comprehensive income:

	Years Ended December 31,		
	2019	2018	2017
Foreign currency debt	$ 47,033	$ 218,269	$ (235,292)
Cross-currency interest rate swaps (included component) (1)	15,514	—	—
Cross-currency interest rate swaps (excluded component) (2)	10,737	—	—
Total	$ 73,284	$ 218,269	$ (235,292)

Amount of gain or (loss) recognized in earnings:

		Years Ended December 31,		
	Location of gain or (loss)	2019	2018	2017
Cross-currency interest rate swaps (excluded component) (2)	Interest expense	$ 19,261	$ —	$ —
Total		$ 19,261	$ —	$ —

(1) Included component represents foreign exchange spot rates.

(2) Excluded component represents cross-currency basis spread and interest rates.

Cash Flow Hedges. The Company hedges its foreign currency translation exposure for forecasted revenues and expenses in its EMEA region between the U.S. Dollar and the British Pound, Euro, Swedish Krona and Swiss Franc. The foreign currency forward and option contracts that the Company uses to hedge this exposure are designated as cash flow hedges. As of December 31, 2019 and 2018, the total notional amounts of these foreign exchange contracts were $824.8 million and $760.9 million, respectively.

The Company hedges the interest rate exposure created by anticipated fixed rate debt issuances through the use of treasury locks, which are designated as cash flow hedges. During the fourth quarter of 2019, we entered into and settled ten treasury locks designated as cash flow hedges with an aggregate notional amount of $1.5 billion, hedging anticipated fixed-rate debt issuances. The settlement of these contracts during the fourth quarter of 2019, resulted in a gain of $5.1 million, which was deferred and included as a component of other comprehensive income (loss), and is being amortized to interest expense over the life of the associated debt.

The Company enters into intercompany hedging instruments ("intercompany derivatives") with wholly-owned subsidiaries of the Company in order to hedge certain forecasted revenues and expenses denominated in currencies other than the U.S. Dollar. Simultaneously, the Company enters into derivative contracts with unrelated third parties to externally hedge the net exposure created by such intercompany derivatives.

The effect of cash flow hedges on accumulated other comprehensive income and the consolidated statements of operations for the years ended December 31, 2019, 2018 and 2017 was as follows (in thousands):

Amount of gain or (loss) recognized in accumulated other comprehensive income:

	Years Ended December 31,		
	2019	2018	2017
Foreign currency forward and option contracts (included component) (1)	$ (9,945)	$ 58,227	$ (73,437)
Foreign currency option contracts (excluded component) (2)	(1,807)	—	—
Treasury locks	4,972	—	—
Total	$ (6,780)	$ 58,227	$ (73,437)

Amount of gain or (loss) reclassified from accumulated other comprehensive income to income:

		Years Ended December 31,		
	Location of gain or (loss)	2019	2018	2017
Foreign currency forward contracts	Revenues	$ 80,046	$ (30,603)	$ 20,845
Foreign currency forward contracts	Costs and operating expenses	(41,262)	15,341	(11,183)
Treasury locks	Interest Expense	79	—	—
Total		$ 38,863	$ (15,262)	$ 9,662

Amount of gain or (loss) excluded from effectiveness testing and included in income:

		Years Ended December 31,		
	Location of gain or (loss)	2019	2018	2017
Foreign currency forward contracts	Other income (expense)	$ 88	$ 16,470	$ 3,805
Foreign currency option contracts (excluded component) (2)	Revenues	(1,082)	—	—
Total		$ (994)	$ 16,470	$ 3,805

(1) Included component represents foreign exchange spot rates.
(2) Excluded component represents option's time value.

As of December 31, 2019, the Company's foreign currency cash flow hedge instruments had maturity dates ranging from January 2020 to December 2021 and the Company recorded a net gain of $16.3 million within accumulated other comprehensive income (loss) relating to cash flow hedges that will be reclassified to revenues and expenses as they mature in the next 12 months. As of December 31, 2018, the Company's foreign currency cash flow hedge instruments had maturity dates ranging from January 2019 to December 2020 and the Company recorded a net gain of $21.4 million within accumulated other comprehensive income (loss) relating to cash flow hedges that will be reclassified to revenues and expenses as they mature in the next 12 months. As of December 31, 2019, the Company had no interest rate cash flow hedges outstanding. The net gain in accumulated other comprehensive income (loss) to be reclassified to interest expense in the next 12 months for settled interest rate cash flow hedges is $0.7 million.

Derivatives Not Designated as Hedging Instruments

Embedded Derivatives. The Company is deemed to have foreign currency forward contracts embedded in certain of the Company's customer agreements that are priced in currencies different from the functional or local currencies of the parties involved. These embedded derivatives are separated from their host contracts and carried on the Company's balance sheet at their fair value. The majority of these embedded derivatives arise as a result of the Company's foreign subsidiaries pricing their customer contracts in U.S. Dollars.

Economic Hedges of Embedded Derivatives. The Company uses foreign currency forward contracts to manage the foreign exchange risk associated with the Company's customer agreements that are priced in currencies different from the functional or local currencies of the parties involved ("economic hedges of embedded derivatives"). Foreign currency forward contracts represent agreements to exchange the currency of one country for the currency of another country at an agreed-upon price on an agreed-upon settlement date.

Foreign Currency Forward Contracts. The Company also uses foreign currency forward contracts to manage the foreign exchange risk associated with certain foreign currency-denominated monetary assets and liabilities. As a result of foreign currency fluctuations, the U.S. Dollar equivalent values of its foreign currency-denominated monetary assets and liabilities change. Gains and losses on these contracts are included in other income (expense), on a net basis, along with the foreign currency gains and losses of the related foreign currency-denominated monetary assets and liabilities associated with these foreign currency forward contracts. As of December 31, 2019 and 2018, the total notional amounts of these foreign currency contracts were $2,467.0 million and $1,500.4 million, respectively.

The following table presents the effect of derivatives not designated as hedging instruments in the Company's consolidated statements of operations (in thousands):

Amount of gain or (loss) recognized in earnings:

		Years Ended December 31,		
	Location of gain or (loss)	**2019**	**2018**	**2017**
Embedded derivatives	Revenues	$ 63	$ 618	$ (6,756)
Economic hedge of embedded derivatives	Revenues	550	(877)	1,655
Foreign currency forward contracts	Other income (expense)	36,846	91,233	(68,962)
Total		$ 37,459	$ 90,974	$ (74,063)

Fair Value of Derivative Instruments

The following table presents the fair value of derivative instruments recognized in the Company's consolidated balance sheets as of December 31, 2019 and 2018 (in thousands):

	December 31, 2019		December 31, 2018	
	Assets (1)	**Liabilities (2)**	**Assets (1)**	**Liabilities (2)**
Designated as hedging instruments:				
Cash flow hedges				
Foreign currency forward and option contracts	$ 24,853	$ 5,898	$ 38,606	$ 865
Net investment hedges				
Cross-currency interest rate swaps	26,251	—	—	—
Total designated as hedging	51,104	5,898	38,606	865
Not designated as hedging instruments:				
Embedded derivatives	4,595	2,268	4,656	2,426
Economic hedges of embedded derivatives	1,367	—	525	180
Foreign currency forward contracts	641	27,446	29,287	6,269
Total not designated as hedging	6,603	29,714	34,468	8,875
Total Derivatives	$ 57,707	$ 35,612	$ 73,074	$ 9,740

(1) As presented in the Company's condensed consolidated balance sheets within other current assets and other assets.
(2) As presented in the Company's condensed consolidated balance sheets within other current liabilities and other liabilities.

Offsetting Derivative Assets and Liabilities

The Company presents its derivative instruments and the accrued interest related to cross-currency interest rate swaps at gross fair values in the condensed consolidated balance sheets. The Company enters into master netting agreements with its counterparties for transactions other than embedded derivatives to mitigate credit risk exposure to any single counterparty. Master netting agreements allow for individual derivative contracts with a single counterparty to offset in the event of default. For presentation on the consolidated balance sheets, the Company does not offset fair value amounts recognized for derivative instruments or the accrued interest related to cross-currency interest rate swaps under master netting arrangements. The following table presents information related to these offsetting arrangements as of December 31, 2019 and 2018 (in thousands):

	Gross Amounts Offset in Consolidated Balance Sheet				
	Gross Amounts	**Gross Amounts Offset in the Balance Sheet**	**Net Amounts**	**Gross Amounts not Offset in the Balance Sheet**	**Net**
December 31, 2019					
Derivative assets	$ 76,640	$ —	$ 76,640	$ (37,820)	$ 38,820
Derivative liabilities	45,832	—	45,832	(37,820)	8,012
December 31, 2018					
Derivative assets	$ 73,074	$ —	$ 73,074	$ (6,517)	$ 66,557
Derivative liabilities	9,740	—	9,740	(6,517)	3,223

9. Fair Value Measurements

Valuation Methods

Fair value estimates are made as of a specific point in time based on methods using the market approach valuation method which uses prices and other relevant information generated by market transactions involving identical or comparable assets or liabilities or other valuation techniques. These techniques involve uncertainties and are affected by the assumptions used and the judgments made regarding risk characteristics of various financial instruments, discount rates, estimates of future cash flows, future expected loss experience and other factors.

Cash Equivalents and Investments. The fair value of the Company's investments in money market funds approximates their face value. Such instruments are included in cash equivalents. The Company's money market funds and publicly traded equity securities are classified within Level 1 of the fair value hierarchy because they are valued using quoted prices for identical instruments in active markets. The fair value of the Company's other investments, including certificates of deposit, approximates their face value. The fair value of these investments is priced based on the quoted market price for similar instruments or nonbinding market prices that are corroborated by observable market data. Such instruments are classified within Level 2 of the fair value hierarchy. The Company determines the fair values of its Level 2 investments by using inputs such as actual trade data, benchmark yields, broker/dealer quotes and other similar data, which are obtained from quoted market prices, custody bank, third-party pricing vendors or other sources. The Company uses such pricing data as the primary input to make its assessments and determinations as to the ultimate valuation of its investment portfolio and has not made, during the periods presented, any material adjustments to such inputs. The Company is responsible for its consolidated financial statements and underlying estimates.

The Company uses the specific identification method in computing realized gains and losses. Realized gains and losses from the sale of investments are included within other income (expense) in the Company's consolidated statements of operations. The Company's investments in publicly traded equity securities are carried at fair value. Subsequent to the adoption of ASU 2016-01, unrealized gains and losses on publicly traded equity securities are reported within other income (expense) in the Company's consolidated statements of operations. Prior to the adoption of ASU 2016-01, unrealized gains and losses on publicly traded equity securities were reported in stockholders' equity as a component of other comprehensive income or loss. Upon adoption of ASU 2016-01, the Company recorded a net cumulative effect increase of $2.1 million to retained earnings.

Derivative Assets and Liabilities. Inputs used for valuations of derivatives are based upon quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, and model-based valuation techniques for which all significant inputs are observable in the market or can be corroborated by observable market data. The significant inputs used include spot currency rates and forward points, interest rate curves, and published credit default swap rates of its foreign exchange trading counterparties and other comparable companies. The Company has determined that the inputs used to value its derivatives fall within Level 2 of the fair value hierarchy, therefore the derivatives are categorized as Level 2.

During the years ended December 31, 2019 and 2018, the Company did not have any nonfinancial assets or liabilities measured at fair value on a recurring basis.

The Company's financial assets and liabilities measured at fair value on a recurring basis as of December 31, 2019 were as follows (in thousands):

	Fair Value at December 31, 2019	Fair Value Measurement Using Level 1	Fair Value Measurement Using Level 2
Assets:			
Money market and deposit accounts	$ 886,547	$ 886,547	$ —
Publicly traded equity securities	2,779	2,779	—
Certificates of deposit	7,583	—	7,583
Derivative instruments	57,707	—	57,707
	$ 954,616	$ 889,326	$ 65,290
Liabilities:			
Derivative instruments	$ 35,612	$ —	$ 35,612

The Company's financial assets and liabilities measured at fair value on a recurring basis at December 31, 2018 were as follows (in thousands):

	Fair Value at December 31, 2018	Fair Value Measurement Using Level 1	Fair Value Measurement Using Level 2
Assets:			
Money market and deposit accounts	$ 119,518	$ 119,518	$ —
Publicly traded equity securities	1,717	1,717	—
Certificates of deposit	2,823	—	2,823
Derivative instruments	73,074	—	73,074
	$ 197,132	$ 121,235	$ 75,897
Liabilities:			
Derivative instruments	$ 9,740	$ —	$ 9,740

The Company did not have any Level 3 financial assets or financial liabilities during the years ended December 31, 2019 and 2018.

10. Leases

Significant Lease Transactions

Hong Kong 4 ("HK4") Data Center

In August 2018, the Company entered into a lease agreement with the landlord to lease the remaining floors of the HK4 Data Center. The lease did not commence until May 2019. The lease has an initial term of 9.4 years and one 10-year renewal option which the Company determined it was not reasonably certain to exercise. The Company therefore excluded the renewal option from the lease term. The Company assessed the lease classification of the HK4 lease at the commencement date and determined the lease should be accounted for as an operating lease. During the three months ended June 30, 2019, the Company recorded operating lease ROU asset and liability of 317.3 million Hong Kong dollars, or $40.6 million at the exchange rate in effect on June 30, 2019.

Seoul 1 ("SL1") Data Center

In October 2018, the Company entered into a lease agreement with the landlord for several leased spaces in SL1 Data Center. Phase 1 commenced in August 2019 with an initial term of 5 years. The lease includes three 5-year renewal options. The Company concluded that one renewal option of 5 years is reasonably certain to be exercised after considering all relevant factors that create an economic incentive for the Company. The Company assessed the lease classification of the SL1 lease at the commencement date and determined the lease should be accounted for as a finance lease. During the three months ended September 30, 2019, the Company recorded finance lease ROU asset and liability of 35,747 million Korean Won and 34,804 million Korean Won, respectively, or $29.9 million and $29.1 million, respectively, at the exchange rate in effect on September 30, 2019.

Tokyo 11 ("TY11") Data Center

In July 2019, the Company entered into two new lease agreements for building I and building II in TY11 Data Center for a lease term of 28.6 years. At the same time, the Company terminated the original lease agreement of certain leased space in building I. The new spaces in building I and building II provide additional right-of-use assets that are not included in the original lease agreement and the lease payments for the new spaces are commensurate with the stand-alone price of the additional right-of-use assets. As a result, the Company concluded the new spaces in building I and building II met the criteria to be treated as a separate contract and did not modify the accounting treatment of the original leased space. The Company assessed the lease classification of TY11 leases at the commencement date and determined that the leases for both the new spaces in building I and building II should be accounted for as finance leases. During the three months ended September 30, 2019, the Company recorded finance lease ROU asset and liability of ¥6,922.3 million in aggregate for both new spaces in building I and II, or approximately $64.0 million at the exchange rate in effect on September 30, 2019.

Singapore 4 ("SG4") Data Center

In July 2019, the Company entered into a lease agreement with the landlord to lease the land and building for its new SG4 Data Center. The initial lease term is 25 years with a renewal option to extend the lease until 2053. The Company determined the renewal option was not reasonably certain to exercise; therefore, the renewal option was not included in the lease term. The Company assessed the lease classification of the SG4 lease at the commencement date and determined that the lease for the building and land components should be accounted for as a finance lease and an operating lease, respectively. During the three months ended September 30, 2019, the Company recorded finance lease ROU asset and liability of 75.5 million Singapore dollars, or approximately $54.6 million, and operating lease ROU asset and liability of 48.5 million Singapore dollars, or approximately $35.1 million, at the exchange rate in effect on September 30, 2019.

Silicon Valley 3 ("SV3") Data Center

In July 2019, the Company entered into a lease agreement with the landlord to extend the term of the SV3 lease for an additional 12 years. The lease includes two 5-year renewal options which the Company determined it was not reasonably certain to exercise; therefore, the renewal options were not included in the lease term. The SV3 lease renewal is accounted for as a lease modification. The Company assessed the lease classification of the SV3 lease at modification date and determined that the lease for the building and land components should be accounted for as a finance lease and an operating lease, respectively. During the three months ended September 30, 2019, the Company recorded incremental finance lease ROU asset and liability of $39.9 million. The Company also recorded an incremental operating lease ROU asset and liability of $13.1 million.

Hong Kong 1 ("HK1") Data Center

In October 2019, the Company extended certain leased spaces in HK1 Data Center for another 18 years. The HK1 lease is accounted for as a lease modification. The Company assessed the lease classification of the HK1 lease at modification date and determined that the lease should be accounted for as a finance lease. The Company recorded finance lease ROU asset and liability of 426.0 million Hong Kong dollars, or approximately $54.7 million at the exchange rate in effect on December 31, 2019.

Toronto 2 ("TR2") Data Center

In October 2019, the Company entered into an agreement with the landlord to purchase the TR2 Data Center for 223 million Canadian dollars, or approximately $171.8 million at the exchange rate in effect on December 31, 2019. The deal was closed on December 18, 2019. As part of the transaction, the Company assumed the outstanding mortgage financing on the property of 56.9 million Canadian dollars, or approximately $43.8 million, at the exchange rate in effect on December 31, 2019 (see Note 11). The cash consideration was reduced by the outstanding mortgage amount. The Company had previously accounted for the TR2 land and building as operating and finance leases, respectively. Upon the purchase, the Company effectively terminated the leases and settled the operating and finance lease liabilities of 13.1 million Canadian dollars and 61.7 million Canadian dollars, respectively, or approximately $10.1 million and $47.5 million, respectively, at the exchange rate in effect on December 31, 2019. The Company also derecognized operating lease and finance lease ROU assets of 13.1 million Canadian dollars and 49.2 million Canadian dollars, respectively, or approximately $10.1 million and $37.9 million, respectively, at the exchange rate in effect on December 31, 2019. The Company recorded land and building of 135.3 million Canadian dollars and 85.0 million Canadian dollars, respectively, or approximately $104.3 million and $65.5 million, respectively, at the exchange rate in effect on December 31, 2019.

London 10 ("LD10") Data Center

In October 2019, the Company signed a sub-lease agreement with the Joint Venture to sub-lease a portion of Equinix's former LD10 Data Center for 15 years. The sub-lease agreement includes one 5-year renewal option which the Company determined it was not reasonably certain to exercise; therefore, the renewal option was not included in the lease term. Additionally, Equinix and the Joint Venture signed an agreement for the Joint Venture to operate the leased space for 15 years. The Company determined that the sub-lease and other agreements should be combined into a single contract as the contracts were negotiated at the same time and with the same commercial objective to operate a data center. The Company assessed the lease classification of the lease at the commencement date and determined the lease should be accounted for as a finance lease. The Company recorded finance lease ROU asset and liability of £103.2 million, or approximately $136.7 million at the exchange rate in effect on December 31, 2019.

Lease Expenses

The components of lease expenses are as follows (in thousands):

		Twelve Months Ended December 31, 2019
Finance lease cost		
Amortization of right-of-use assets [(1)]	$	82,893
Interest on lease liabilities		110,688
Total finance lease cost		193,581
Operating lease cost		219,021
Total lease cost	$	412,602

(1) Amortization of right-of-use assets is included with depreciation expense, and is recorded within cost of revenues, sales and marketing and general and administrative expenses in the consolidated statements of operations.

Other Information

Other information related to leases is as follows (in thousands, except years and percent):

		Twelve Months Ended December 31, 2019
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows from finance leases	$	107,000
Operating cash flows from operating leases		210,848
Financing cash flows from finance leases		126,486
Right-of-use assets obtained in exchange for lease obligations: [(1)]		
Finance leases	$	387,808
Operating leases		145,025
		As of December 31, 2019
Weighted-average remaining lease term - finance leases [(2)]		15 years
Weighted-average remaining lease term - operating leases [(2)]		13 years
Weighted-average discount rate - finance leases		9 %
Weighted-average discount rate - operating leases		4 %
Finance lease assets [(3)]	$	1,277,614

(1) Represents all non-cash changes in ROU assets.
(2) Includes lease renewal options that are reasonably certain to be exercised.
(3) Finance lease assets, net of accumulated amortization of $474.8 million, are recorded within property, plant and equipment, net on the consolidated balance sheets.

Maturities of Lease Liabilities

Maturities of lease liabilities under Topic 842 as of December 31, 2019 are as follows (in thousands):

	Operating Leases	Finance Leases	Total
2020	$ 193,663	$ 173,994	$ 367,657
2021	191,954	176,357	368,311
2022	183,908	176,992	360,900
2023	168,353	178,289	346,642
2024	156,502	177,338	333,840
Thereafter	1,106,944	1,739,235	2,846,179
Total lease payments	2,001,324	2,622,205	4,623,529
Plus amount representing residual property value	—	18,164	18,164
Less imputed interest	(540,062)	(1,134,248)	(1,674,310)
Total	$ 1,461,262	$ 1,506,121	$ 2,967,383

For the year ended December 31, 2018, the Company's operating lease, capital lease and other financing obligations under ASC Topic 840 are summarized as follows (in thousands):

	Capital Lease Obligations	Other Financing Obligations [1]	Total Capital Lease and Other Financing Obligations	Operating Leases
2019	$ 103,859	$ 80,292	$ 184,151	$ 187,280
2020	97,326	73,266	170,592	179,515
2021	95,414	73,672	169,086	166,159
2022	94,954	73,856	168,810	158,115
2023	95,463	69,423	164,886	147,677
Thereafter	878,755	722,496	1,601,251	1,130,494
Total minimum lease payments	1,365,771	1,093,005	2,458,776	1,969,240
Plus amount representing residual property value	—	389,643	389,643	—
Less amount representing interest	(602,026)	(727,472)	(1,329,498)	—
Present value of net minimum lease payments	763,745	755,176	1,518,921	1,969,240
Less current portion	(43,498)	(34,346)	(77,844)	—
Total	$ 720,247	$ 720,830	$ 1,441,077	$ 1,969,240

[1] Other financing obligations are primarily related to build-to-suit arrangements.

The Company entered into lease agreements with various landlords primarily for data center spaces and ground lease which have not yet commenced as of December 31, 2019. These leases will commence between fiscal years 2020 and 2022, with lease terms of 10 to 49 years and a total lease commitment of approximately $608.1 million.

11. Debt Facilities

Mortgage and Loans Payable

The Company's mortgage and loans payable consisted of the following as of December 31 (in thousands):

	2019	2018
Term loans	$ 1,287,151	$ 1,344,482
Mortgage payable and other loans payable	82,967	44,042
	1,370,118	1,388,524
Less the amount representing unamortized debt discount and debt issuance cost	(4,849)	(6,614)
Add the amount representing unamortized mortgage premium	1,768	1,882
	1,367,037	1,383,792
Less current portion	(77,603)	(73,129)
	$ 1,289,434	$ 1,310,663

Senior Credit Facility

On December 12, 2017, the Company entered into a credit agreement with a group of lenders for a $3,000.0 million credit facility ("Senior Credit Facility"), comprised of a $2,000.0 million senior unsecured multicurrency revolving credit facility ("Revolving Facility") and an approximately $1,000.0 million senior unsecured multicurrency term loan facility ("Term Loan Facility"). The Senior Credit Facility contains customary covenants, including financial covenants which require the Company to maintain certain financial coverage and leverage ratios, as well as customary events of default. The Senior Credit Facility has a 5 year term, maturing on December 12, 2022.

Revolving Facility

The Revolving Facility allows the Company to borrow, repay and reborrow over its term. The Revolving Facility provides a sublimit for the issuance of letters of credit of up to $250.0 million at any one time. Borrowings under the Revolving Facility bear interest at a rate based on a benchmark rate defined in the credit agreement plus a margin that can vary from 0.85% to 1.40% or, at the Company's option, the base rate, which is defined as the highest of (a) the Federal Funds Rate plus 0.5%, (b) the Bank of America prime rate and (c) one-month LIBOR plus 1% plus a margin that can vary from 0.0% to 0.4%. The Company is required to pay a quarterly letter of credit fee on the face amount of each letter of credit, which fee is based on the same margin that applies from time to time to borrowings under the Revolving Facility. The Company is also required to pay a quarterly facility fee ranging from 0.15% to 0.30% per annum based on the total Revolving Facility amount.

Term Loan Facility

On December 12, 2017, the Company borrowed £500.0 million and SEK 2,800.0 million under the Term Loan Facility, or approximately $997.1 million at the exchange rates in effect on that date. The Company is required to repay the Term Loan Facility at the rate of 5% of the original principal amount per annum with the remaining balance to be repaid in full at the maturity of the Senior Credit Facility. The Term Loan Facility bears interest at a rate based on LIBOR plus a margin that can vary from 1.00% to 1.70%. As of December 31, 2019, the Company had £456.3 million and SEK2,555.0 million, or approximately $877.0 million in U.S. dollars at the exchange rates in effect as of December 31, 2019, outstanding under the Term Loan Facility with a weighted average effective interest rate of 1.86% per annum. Debt issuance costs related to the Term Loan Facility, net of amortization, were $1.7 million as of December 31, 2019.

On July 26, 2018, the Company entered into an amendment to its Senior Credit Facility. The amendment provided for a senior unsecured term loan in an aggregate principal amount of ¥47.5 billion (the "JPY Term Loan"). On July 31, 2018, the Company drew down the full ¥47.5 billion of the JPY Term Loan, or approximately $424.7 million at the exchange rate effective on July 31, 2018, and prepaid the remaining principal of its existing Japanese Yen Term Loan of ¥43.8 billion or approximately $391.3 million. The Company is required to repay the JPY Term Loan at the rate of 5% of the original principal amount per annum with the remaining balance to be repaid in full at the maturity of the Senior Credit Facility. The JPY Term Loan bears interest at a rate based on LIBOR plus a margin that can vary from 1.00% to 1.70% and contains customary covenants consistent with the Senior Credit Facility. As of December 31, 2019, total outstanding borrowings under the JPY Term Loan were ¥44.5 billion, or approximately $410.1 million at the exchange rate effective on that date, with an effective interest rate of 1.74%. Debt issuance costs, net of amortization, related to the JPY Term Loan were $3.2 million as of December 31, 2019.

Mortgage Payable

In October 2013, as a result of the Frankfurt Kleyer 90 Carrier Hotel Acquisition, the Company assumed a mortgage payable of $42.9 million with an effective interest rate of 4.25%. The mortgage payable has monthly principal and interest payments and has an expiration date of August 2022.

In December 2019, as a result of the TR2 Data Center purchase as described in Note 10 above, the Company assumed a mortgage payable of $43.8 million with an effective interest rate of 3.63%. The mortgage payable has monthly principal and interest payments and has an expiration date of November 2029.

Senior Notes

The Company's senior notes consisted of the following as of December 31 (in thousands):

			2019		2018	
Senior Notes	**Issuance Date**	**Maturity Date**	**Amount**	**Effective Rate**	**Amount**	**Effective Rate**
5.000% Infomart Senior Notes	April 2018	April 2019 - April 2021	$ 450,000	4.46%	$ 750,000	4.40%
5.375% Senior Notes due 2022	November 2014	January 2022	343,711	5.56%	750,000	5.56%
5.375% Senior Notes due 2023	March 2013	April 2023	—	—%	1,000,000	5.51%
2.625% Senior Notes due 2024	November 2019	November 2024	1,000,000	2.79%	—	—%
2.875% Euro Senior Notes due 2024	March 2018	March 2024	841,500	3.08%	859,125	3.08%
5.750% Senior Notes due 2025	November 2014	January 2025	—	—%	500,000	5.88%
2.875% Euro Senior Notes due 2025	September 2017	October 2025	1,122,000	3.04%	1,145,500	3.04%
2.900% Senior Notes due 2026	November 2019	November 2026	600,000	3.04%	—	—%
5.875% Senior Notes due 2026	December 2015	January 2026	1,100,000	6.03%	1,100,000	6.03%
2.875% Euro Senior Notes due 2026	December 2017	February 2026	1,122,000	3.04%	1,145,500	3.04%
5.375% Senior Notes due 2027	March 2017	May 2027	1,250,000	5.51%	1,250,000	5.51%
3.200% Senior Notes due 2029	November 2019	November 2029	1,200,000	3.30%	—	—%
			9,029,211		8,500,125	
Less amount representing unamortized debt discount and debt issuance cost			(78,030)		(75,372)	
Add amount representing unamortized debt premium			1,716		5,031	
			8,952,897		8,429,784	
Less current portion			(643,224)		(300,999)	
			$ 8,309,673		$ 8,128,785	

2.625% Senior Notes due 2024, 2.900% Senior Notes due 2026 and 3.200% Senior Notes due 2029

On November 18, 2019, the Company issued $1.0 billion aggregate principal amount of 2.625% senior notes due 2024 (the “2024 Notes”), $600.0 million aggregate principal amount of 2.900% senior notes due 2026 (the “2026 Notes”) and $1.2 billion aggregate principal amount of 3.200% senior notes due 2029 (the “2029 Notes”). Interest on these notes is payable semi-annually on May 18 and November 18 of each year, commencing on May 18, 2020. Debt issuance costs and debt discounts related to the 2024 Notes, the 2026 Notes and the 2029 Notes were $8.1 million, $5.9 million and $11.5 million, respectively.

Tender and Redemption of 5.375% Senior Notes due 2022, 5.375% Senior Notes due 2023 and 5.750% Senior Notes due 2025

On November 6, 2019, the Company announced a cash tender offer to purchase any and all of its outstanding 5.375% Senior Notes due 2022 (the “2022 Notes”), 5.375% Senior Notes due 2023 (the “2023 Notes”) and 5.750% Senior Notes due 2025 (the “2025 Notes”), with an aggregated principal amount of $2.25 billion. On November 18, 2019, the Company closed the tender offer and completed the purchase of $1.24 billion in aggregate principal amount of the 2022, 2023 and 2025 Notes. In connection with this tender offer, the Company paid a tender premium of $27.2 million. On December 16, 2019, the Company redeemed the remaining $662.7 million principal amount of the 2023 and 2025 Notes. The purchase of the 2022, 2023 and 2025 Notes under the tender offer and the subsequent redemption of the 2023 and 2025 Notes were funded with a portion of the net cash proceeds from the issuance of 2024, 2026 and 2029 Notes as described above.

All of the Company's senior notes are unsecured and rank equal in right of payment to the Company's existing or future senior indebtedness and senior in right of payment to the Company's existing and future subordinated indebtedness. Interest on the senior notes is paid semi-annually in arrears. The senior notes are effectively subordinated to all of the existing and future secured debt, including debt outstanding under any bank facility or secured by any mortgage, to the extent of the assets securing such debt. They are also structurally subordinated to any existing and future indebtedness and other liabilities (including trade payables) of any of the Company's subsidiaries.

Each series of senior notes is governed by an indenture and a supplemental indenture between the Company and U.S. Bank National Association, as trustee. These supplemental indentures contain covenants that limit the Company's ability and the ability of its subsidiaries to, among other things:

- purchase, redeem or retire capital stock or subordinated debt;
- incur liens [1];
- enter into sale-leaseback transactions [1];
- make investments; and
- merge or consolidate with any other person [1].

(1) The supplemental indentures for the 5.000% Infomart Senior Notes, 2.875% Euro Senior Notes due 2024, 2.625% Senior Notes due 2024, 2.875% Euro Senior Notes due 2026, 2.900% Senior Notes due 2026, and 3.200% Senior Notes due 2029 only contain covenants footnoted with [1].

As of December 31, 2019, the Company was in compliance with all covenants. Subject to compliance with the limitations described above, the Company may issue an unlimited principal amount of additional notes at later dates under the same indenture as the senior notes.

The Company is not required to make any mandatory redemption with respect to the senior notes; however, upon the event of a change in control, the Company may be required to offer to purchase the senior notes.

Optional Redemption Schedule

Each series of the Company's senior notes, with the exception of 5.000% Infomart Senior Notes, provide for optional redemption. Six series of the Company's senior notes provide for optional redemption as summarized below:

Senior Notes Description	Early Equity Redemption Price (1)	First Scheduled Redemption Date (2)	First Scheduled Redemption Price	Second Year Redemption Price	Third Year Redemption Price	Fourth Year (if scheduled) Redemption Price
5.375% Senior Notes due 2022	105.375%	January 1, 2018	104.031%	102.688%	101.344%	100.000%
2.875% Euro Senior Notes due 2024	102.875%	September 15, 2020	101.438%	100.719%	100.000%	
2.875% Euro Senior Notes due 2025	102.875%	October 1, 2020	101.438%	100.719%	100.000%	
5.875% Senior Notes due 2026	105.875%	January 15, 2021	102.938%	101.958%	100.979%	100.000%
2.875% Euro Senior Notes due 2026	102.875%	February 1, 2021	101.438%	100.719%	100.000%	
5.375% Senior Notes due 2027	105.375%	May 15, 2022	102.688%	101.792%	100.896%	100.000%

(1) Within 90 days of the closing of one or more equity offerings and at any time prior to the first scheduled redemption date, the Company may redeem up to 35% of the aggregate principal amount of any series of senior notes outstanding, at the respective early equity redemption price, plus accrued and unpaid interest to the redemption date, provided that at least 65% of the aggregate principal amount of the senior notes issued in such series remains outstanding immediately after such redemption(s).

(2) On or after the first scheduled redemption date, the Company may redeem all or a part of a series of senior notes at the first scheduled redemption price plus accrued and unpaid interest thereon, if redeemed during the 12 month period beginning on the first scheduled redemption date and at reduced scheduled redemption prices during the 12 or 18 month periods beginning on the anniversaries of the first scheduled redemption date.

At any time prior to the first scheduled redemption date, the Company may redeem all or a part of any series of senior notes at a redemption price equal to 100% of the principal amount of such senior notes redeemed plus an applicable premium and accrued and unpaid interest, subject to the rights of the holders of record of such senior notes on the relevant record date to receive interest due on the relevant interest payment date.

With respect to the 2024 Notes, the 2026 Notes and the 2029 Notes, the Company may redeem at its election, at any time or from time to time, some or all of the notes of any series before they mature. The redemption price will equal the sum of (1) an amount equal to one hundred percent (100%) of the principal amount of the notes being redeemed plus accrued and unpaid interest up to, but not including, the redemption date and (2) a make-whole premium. If the 2024 Notes are redeemed on or after October 18, 2024, the 2026 Notes are redeemed on or after September 18, 2026, or the 2029 Notes are redeemed on or after August 18, 2029, in each case, the redemption price will not include a make-whole premium for the applicable notes.

Loss on Debt Extinguishment

During the year ended December 31, 2019, the Company recorded $52.8 million of loss on debt extinguishment primarily comprised of:

- $52.9 million of loss on debt extinguishment from the tender and subsequent redemption of the 2022, 2023 and 2025 Notes, which included $43.3 million tender and redemption premium that was paid in cash and $9.6 million related to the write-off of unamortized debt issuance costs.

During the year ended December 31, 2018, the Company recorded $51.4 million of loss on debt extinguishment comprised of:

- $17.1 million of loss on debt extinguishment as a result of amendments to leases impacting the related financing obligations;
- $19.5 million of loss on debt extinguishment from the settlement of financing obligations as a result of the Infomart Dallas Acquisition;

- $12.6 million of loss on debt extinguishment as a result of the settlement of financing obligations for properties purchased; and
- $2.2 million of loss on debt extinguishment as a result of the redemption of the Japanese Yen Term Loan.

During the year ended December 31, 2017, the Company recorded $65.8 million of loss on debt extinguishment comprised of:

- $14.6 million of loss on debt extinguishment from the redemption of senior notes, which included $12.2 million redemption premium that was paid in cash and $2.4 million related to the write-off of unamortized debt issuance costs;
- $22.5 million of loss on debt extinguishment from the redemption of term loans;
- $16.7 million of loss on debt extinguishment as a result of amendments to leases and financing obligations; and
- $12.0 million of loss on debt extinguishment from the settlement of financing obligations as a result of properties purchased.

Maturities of Debt Instruments

The following table sets forth maturities of the Company's debt, including mortgage and loans payable, and senior notes, gross of debt issuance costs, debt discounts and debt premiums, as of December 31, 2019 (in thousands):

Years ending:		
2020	$	721,314
2021		227,654
2022		1,180,017
2023		6,683
2024		1,847,714
Thereafter		6,417,715
	$	10,401,097

Fair Value of Debt Instruments

The following table sets forth the estimated fair values of the Company's mortgage and loans payable and senior notes as of December 31 (in thousands):

		2019		2018
Mortgage and loans payable	$	1,378,429	$	1,389,632
Senior notes		9,339,497		8,422,211

The fair values of the mortgage and loans payable and 5.000% Infomart Senior Notes, which were not publicly traded, were estimated by considering the Company's credit rating, current rates available to the Company for debt of the same remaining maturities and terms of the debt (level 2). The fair value of the senior notes, which were traded in the public debt market, was based on quoted market prices (level 1).

Interest Charges

The following table sets forth total interest costs incurred and total interest costs capitalized for the years ended December 31 (in thousands):

	2019	2018	2017
Interest expense	$ 479,684	$ 521,494	$ 478,698
Interest capitalized	32,173	19,880	22,625
Interest charges incurred	$ 511,857	$ 541,374	$ 501,323

Total interest paid, net of capitalized interest, during the years ended December 31, 2019, 2018 and 2017 was $521.6 million, $476.9 million and $422.2 million, respectively.

12. Stockholders' Equity

The Company's authorized share capital is 300,000,000 shares of common stock and 100,000,000 shares of preferred stock, of which 25,000,000 is designated Series A, 25,000,000 is designated as Series A-1 and 50,000,000 is undesignated. As of December 31, 2019 and 2018, the Company had no preferred stock issued and outstanding.

Common Stock

In March 2017, the Company issued and sold 6,069,444 shares of its common stock in a public offering pursuant to a registration statement and a related prospectus and prospectus supplement. The Company received net proceeds of approximately $2,126.3 million, net of underwriting discounts, commissions and offering expenses. In March 2019, the Company issued and sold 2,985,575 shares of common stock in a public offering pursuant to a registration statement and a related prospectus and prospectus supplement. The Company received net proceeds of approximately $1,213.4 million, net of underwriting discounts, commissions and offering expenses.

In August 2017, the Company established an "at the market" equity offering program (the "2017 ATM Program"), under which the Company may, from time to time, offer and sell shares of its common stock to or through sales agents up to an aggregate of $750.0 million. For the year ended December 31, 2018 and 2017, the Company sold 930,934 shares and 763,201 shares, respectively, for approximately $388.2 million and $355.1 million, respectively, net of payment of commissions to the sales agents and estimated equity offering costs. As of December 31, 2018, no shares remained available for sale under the 2017 ATM Program. In December 2018, the Company established another ATM program, under which it may, from time to time, offer and sell up to an aggregate of $750.0 million of its common stock to or through sales agents in "at the market" transactions (the "2018 ATM Program"). For the year ended December 31, 2019, the Company sold 903,555 shares for approximately $447.5 million, net of payment of commissions to sales agents and other offering expenses, under the 2018 ATM Program.

As of December 31, 2019, the Company had reserved the following authorized but unissued shares of common stock for future issuances:

Common stock options and restricted stock units	3,334,130
Common stock employee purchase plans	2,973,785
Total	6,307,915

Accumulated Other Comprehensive Loss

The changes in accumulated other comprehensive loss, net of tax, by components are as follows (in thousands):

	December 31, 2016	Net Change	December 31, 2017	Net Change	Cumulative Effect Adjustment	December 31, 2018	Net Change	December 31, 2019
Foreign currency translation adjustment ("CTA") gain (loss)	$ (1,031,129)	$ 454,269	$ (576,860)	$ (421,743)	$ —	$ (998,603)	$ (58,315)	$ (1,056,918)
Unrealized gain (loss) on cash flow hedges (1)	30,704	(54,895)	(24,191)	43,671	—	19,480	(3,842)	15,638
Net investment hedge CTA gain (loss) (1)	49,989	(235,292)	(185,303)	219,628	—	34,325	73,294	107,619
Unrealized gain (loss) on available for sale securities (2)	2,110	14	2,124	—	(2,124)	—	—	—
Net actuarial gain (loss) on defined benefit plans (3)	(816)	(143)	(959)	55	—	(904)	(48)	(952)
	$ (949,142)	$ 163,953	$ (785,189)	$ (158,389)	$ (2,124)	$ (945,702)	$ 11,089	$ (934,613)

(1) Refer to Note 8 for a discussion of the amounts reclassified from accumulated other comprehensive loss to net income.

(2) Upon adoption of ASU 2016-01 during the three months ended March 31, 2018, the Company recorded a net cumulative effect adjustment of $2.1 million from accumulated other comprehensive loss to retained earnings. The realized gains and losses reclassified from accumulated other comprehensive loss to net income as a result of sale of available for sale securities were not significant for the years ended December 31, 2017 and 2016.

(3) The Company has a defined benefit pension plan covering all employees in one country where such plans are mandated by law. The Company does not have any defined benefit plans in any other countries. The unamortized gain (loss) on defined benefit plans includes gains or losses resulting from a change in the value of either the projected benefit obligation or the plan assets resulting from a change in an actuarial assumption, net of amortization.

Changes in foreign currencies can have a significant impact to the Company's consolidated balance sheets (as evidenced above in the Company's foreign currency translation loss), as well as its consolidated results of operations, as amounts in foreign currencies are generally translated into more U.S. dollars when the U.S. dollar weakens or less U.S. dollars when the U.S. dollar strengthens. As of December 31, 2019, the U.S. dollar was generally stronger relative to certain of the currencies of the foreign countries in which the Company operates as compared to December 31, 2018. This overall strengthening of the U.S. dollar had an overall negative impact on the Company's consolidated financial position because the foreign denominations translated into less U.S. dollars as evidenced by the increase in foreign currency translation loss for the year ended December 31, 2019 as reflected in the above table. In future periods, the volatility of the U.S. dollar as compared to the other currencies in which the Company does business could have a significant impact on its consolidated financial position and results of operations including the amount of revenue that the Company reports in future periods.

Dividends

During the years ended December 31, 2019, 2018 and 2017, the Company's Board of Directors declared quarterly dividends whose treatment for federal income tax purposes were as follows:

Declaration Date	Record Date	Payment Date	Total Distribution [(1)]	Nonqualified Ordinary Dividend [(2)]	Total Distribution Amount
			(per share)		(in thousands)
Fiscal 2019					
2/13/2019	2/27/2019	3/20/2019	$ 2.460000	$ 2.460000	$ 198,933
5/1/2019	5/22/2019	6/19/2019	2.460000	2.460000	207,949
7/31/2019	8/21/2019	9/18/2019	2.460000	2.460000	209,226
10/30/2019	11/20/2019	12/11/2019	2.460000	2.460000	209,785
Total			$ 9.840000	$ 9.840000	$ 825,893
Fiscal 2018					
2/14/2018	2/26/2018	3/21/2018	$ 2.280000	$ 2.280000	$ 180,640
5/2/2018	5/23/2018	6/20/2018	2.280000	2.280000	181,207
8/8/2018	8/22/2018	9/19/2018	2.280000	2.280000	182,304
11/1/2018	11/14/2018	12/12/2018	2.280000	2.280000	183,297
Total			$ 9.120000	$ 9.120000	$ 727,448
Fiscal 2017					
2/15/2017	2/27/2017	3/22/2017	$ 2.000000	$ 2.000000	$ 143,275
4/26/2017	5/24/2017	6/21/2017	2.000000	2.000000	155,824
8/2/2017	8/23/2017	9/20/2017	2.000000	2.000000	156,055
11/1/2017	11/15/2017	12/13/2017	2.000000	2.000000	156,931
Total			$ 8.000000	$ 8.000000	$ 612,085

(1) Common stock dividends are characterized for federal income tax purposes as nonqualified ordinary dividend, qualified ordinary dividend, capital gains or return of capital. During the years ended December 31, 2019, 2018 and 2017, the Company did not classify any portion of the distributions as qualified ordinary dividend, capital gains or return of capital.

(2) All 2019 and 2018 nonqualified ordinary dividends are eligible for the 20% deduction generally allowable to non-corporate shareholders under Internal Revenue Code Section 199A.

In addition, as of December 31, 2019, for dividends and special distributions attributed to the restricted stock units, the Company recorded a short term dividend payable of $9.0 million and a long term dividend payable of $7.1 million for the restricted stock units that have not yet vested. As of December 31, 2018, for dividends and special distributions attributed to the restricted stock units, the Company recorded a short term dividend payable of $8.8 million and a long term dividend payable of $6.5 million for the restricted stock units that have not yet vested.

13. Stock-Based Compensation

Equity Compensation Plans

As of December 31, 2019, The Company's equity compensation plans include:

- *2000 Equity Incentive Plan:* Under the 2000 Equity Incentive Plan, nonstatutory stock options, restricted shares, restricted stock units and stock appreciation rights may be granted to employees, outside directors and consultants at not less than 85% of the fair value on the date of grant, and incentive stock options may be granted to employees at not less than 100% of the fair value on the date of grant. Equity awards granted under the 2000 Equity Incentive Plan generally vest over 4 years.

- *2000 Director Option Plan:* Under the 2000 Director Option Plan, each non-employee board member who was not previously an employee of the Company would receive an automatic initial nonstatutory stock option grant as well as an annual non-statutory stock option grant on the date of the Company's regular Annual Meeting of Stockholders. On December 18, 2008, the Company's Board of Directors passed resolutions eliminating all automatic stock option grant mechanisms under the 2000 Director Option Plan and replaced them with an automatic restricted stock unit grant mechanism under the 2000 Equity Incentive Plan.

- *2001 Supplemental Stock Plan:* Under the 2001 Supplemental Stock Plan, non-statutory stock options and restricted shares/restricted stock units may be granted to consultants and employees who are not executive officers or board members, at not less than 85% of the fair value on the date of grant. Current stock options granted under the 2001 Supplemental Stock Plan generally vest over 4 years.

- *2004 Employee Stock Purchase Plan (2004 Purchase Plan):* The 2004 Purchase Plan permits eligible employees to purchase common stock on favorable terms via payroll deductions of up to 15% of the employee's cash compensation, subject to certain share and statutory dollar limits. Two overlapping offering periods commence during each calendar year, on each February 15 and August 15 or such other periods or dates as determined by the Compensation Committee from time to time, and the offering periods last up to 24 months with a purchase date every 6 months. The price of each share purchased is 85% of the lower of a) the fair value per share of common stock on the last trading day before the commencement of the applicable offering period or b) the fair value per share of common stock on the purchase date.

The Equity compensation plans are administered by the Compensation Committee of the Board of Directors (the "Compensation Committee"), and the Compensation Committee may terminate or amend these plans, with approval of the stockholders as may be required by applicable law, at any time. As of December 31, 2019, shares reserved and available for issuance under the equity compensation plans are as follows:

	Shares reserved	Shares available for grant
2000 Equity Incentive Plan	16,636,172	1,255,261
2000 Director Option Plan	594,403	505,646
2001 Supplemental Stock Plan	1,494,275	260,498
2004 Purchase Plan	5,392,206	2,973,785

Restricted Stock Units

Since 2008, the Company primarily grants restricted stock units to its employees, including executives and non-employee directors, in lieu of stock options. The Company generally grants restricted stock units that have a service condition only or have both a service and performance condition. Each restricted stock unit is not considered issued and outstanding and does not have voting rights until it is converted into one share of the Company's common stock upon vesting. Restricted stock unit activity is summarized as follows:

	Number of Shares Outstanding	Weighted Average Grant Date Fair Value per Share	Weighted Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value (1) (Dollars in Thousands)
Restricted stock units outstanding, December 31, 2016	1,347,879	$ 192.59		
Restricted stock units granted	658,196	389.60		
Restricted stock units released, vested	(606,064)	260.75		
Special distribution shares released	(15,667)	243.06		
Restricted stock units canceled	(79,451)	313.83		
Special distribution shares canceled	(1,002)	282.49		
Restricted stock units outstanding, December 31, 2017	1,303,891	252.30		
Restricted stock units granted	704,249	387.31		
Restricted stock units released, vested	(593,528)	299.07		
Special distribution shares released	(13,880)	283.14		
Restricted stock units canceled	(173,460)	336.75		
Special distribution shares canceled	(485)	295.77		
Restricted stock units outstanding, December 31, 2018	1,226,787	361.22		
Restricted stock units granted	779,478	448.16		
Restricted stock units released, vested	(549,259)	362.66		
Special distribution shares released	(1,781)	295.31		
Restricted stock units canceled	(142,477)	364.42		
Special distribution shares canceled	(23)	297.04		
Restricted stock units outstanding, December 31, 2019	1,312,725	$ 411.99	1.29	$ 766,238

(1) The intrinsic value is calculated based on the market value of the stock as of December 31, 2019.

The total fair value of restricted stock units vested and released during the years ended December 31, 2019, 2018 and 2017 was $269.1 million, $249.8 million and $259.1 million, respectively.

Employee Stock Purchase Plan

The Company provides the following disclosures for the 2004 Purchase Plan as of December 31 (dollars, except shares):

	2019	2018	2017
Weighted-average purchase price per share	$ 354.72	$ 341.48	$ 250.65
Weighted average grant-date fair value per share of shares purchased	$ 104.84	$ 90.04	$ 72.21
Number of shares purchased	146,640	145,346	162,076

The Company uses the Black-Scholes option-pricing model to determine the fair value of shares under the 2004 Purchase Plan with the following assumptions during the years ended December 31:

	2019	2018	2017
Range of dividend yield	2.07 - 2.09%	1.97 - 2.00%	2.10 - 2.31%
Range of risk-free interest rate	1.55 - 2.58%	1.79 - 2.68%	0.70 - 1.35%
Range of expected volatility	19.27 - 25.55%	19.04 - 24.33%	16.42 - 24.27%
Weighted-average expected volatility	22.95%	20.74%	20.30%
Weighted average expected life (in years)	1.24	1.43	1.52

Stock-Based Compensation

The following table presents, by operating expense, the Company's stock-based compensation expense recognized in the Company's consolidated statement of operations for the years ended December 31 (in thousands):

	2019	2018	2017
Cost of revenues	$ 25,355	$ 18,247	$ 13,621
Sales and marketing	56,719	53,448	50,094
General and administrative	154,465	109,021	111,785
Total	$ 236,539	$ 180,716	$ 175,500

The Company's stock-based compensation recognized in the consolidated statement of operations was comprised of the following types of equity awards for the years ended December 31 (in thousands):

	2019	2018	2017
Restricted stock units	$ 217,541	$ 165,141	$ 164,321
Employee stock purchase plan	18,998	15,575	11,179
Total	$ 236,539	$ 180,716	$ 175,500

During the years ended December 31, 2019, 2018 and 2017, the Company capitalized $9.1 million, $9.1 million and $6.2 million, respectively, of stock-based compensation expense as construction in progress in property, plant and equipment.

As of December 31, 2019, the total stock-based compensation cost related to unvested equity awards not yet recognized, net of estimated forfeitures, totaled $413.8 million which is expected to be recognized over a weighted-average period of 2.25 years.

14. Income Taxes

Income (loss) before income taxes is attributable to the following geographic locations for the years ended December 31, (in thousands):

	2019	2018	2017
Domestic	$ 328,806	$ 298,009	$ 148,500
Foreign	363,791	135,029	138,332
Income before income taxes	$ 692,597	$ 433,038	$ 286,832

The tax benefit (expenses) for income taxes consisted of the following components for the years ended December 31, (in thousands):

	2019	2018	2017
Current:			
Federal	$ (17,906)	$ 7,085	$ 9,346
State and local	(4,624)	(2,663)	(849)
Foreign	(135,356)	(118,175)	(109,032)
Subtotal	(157,886)	(113,753)	(100,535)
Deferred:			
Federal	(7,459)	(27,874)	9,684
State and local	(1,775)	(1,165)	2,018
Foreign	(18,232)	75,113	34,983
Subtotal	(27,466)	46,074	46,685
Income tax expense	$ (185,352)	$ (67,679)	$ (53,850)

State and foreign taxes not based on income are included in general and administrative expenses and the aggregate amounts were not significant for the years ended December 31, 2019, 2018 and 2017.

The fiscal 2019, 2018, and 2017 income tax benefit (expenses) differed from the amounts computed by applying the U.S. federal income tax rate of 21%, 21% and 35%, respectively, to pre-tax income as a result of the following for the years ended December 31 (in thousands):

	2019	2018	2017
Federal tax at statutory rate	$ (145,445)	$ (90,938)	$ (100,391)
State and local tax (expense) benefit	(5,852)	(3,616)	1,000
Deferred tax assets generated in current year not benefited	(5,398)	(3,777)	(7,643)
Foreign income tax rate differential	(11,610)	(4,072)	26,151
Non-deductible expenses	(1,021)	(756)	(2,629)
Stock-based compensation expense	(2,105)	(2,308)	(616)
Change in valuation allowance	(2,870)	38,684	(716)
Foreign financing activities	(18,738)	(17,548)	1,319
Loss on debt extinguishment	—	—	(1,604)
Loss on divestments	(3,277)	—	—
Uncertain tax positions reserve	(35,724)	(20,440)	(66)
Tax adjustments related to REIT	63,614	32,189	41,973
Enactment of the US tax reform	—	—	(6,513)
Change in deferred tax adjustments	(10,574)	—	—
Other, net	(6,352)	4,903	(4,115)
Total income tax expense	$ (185,352)	$ (67,679)	$ (53,850)

Legislation commonly referred to as the Tax Cuts and Jobs Act ("TCJA"), which was signed into law on December 22, 2017, contained many significant changes to the U.S. federal income tax laws. Among other things, the TCJA reduced the U.S. corporate income tax rate from 35% to 21% effective January 1, 2018, limited the tax deductibility of interest expense, accelerated expensing of certain business assets and transitioned the U.S. international taxation from a worldwide tax system to a territorial tax system by imposing a one-time mandatory repatriation of undistributed foreign earnings. As a result of the reduced corporate tax rate, the Company recognized an income tax expense of $6.5 million during the fourth quarter of 2017 as a provisional estimate due to the remeasurement of the net deferred tax assets in the U.S. TRS. In the fourth quarter of 2018, the Company completed the analysis of the TCJA's income tax effects and the adjustment to the provisional amount was insignificant.

The TCJA included a Global Intangible Low-Taxed Income ("GILTI") provision that increases U.S. federal taxable income by certain foreign subsidiary income in the year it is earned. The Company's accounting policy is to treat any tax on GILTI inclusions as a current period cost included in the tax expense in the year incurred. The Company believes the GILTI inclusion provision will result in no financial statement impact provided the Company satisfies its REIT distribution requirement with respect to the GILTI inclusions.

As a result of the Company's conversion to a REIT effective January 1, 2015, it is no longer the Company's intent to indefinitely reinvest undistributed foreign earnings. However, no deferred tax liability has been recognized to account for this change because the expected recovery of the basis difference will not result in U.S. taxes in the post-REIT conversion periods due to the fact that none of its foreign subsidiaries is owned by a U.S. taxable REIT subsidiary and the withholding tax effect would be immaterial. The Company continues to assess the foreign withholding tax impact of its current policy and does not believe the distribution of its foreign earnings would trigger any significant foreign withholding taxes, as a majority of the foreign jurisdictions where the Company operates do not impose withholding taxes on dividend distributions to a corporate U.S. parent.

The types of temporary differences that give rise to significant portions of the Company's deferred tax assets and liabilities are set out below as of December 31 (in thousands):

	2019	2018
Deferred tax assets:		
Reserves and accruals	$ 7,670	$ 24,136
Stock-based compensation expense	2,675	2,524
Unrealized losses	6,492	1,471
Operating loss carryforwards	59,735	49,169
Gross deferred tax assets	76,572	77,300
Valuation allowance	(57,812)	(57,003)
Total deferred tax assets, net	18,760	20,297
Deferred tax liabilities:		
Property, plant and equipment	(85,729)	(50,610)
Intangible assets	(144,404)	(159,237)
Total deferred tax liabilities	(230,133)	(209,847)
Net deferred tax liabilities	$ (211,373)	$ (189,550)

The tax basis of REIT assets, excluding investments in TRSs, is greater than the amounts reported for such assets in the accompanying consolidated balance sheet by approximately $1.9 billion as of December 31, 2019.

The Company's accounting for deferred taxes involves weighing positive and negative evidence concerning the realizability of the Company's deferred tax assets in each tax jurisdiction. After considering such evidence as the nature, frequency and severity of current and cumulative financial reporting losses, and the sources of future taxable income and tax planning strategies, the Company concluded that valuation allowances were required in certain foreign jurisdictions. The operations in the jurisdictions for which a valuation allowance has been established have a history of significant losses as of December 31, 2019. As such, the Company does not believe these operations have established a sustained history of profitability and that a valuation allowance is, therefore, necessary. The Company also provided a valuation allowance against certain gross deferred tax assets in certain tax jurisdictions as these deferred tax assets are not expected to be realizable in the foreseeable future.

Changes in the valuation allowance for deferred tax assets for the years ended December 31, 2019, 2018 and 2017 are as follows (in thousands):

	2019	2018	2017
Beginning balance	$ 57,003	$ 84,573	$ 29,167
Amounts from acquisitions	(2,707)	33,070	25,283
Divested balances	(351)	—	—
Amounts recognized into income	2,870	(38,684)	716
Current increase (decrease)	697	(13,086)	28,431
Impact of foreign currency exchange	300	(8,870)	976
Ending balance	$ 57,812	$ 57,003	$ 84,573

The Company's NOL carryforwards for federal, state and foreign tax purposes which expire, if not utilized, at various intervals from 2020, are outlined below (in thousands):

Expiration Date	Federal (1)	State	Foreign (2) (3)	Total
2020	$ 78,458	$ —	$ 9,739	$ 88,197
2021 to 2023	149,057	—	6,191	155,248
2024 to 2026	15,564	—	19,867	35,431
2027 to 2029	6,065	—	14,383	20,448
2030 to 2032	—	—	—	—
2033 to 2035	—	197	—	197
Thereafter	—	—	322,729	322,729
	$ 249,144	$ 197	$ 372,909	$ 622,250

(1) The total amount of NOL carryforwards that will not be available to offset the Company's future taxable income after dividend paid deduction due to Section 382 limitations was $241.8 million for federal.

(2) In certain jurisdictions, the net operating loss carryforwards can only be used to offset a percentage of taxable income in a given year.

(3) If certain substantial changes in the entity's ownership occur or have determined to have occurred, there may be a limitation on the amount of the carryforwards that can be utilized.

As of December 31, 2019, the Company had tax credit carryforwards of $8.6 million, which expire, if not utilized, from 2020 to 2031.

The beginning and ending balances of the Company's unrecognized tax benefits are reconciled below for the years ended December 31 (in thousands):

	2019	2018	2017
Beginning balance	$ 150,930	$ 82,390	$ 72,187
Gross increases related to prior year tax positions	—	33,436	6,095
Gross decreases related to prior year tax positions	(1,160)	—	—
Gross increases related to current year tax positions	31,332	48,685	19,832
Decreases resulting from expiration of statute of limitation	(2,112)	(1,276)	(15,410)
Decreases resulting from settlements	(5,264)	(12,305)	(314)
Ending balance	$ 173,726	$ 150,930	$ 82,390

The Company recognizes interest and penalties related to unrecognized tax benefits within income tax expense in the consolidated statements of operations. The Company accrued $14.2 million and $8.4 million for interest and penalties as of December 31, 2019 and 2018, respectively.

The unrecognized tax benefits of $173.7 million as of December 31, 2019, if subsequently recognized, will affect the Company's effective tax rate favorably at the time when such a benefit is recognized, of which $30.8 million is subject to an indemnification agreement.

Due to various tax years open for examination and the ongoing tax audits and inquiries by the tax authorities in different jurisdictions, it is reasonably possible that the balance of unrecognized tax benefits could significantly increase or decrease over the next 12 months as the Company may be subject to either examination by tax authorities, tax audit settlements, or a lapse in statute of limitations. The Company is currently unable to estimate the range of possible adjustments to the balance of unrecognized tax benefits.

The Company's income tax returns for the years from 2016 through current year remain open to examination by federal and state taxing authorities. In addition, the Company's tax years of 2007 through current year remain open and subject to examination by local tax authorities in certain foreign jurisdictions in which the Company has major operations.

15. Commitments and Contingencies

Purchase Commitments

Primarily as a result of the Company's various IBX expansion projects, as of December 31, 2019, the Company was contractually committed for $0.8 billion of unaccrued capital expenditures, primarily for IBX equipment not yet delivered and labor not yet provided, in connection with the work necessary to open these IBX data centers and make them available to customers for installation. In addition, the Company had numerous other, non-capital purchase commitments in place as of December 31, 2019, such as commitments to purchase power in select locations through 2020 and thereafter, and other open purchase orders for goods, services or arrangements to be delivered or provided during 2020 and thereafter. Such other miscellaneous purchase commitments totaled $1.0 billion as of December 31, 2019. In addition, the Company entered into lease agreements with various landlords primarily for data center spaces and ground lease which have not yet commenced as of December 31, 2019. These leases will commence between fiscal years 2020 and 2022, with lease terms of 10 to 49 years and a total lease commitment of approximately $608.1 million.

Equity Contribution Commitments

In connection with the Joint Venture closed in October 2019, the Company agreed to make future equity contributions to the Joint Venture of €17.6 million and £15.7 million, or $40.6 million in total at the exchange rate in effect on December 31, 2019.

Contingent Liabilities

The Company estimates exposure on certain liabilities, such as indirect and property taxes, based on the best information available at the time of determination. With respect to real and personal property taxes, the Company records what it can reasonably estimate based on prior payment history, current landlord estimates or estimates based on current or changing fixed asset values in each specific municipality, as applicable. However, there are circumstances beyond the Company's control whereby the underlying value of the property or basis for which the tax is calculated on the property may change, such as a landlord selling the underlying property of one of the Company's IBX data center leases or a municipality changing the assessment value in a jurisdiction and, as a result, the Company's property tax obligations may vary from period to period. Based upon the most current facts and circumstances, the Company makes the necessary property tax accruals for each of its reporting periods. However, revisions in the Company's estimates of the potential or actual liability could materially impact the financial position, results of operations or cash flows of the Company.

The Company's indirect and property tax filings in various jurisdictions are subject to examination by local tax authorities. Although we believe that we have adequately assessed and accounted for our potential tax liabilities, and that our tax estimates are reasonable, there can be no certainty that additional taxes will not be due upon audit of our tax returns or as a result of further changes to the tax laws and interpretations thereof. For example, we are currently undergoing audits and appealing the tentative assessments in a number of jurisdictions where we operate, such as France and Brazil. The final results of these audits and outcome of the appeals are uncertain and may not be resolved in our favor. The Company regularly assesses the likelihood of adverse outcomes resulting from these examinations and appeals that would affect the adequacy of its tax accruals for each of the reporting periods. If any issues arising from the tax examinations and appeals are resolved in a manner inconsistent with the Company's expectations, the revision of the estimates of the potential or actual liabilities could materially impact the financial position, results of operations, or cash flows of the Company.

From time to time, the Company may have certain contingent liabilities that arise in the ordinary course of its business activities. The Company accrues contingent liabilities when it is probable that future expenditures will be made and such expenditures can be reasonably estimated. In the opinion of management, there are no pending claims for which the outcome is expected to result in a material adverse effect in the financial position, results of operations or cash flows of the Company.

Employment Agreements

The Company has entered into a severance agreement with certain of its executive officers that provides for a severance payment equal to 100% of the executive officer's annual base salary and maximum bonus in the event his or her employment is terminated for any reason other than cause or he or she voluntarily resigns under certain circumstances as described in the agreement, or 200% of the executive officer's annual base salary and maximum bonus in the event this occurs after a change-in-control of the Company. For certain other executive officers, these benefits are only triggered after a change-in-control of the Company, in which case the officer is entitled to 200% of the executive officer's annual base salary and maximum bonus. In addition, under these agreements, the executive officer is entitled to the payment of his or her monthly health care premiums under the Consolidated Omnibus Budget Reconciliation Act for up to 24 months.

Indemnification and Guarantor Arrangements

As permitted under Delaware law, the Company has agreements whereby the Company indemnifies its officers and directors for certain events or occurrences while the officer or director is, or was serving, at the Company's request in such capacity. The term of the indemnification period is for the officer's or director's lifetime. The maximum potential amount of future payments the Company could be required to make under these indemnification agreements is unlimited; however, the Company has a director and officer insurance policy that limits the Company's exposure and enables the Company to recover a portion of any future amounts paid. As a result of the Company's insurance policy coverage, the Company believes the estimated fair value of these indemnification agreements is minimal. The Company has no liabilities recorded for these agreements as of December 31, 2019.

The Company enters into standard indemnification agreements in the ordinary course of business. Pursuant to these agreements, the Company indemnifies, holds harmless, and agrees to reimburse the indemnified party for losses suffered or incurred by the indemnified party, generally the Company's business partners or customers, in connection with any U.S. patent, or any copyright or other intellectual property infringement claim by any third party with respect to the Company's offerings. The term of these indemnification agreements is generally perpetual any time after execution of the agreement. The maximum potential amount of future payments the Company could be required to make under these indemnification agreements is unlimited; however, the Company has never incurred costs to defend lawsuits or settle claims related to these indemnification agreements. As a result, the Company believes the estimated fair value of these agreements is minimal. The Company has no liabilities recorded for these agreements as of December 31, 2019.

The Company enters into arrangements with its business partners, whereby the business partner agrees to provide services as a subcontractor for the Company's installations. Accordingly, the Company enters into standard indemnification agreements with its customers, whereby the Company indemnifies them for other acts, such as personal property damage, of its subcontractors. The maximum potential amount of future payments the Company could be required to make under these indemnification agreements is unlimited; however, the Company has general and umbrella insurance policies that enable the Company to recover a portion of any amounts paid. The Company has never incurred costs to defend lawsuits or settle claims related to these indemnification agreements. As a result, the Company believes the estimated fair value of these agreements is minimal. The Company has no liabilities recorded for these agreements as of December 31, 2019.

The Company has service level commitment obligations to certain of its customers. As a result, service interruptions or significant equipment damage in the Company's IBX data centers, whether or not within the Company's control, could result in service level commitments to these customers. The Company's liability insurance may not be adequate to cover those expenses. In addition, any loss of services, equipment damage or inability to meet the Company's service level commitment obligations could reduce the confidence of the Company's customers and could consequently impair the Company's ability to obtain and retain customers, which would adversely affect both the Company's ability to generate revenues and the Company's operating results. The Company generally has the ability to determine such service level credits prior to the associated revenue being recognized. The Company does not have significant liabilities in connection with service level credits as of December 31, 2019.

16. Related Party Transactions

Related Party Transactions with the Joint Venture

Upon closing of the Joint Venture, the Company sold certain data center facilities in Europe to the Joint Venture and recognized a gain on assets sale of $45.1 million during the year ended December 31, 2019. For further information on the transaction, see Note 5 above.

The Company entered into a sub-lease agreement with the Joint Venture to sub-lease a portion of Equinix's former LD10 Data Center. The Company accounted for the lease as a finance lease. As of December 31, 2019, the Company recorded a finance lease ROU asset and liability of £103.2 million, or approximately $136.7 million at the exchange rate in effect on December 31, 2019. For further information on the lease, see Note 10 above.

The Company also entered an agreement to lease to the Joint Venture a portion of land at its Frankfurt 2 data center site and a new building that is under construction at the land. The lease will have an initial term of 30 years and 2 renewal options of 10 years each. The consideration of the lease agreement will be based on the total cost of construction as determined when the construction is completed. As of December 31, 2019, the lease has not commenced yet.

In connection with the Joint Venture investment, the Company entered into multiple agreements to provide various services to the Joint Venture, including sales and marketing, development management, facilities management, and asset management services. During the year ended December 31, 2019, the total revenue recorded from these services was insignificant.

Other Related Party Transactions

The Company has several significant stockholders and other related parties that are also customers and/or vendors. The Company's activity of related party transactions was as follows (in thousands):

	Years ended December 31,		
	2019	2018	2017
Revenues	$ 25,905	$ 19,439	$ 13,726
Costs and services	15,844	19,708	11,211

	As of December 31,	
	2019	2018
Accounts receivable	$ 3,345	$ 4,031
Accounts payable	800	585

17. Segment Information

While the Company has a single line of business, which is the design, build-out and operation of IBX data centers, it has determined that it has three reportable segments comprised of its Americas, EMEA and Asia-Pacific geographic regions.

The following tables present revenue information disaggregated by service lines and geographic areas (in thousands):

	Twelve Months Ended December 31, 2019			
	Americas [2]	**EMEA**	**Asia-Pacific**	**Total**
Colocation [1]	$ 1,769,654	$ 1,395,544	$ 857,009	$ 4,022,207
Interconnection	576,709	161,552	155,328	893,589
Managed infrastructure	90,262	113,631	88,735	292,628
Other [1]	19,743	10,019	—	29,762
Recurring revenues	2,456,368	1,680,746	1,101,072	5,238,186
Non-recurring revenues	131,359	125,698	66,897	323,954
Total	$ 2,587,727	$ 1,806,444	$ 1,167,969	$ 5,562,140

(1) Includes some leasing and hedging activities. For further information on revenue recognition, see Note 1 and Note 2 above.
(2) Includes revenues of $2.4 billion attributed to the U.S.

	Twelve Months Ended December 31, 2018			
	Americas [2]	**EMEA**	**Asia-Pacific**	**Total**
Colocation [1]	$ 1,732,998	$ 1,201,769	$ 735,404	$ 3,670,171
Interconnection	532,163	138,874	130,928	801,965
Managed infrastructure	75,595	118,685	85,352	279,632
Other [1]	16,570	8,164	—	24,734
Recurring revenues	2,357,326	1,467,492	951,684	4,776,502
Non-recurring revenues	127,408	95,145	72,599	295,152
Total	$ 2,484,734	$ 1,562,637	$ 1,024,283	$ 5,071,654

(1) Includes some leasing and hedging activities. For further information on revenue recognition, see Note 1 and Note 2 above.
(2) Includes revenues of $2.3 billion attributed to the U.S.

	Twelve Months Ended December 31, 2017			
	Americas [2]	**EMEA**	**Asia-Pacific**	**Total**
Colocation [1]	$ 1,518,929	$ 1,063,543	$ 595,673	$ 3,178,145
Interconnection	469,268	104,891	107,014	681,173
Managed infrastructure	68,937	88,122	88,110	245,169
Other [1]	5,218	10,415	—	15,633
Recurring revenues	2,062,352	1,266,971	790,797	4,120,120
Non-recurring revenues	110,408	79,285	58,615	248,308
Total	$ 2,172,760	$ 1,346,256	$ 849,412	$ 4,368,428

(1) Includes some leasing and hedging activities. For further information on revenue recognition, see Note 1 and Note 2 above.
(2) Includes revenues of $2.0 billion attributed to the U.S.

The Company's chief operating decision-maker evaluates performance, makes operating decisions and allocates resources based on the Company's revenues and adjusted EBITDA performance both on a consolidated basis and these three reportable segments. The Company defines adjusted EBITDA as income from operations excluding depreciation, amortization, accretion, stock-based compensation expense, restructuring charges, impairment charges, transaction costs and gain on asset sales as presented below for the years ended December 31 (in thousands):

	2019	2018	2017
Adjusted EBITDA:			
Americas	$ 1,237,622	$ 1,183,831	$ 1,034,694
EMEA	827,980	698,280	582,697
Asia-Pacific	622,125	531,129	434,650
Total adjusted EBITDA	2,687,727	2,413,240	2,052,041
Depreciation, amortization and accretion expense	(1,285,296)	(1,226,741)	(1,028,892)
Stock-based compensation expense	(236,539)	(180,716)	(175,500)
Transaction costs	(24,781)	(34,413)	(38,635)
Impairment charges	(15,790)	—	—
Gain on asset sales	44,310	6,013	—
Income from operations	$ 1,169,631	$ 977,383	$ 809,014

The Company provides the following segment disclosures related to its operations as follows for the years ended December 31 (in thousands):

	2019	2018	2017
Depreciation and amortization:			
Americas	$ 669,498	$ 636,214	$ 515,726
EMEA	353,765	355,895	316,250
Asia-Pacific	261,574	235,380	210,504
Total	$ 1,284,837	$ 1,227,489	$ 1,042,480
Capital expenditures:			
Americas	$ 805,360	$ 773,514	$ 621,158
EMEA	733,326	884,790	555,346
Asia-Pacific	540,835	437,870	202,221
Total	$ 2,079,521	$ 2,096,174	$ 1,378,725

The Company's long-lived assets, including property, plant and equipment, net and operating lease right-of-use assets, are located in the following geographic areas as of December 31 (in thousands):

	2019	2018
Americas [1]	$ 5,400,287	$ 5,010,507
EMEA	4,051,701	3,726,596
Asia-Pacific	2,700,609	2,288,917
Total Property, plant and equipment, net	$ 12,152,597	$ 11,026,020

(1) Includes $4.8 billion and $4.6 billion, respectively, of property, plant and equipment, net attributed to the U.S. as of December 31, 2019 and 2018.

	2019	2018
Americas [1]	$ 387,598	$ —
EMEA	521,129	—
Asia-Pacific	566,640	—
Total Operating lease right-of-use assets	$ 1,475,367	$ —

(1) Includes $373.7 million of operating lease right-of-use assets attributed to the U.S. as of December 31, 2019.

18. Subsequent Events

On February 12, 2020, the Company's Board of Directors declared a quarterly cash dividend of $2.66 per share, which is payable on March 18, 2020 to the Company's common stockholders of record as of the close of business on February 26, 2020.

On January 14, 2020, the Company entered into an agreement to acquire Packet Host, Inc., the bare metal automation company. The acquisition is expected to close in the first quarter of 2020, subject to customary closing conditions.

On January 8, 2020, the Company completed the acquisition of three data centers in Mexico for a cash purchase price of approximately $175.0 million. The operating results of the acquisition are reported in the Americas region following the date of acquisition. The valuation of assets acquired and liabilities assumed are still being appraised by a third-party and the purchase price allocation is not yet complete.

On January 2, 2020, the Company redeemed the remaining $343.7 million principal amount of the 5.375% Senior Notes due 2022, using a portion of the net cash proceeds from the 2024, 2026 and 2029 Notes as described in Note 11 above. In connection with the redemption, the Company incurred $5.9 million of loss on debt extinguishment, including $4.6 million redemption premium that was paid in cash and $1.3 million related to the write-off of unamortized debt issuance costs.

19. Quarterly Financial Information (Unaudited)

The Company believes that period-to-period comparisons of its financial results should not be relied upon as an indication of future performance. The Company's revenues and results of operations have been subject to significant fluctuations, particularly on a quarterly basis, and the Company's revenues and results of operations could fluctuate significantly quarter-to-quarter and year-to-year. Significant quarterly fluctuations in revenues will cause fluctuations in the Company's cash flows and the cash and cash equivalents and accounts receivable accounts on the Company's consolidated balance sheet. Causes of such fluctuations may include the volume and timing of new orders and renewals, the timing of the opening of new IBX data centers, the sales cycle for the Company's offerings, the introduction of new offerings, changes in prices and pricing models, trends in the internet infrastructure industry, general economic conditions, extraordinary events such as acquisitions or litigation and the occurrence of unexpected events.

The unaudited quarterly financial information presented below has been prepared by the Company and reflects all adjustments, consisting only of normal recurring adjustments, which in the opinion of management are necessary to present fairly the financial position and results of operations for the interim periods presented.

The following tables present selected quarterly information (in thousands, except per share data):

	2019			
	Quarters Ended			
	March 31	June 30	September 30	December 31
Revenues	$ 1,363,218	$ 1,384,977	$ 1,396,810	$ 1,417,135
Gross profit	681,188	686,798	692,471	691,499
Net income attributable to Equinix	118,078	143,527	120,850	124,995
Earnings per share attributable to Equinix:				
Basic	1.44	1.70	1.42	1.47
Diluted	1.44	1.69	1.41	1.46

	2018			
	Quarters Ended			
	March 31	June 30	September 30	December 31
Revenues	$ 1,215,877	$ 1,261,943	$ 1,283,751	$ 1,310,083
Gross profit	593,447	610,142	623,442	639,148
Net income attributable to Equinix	62,894	67,618	124,825	110,022
Earnings per share attributable to Equinix:				
Basic	0.79	0.85	1.56	1.37
Diluted	0.79	0.85	1.55	1.36

EQUINIX INC.
SCHEDULE III - SCHEDULE OF REAL ESTATE AND ACCUMULATED DEPRECIATION
DECEMBER 31, 2019
(Dollars in Thousands)

	Initial Costs to Company (1)			Costs Capitalized Subsequent to Acquisition or Lease		Total Costs			
	Encumbrances	Land	Buildings and Improvements (2)	Land	Buildings and Improvements (2)	Land	Buildings and Improvements (2)	Accumulated Depreciation (3)	Date of Acquisition or Lease (4)
Americas:									
AT1 ATLANTA (METRO)	$—	$—	$—	$—	$147,120	$—	$147,120	$(60,777)	2010
AT2 ATLANTA (METRO)	—	—	—	—	39,988	—	39,988	(23,173)	2010
AT3 ATLANTA (METRO)	—	—	—	—	4,571	—	4,571	(2,638)	2010
AT4 ATLANTA (METRO)	—	5,400	20,209	—	16,914	5,400	37,123	(8,279)	2017
AT5 ATLANTA (METRO)	—	—	5,011	—	1,962	—	6,973	(3,193)	2017
BG1 BOGOTÁ (METRO), COLOMBIA	—	—	8,779	899	4,859	899	13,638	(3,097)	2017
BO1 BOSTON (METRO)	—	—	—	—	10,770	—	10,770	(8,928)	2010
BO2 BOSTON (METRO)	—	2,500	30,383	—	19,941	2,500	50,324	(9,841)	2017
CH1 CHICAGO (METRO)	—	—	—	—	153,749	—	153,749	(95,232)	1999
CH2 CHICAGO (METRO)	—	—	—	—	110,736	—	110,736	(60,803)	2005
CH3 CHICAGO (METRO)	—	9,759	—	351	319,029	10,110	319,029	(121,456)	2006
CH4 CHICAGO (METRO)	—	—	—	—	22,444	—	22,444	(12,658)	2009
CH7 CHICAGO (METRO)	—	670	10,564	—	5,077	670	15,641	(3,679)	2017
CU1 CULPEPER (METRO)	—	1,019	37,581	—	4,523	1,019	42,104	(10,596)	2017
CU2 CULPEPER (METRO)	—	1,244	48,000	—	7,813	1,244	55,813	(11,365)	2017
CU3 CULPEPER (METRO)	—	1,088	37,387	—	1,010	1,088	38,397	(8,692)	2017
CU4 CULPEPER (METRO)	—	1,372	27,832	—	32,477	1,372	60,309	(6,588)	2017
DA1 DALLAS (METRO)	—	—	—	—	70,861	—	70,861	(38,772)	2000
DA2 DALLAS (METRO)	—	—	—	—	80,240	—	80,240	(28,647)	2010
DA3 DALLAS (METRO)	—	—	—	—	96,101	—	96,101	(37,901)	2010
DA4 DALLAS (METRO)	—	—	—	—	17,206	—	17,206	(8,878)	2010
DA6 DALLAS (METRO)	—	—	20,522	—	162,223	—	182,745	(30,483)	2012
DA7 DALLAS (METRO)	—	—	—	—	29,417	—	29,417	(10,489)	2015
DA9 DALLAS (METRO)	—	610	15,398	—	4,212	610	19,610	(4,730)	2017
DA10 DALLAS (METRO)	—	—	117	—	4,633	—	4,750	(3,105)	2017
DA11 DALLAS (METRO)	—	—	—	—	107,889	—	107,889	—	2018
INFOMART BUILDING DALLAS (METRO)	—	24,380	337,643	—	9,111	24,380	346,754	(19,765)	2018
DC1 WASHINGTON, DC (METRO)	—	—	—	—	4,762	—	4,762	(1,245)	1999
DC2 WASHINGTON, DC (METRO)	—	—	—	5,047	124,621	5,047	124,621	(95,146)	1999
DC3 WASHINGTON, DC (METRO)	—	—	37,451	—	50,453	—	87,904	(52,127)	2004
DC4 WASHINGTON, DC (METRO)	—	1,906	7,272	—	72,553	1,906	79,825	(53,710)	2005
DC5 WASHINGTON, DC (METRO)	—	1,429	4,983	—	89,414	1,429	94,397	(63,448)	2005

	Initial Costs to Company (1)			Costs Capitalized Subsequent to Acquisition or Lease		Total Costs			
	Encumbrances	Land	Buildings and Improvements (2)	Land	Buildings and Improvements (2)	Land	Buildings and Improvements (2)	Accumulated Depreciation (3)	Date of Acquisition or Lease (4)
DC6 WASHINGTON, DC (METRO)	—	1,429	5,082	—	92,078	1,429	97,160	(49,377)	2005
DC7 WASHINGTON, DC (METRO)	—	—	—	—	18,939	—	18,939	(12,156)	2010
DC8 WASHINGTON, DC (METRO)	—	—	—	—	4,598	—	4,598	(4,495)	2010
DC10 WASHINGTON, DC (METRO)	—	—	44,601	—	76,413	—	121,014	(72,826)	2011
DC11 WASHINGTON, DC (METRO)	—	1,429	5,082	—	181,683	1,429	186,765	(50,834)	2005
DC12 WASHINGTON, DC (METRO)	—	—	101,783	—	64,510	—	166,293	(17,654)	2017
DC13 WASHINGTON, DC (METRO)	—	5,500	25,423	—	9,680	5,500	35,103	(10,464)	2017
DC14 WASHINGTON, DC (METRO)	—	2,560	33,511	—	9,565	2,560	43,076	(8,427)	2017
DC15 WASHINGTON, DC (METRO)	—	—	—	—	91,836	—	91,836	—	2018
DC21 WASHINGTON, DC (METRO)	—	—	—	—	15,176	—	15,176	—	2019
DC97 WASHINGTON, DC (METRO)	—	—	2,021	—	971	—	2,992	(1,108)	2017
DE1 DENVER (METRO)	—	—	—	—	9,764	—	9,764	(8,662)	2010
DE2 DENVER (METRO)	—	5,240	23,053	—	29,163	5,240	52,216	(11,831)	2017
HO1 HOUSTON (METRO)	—	1,440	23,780	—	32,179	1,440	55,959	(11,094)	2017
LA1 LOS ANGELES (METRO)	—	—	—	—	107,714	—	107,714	(67,186)	1999
LA2 LOS ANGELES (METRO)	—	—	—	—	10,904	—	10,904	(8,869)	2000
LA3 LOS ANGELES (METRO)	—	—	34,727	3,959	21,283	3,959	56,010	(46,154)	2005
LA4 LOS ANGELES (METRO)	—	19,333	137,630	—	47,458	19,333	185,088	(85,994)	2009
LA7 LOS ANGELES (METRO)	—	7,800	33,621	—	7,584	7,800	41,205	(10,070)	2017
MI1 MIAMI (METRO)	—	18,920	127,194	—	94,472	18,920	221,666	(42,736)	2017
MI2 MIAMI (METRO)	—	—	—	—	23,223	—	23,223	(13,246)	2010
MI3 MIAMI (METRO)	—	—	—	—	32,602	—	32,602	(15,320)	2012
MI6 MIAMI (METRO)	—	4,750	23,017	—	8,286	4,750	31,303	(9,083)	2017
NY1 NEW YORK (METRO)	—	—	—	—	71,186	—	71,186	(41,346)	1999
NY2 NEW YORK (METRO)	—	—	—	17,859	204,510	17,859	204,510	(130,020)	2000
NY4 NEW YORK (METRO)	—	—	—	—	352,069	—	352,069	(188,961)	2006
NY5 NEW YORK (METRO)	—	—	—	—	269,478	—	269,478	(67,199)	2010
NY6 NEW YORK (METRO)	—	—	—	—	66,897	—	66,897	(12,312)	2010
NY7 NEW YORK (METRO)	—	—	24,660	—	167,514	—	192,174	(123,495)	2010
NY8 NEW YORK (METRO)	—	—	—	—	11,267	—	11,267	(7,928)	2010
NY9 NEW YORK (METRO)	—	—	—	—	50,868	—	50,868	(33,241)	2010
NY11 NEW YORK (METRO)	—	2,050	58,717	—	10,940	2,050	69,657	(17,997)	2017
NY13 NEW YORK (METRO)	—	—	31,603	—	6,463	—	38,066	(11,081)	2017
PH1 PHILADELPHIA (METRO)	—	—	—	—	43,724	—	43,724	(16,725)	2010
RJ1 RIO DE JANEIRO (METRO), BRAZIL	—	—	—	—	22,642	—	22,642	(15,816)	2011
RJ2 RIO DE JANEIRO (METRO), BRAZIL	—	—	2,012	1,635	56,081	1,635	58,093	(18,176)	2012
SE2 SEATTLE (METRO)	—	—	—	—	27,912	—	27,912	(23,071)	2010

	Initial Costs to Company [1]			Costs Capitalized Subsequent to Acquisition or Lease		Total Costs			
	Encumbrances	Land	Buildings and Improvements [2]	Land	Buildings and Improvements [2]	Land	Buildings and Improvements [2]	Accumulated Depreciation [3]	Date of Acquisition or Lease [4]
SE3 SEATTLE (METRO)	—	—	1,760	—	99,026	—	100,786	(48,609)	2011
SE4 SEATTLE (METRO)	—	4,000	12,903	—	30,171	4,000	43,074	(4,990)	2017
SP1 SÃO PAULO (METRO), BRAZIL	—	—	10,188	—	20,427	—	30,615	(24,774)	2011
SP2 SÃO PAULO (METRO), BRAZIL	—	—	—	3,979	67,644	3,979	67,644	(52,426)	2011
SP3 SÃO PAULO (METRO), BRAZIL	—	9,998	72,997	—	33,856	9,998	106,853	(21,392)	2017
SP4 SÃO PAULO (METRO), BRAZIL	—	—	22,027	—	46,673	—	68,700	(8,156)	2017
SV1 SILICON VALLEY (METRO)	—	—	—	15,545	142,396	15,545	142,396	(92,746)	1999
SV2 SILICON VALLEY (METRO)	—	—	—	—	150,225	—	150,225	(85,449)	2003
SV3 SILICON VALLEY (METRO)	—	—	—	—	80,591	—	80,591	(38,156)	1999
SV4 SILICON VALLEY (METRO)	—	—	—	—	25,031	—	25,031	(21,991)	2005
SV5 SILICON VALLEY (METRO)	—	6,238	98,991	—	98,181	6,238	197,172	(73,271)	2010
SV6 SILICON VALLEY (METRO)	—	—	15,585	—	28,778	—	44,363	(33,612)	2010
SV8 SILICON VALLEY (METRO)	—	—	—	—	51,084	—	51,084	(32,480)	2010
SV10 SILICON VALLEY (METRO)	—	12,646	123,594	—	85,811	12,646	209,405	(19,993)	2017
SV11 SILICON VALLEY (METRO)	—	—	—	—	2,809	—	2,809	—	2019
SV12 SILICON VALLEY (METRO)	—	20,313	—	—	6,925	20,313	6,925	—	2015
SV13 SILICON VALLEY (METRO)	—	—	3,828	—	73	—	3,901	(2,459)	2017
SV14 SILICON VALLEY (METRO)	—	3,638	5,503	—	3,742	3,638	9,245	(1,768)	2017
SV15 SILICON VALLEY (METRO)	—	7,651	23,060	—	1,188	7,651	24,248	(5,827)	2017
SV16 SILICON VALLEY (METRO)	—	4,271	15,018	—	1,384	4,271	16,402	(4,237)	2017
SV17 SILICON VALLEY (METRO)	—	—	17,493	—	3,805	—	21,298	(10,830)	2017
TR1 TORONTO (METRO), CANADA	—	—	—	—	90,620	—	90,620	(30,501)	2010
TR2 TORONTO (METRO), CANADA	—	—	21,113	104,289	120,080	104,289	141,193	(19,385)	2015
OTHERS [5]	—	77,527	21,580	227	36,770	77,754	58,350	(2,876)	Various
EMEA:									
AD1 ABU DHABI (METRO), UNITED ARAB EMIRATES	—	—	—	—	353	—	353	(108)	2017
AM1 AMSTERDAM (METRO), THE NETHERLANDS	—	—	—	—	86,937	—	86,937	(42,564)	2008
AM2 AMSTERDAM (METRO), THE NETHERLANDS	—	—	—	—	80,238	—	80,238	(30,339)	2008
AM3 AMSTERDAM (METRO), THE NETHERLANDS	—	—	27,099	—	125,459	—	152,558	(52,150)	2011
AM4 AMSTERDAM (METRO), THE NETHERLANDS	—	—	—	—	190,025	—	190,025	(14,637)	2016
AM5 AMSTERDAM (METRO), THE NETHERLANDS	—	—	92,199	—	12,882	—	105,081	(25,529)	2016
AM6 AMSTERDAM (METRO), THE NETHERLANDS	—	6,616	50,876	437	81,635	7,053	132,511	(18,039)	2016

	Initial Costs to Company [1]			Costs Capitalized Subsequent to Acquisition or Lease		Total Costs			
	Encumbrances	Land	Buildings and Improvements [2]	Land	Buildings and Improvements [2]	Land	Buildings and Improvements [2]	Accumulated Depreciation [3]	Date of Acquisition or Lease [4]
AM7 AMSTERDAM (METRO), THE NETHERLANDS	—	—	7,397	—	62,235	—	69,632	(5,773)	2016
AM8 AMSTERDAM (METRO), THE NETHERLANDS	—	—	—	—	11,060	—	11,060	(4,178)	2016
AM11 AMSTERDAM (METRO), THE NETHERLANDS	—	—	6,405	410	1,314	410	7,719	(410)	2019
BA1 BARCELONA (METRO), SPAIN	—	—	9,443	—	6,785	—	16,228	(3,710)	2017
DB1 DUBLIN (METRO), IRELAND	—	—	—	—	3,597	—	3,597	(2,446)	2016
DB2 DUBLIN (METRO), IRELAND	—	—	12,460	—	3,734	—	16,194	(6,469)	2016
DB3 DUBLIN (METRO), IRELAND	—	3,334	54,387	220	14,652	3,554	69,039	(15,205)	2016
DB4 DUBLIN (METRO), IRELAND	—	—	26,875	—	14,977	—	41,852	(6,898)	2016
DU1 DÜSSELDORF (METRO), GERMANY	—	—	—	8,117	30,189	8,117	30,189	(18,332)	2000
DX1 DUBAI (METRO), UNITED ARAB EMIRATES	—	—	—	—	89,340	—	89,340	(25,114)	2008
DX2 DUBAI (METRO), UNITED ARAB EMIRATES	—	—	—	—	653	—	653	(175)	2017
EN1 ENSCHEDE (METRO), THE NETHERLANDS	—	—	—	—	31,702	—	31,702	(21,705)	2008
FR1 FRANKFURT (METRO), GERMANY	—	—	—	—	4,151	—	4,151	(3,800)	2007
FR2 FRANKFURT (METRO), GERMANY	—	—	—	24,342	497,924	24,342	497,924	(126,263)	2007
FR4 FRANKFURT (METRO), GERMANY	—	11,578	9,307	764	80,031	12,342	89,338	(28,865)	2009
FR5 FRANKFURT (METRO), GERMANY	30,310	—	—	14,002	189,912	14,002	189,912	(41,597)	2012
FR6 FRANKFURT (METRO), GERMANY	—	—	—	—	135,071	—	135,071	(16,536)	2016
FR7 FRANKFURT (METRO), GERMANY	—	—	43,634	—	27,003	—	70,637	(18,717)	2016
GV1 GENEVA (METRO), SWITZERLAND	—	—	—	—	15,117	—	15,117	(3,841)	2004
GV2 GENEVA (METRO), SWITZERLAND	—	—	—	—	24,648	—	24,648	(21,916)	2009
HE1 HELSINKI (METRO), FINLAND	—	—	—	—	3,626	—	3,626	(2,541)	2016
HE3 HELSINKI (METRO), FINLAND	—	—	—	—	13,920	—	13,920	(8,134)	2016
HE4 HELSINKI (METRO), FINLAND	—	—	29,092	—	5,841	—	34,933	(13,389)	2016
HE5 HELSINKI (METRO), FINLAND	—	—	7,564	—	5,856	—	13,420	(3,627)	2016
HE6 HELSINKI (METRO), FINLAND	—	—	17,204	1,571	25,830	1,571	43,034	(8,828)	2016
HE7 HELSINKI (METRO), FINLAND	—	7,348	6,946	1,019	16,128	8,367	23,074	(1,310)	2018
HH1 HAMBURG (METRO), GERMANY		3,612	5,360	549	26,734	4,161	32,094	(290)	2018
IL2 ISTANBUL (METRO), TURKEY	—	14,460	39,289	—	12,428	14,460	51,717	(4,603)	2017
LD3 LONDON (METRO), UNITED KINGDOM	—	—	—	—	17,513	—	17,513	(15,831)	2000
LD4 LONDON (METRO), UNITED KINGDOM	—	—	23,044	—	119,830	—	142,874	(43,675)	2007
LD5 LONDON (METRO), UNITED KINGDOM	—	—	16,412	—	181,903	—	198,315	(88,458)	2010
LD6 LONDON (METRO), UNITED KINGDOM	—	—	—	—	138,942	—	138,942	(27,330)	2013
LD7 LONDON (METRO), UNITED KINGDOM	—	—	—	—	130,759	—	130,759	(3,320)	2018

	Initial Costs to Company (1)			Costs Capitalized Subsequent to Acquisition or Lease		Total Costs			
	Encumbrances	Land	Buildings and Improvements (2)	Land	Buildings and Improvements (2)	Land	Buildings and Improvements (2)	Accumulated Depreciation (3)	Date of Acquisition or Lease (4)
LD8 LONDON (METRO), UNITED KINGDOM	—	—	107,544	—	37,898	—	145,442	(38,935)	2016
LD9 LONDON (METRO), UNITED KINGDOM	—	—	181,431	—	152,279	—	333,710	(58,823)	2016
LD10 LONDON (METRO), UNITED KINGDOM	—	—	40,251	—	98,955	—	139,206	(3,115)	2017
LS1 LISBON (METRO), PORTUGAL	—	—	7,374	3,467	4,061	3,467	11,435	(2,313)	2017
MA1 MANCHESTER (METRO), UNITED KINGDOM	—	—	—	—	10,480	—	10,480	(4,260)	2016
MA2 MANCHESTER (METRO), UNITED KINGDOM	—	—	—	—	10,211	—	10,211	(5,824)	2016
MA3 MANCHESTER (METRO), UNITED KINGDOM	—	—	44,931	—	5,883	—	50,814	(20,007)	2016
MA4 MANCHESTER (METRO), UNITED KINGDOM	—	—	6,697	—	2,403	—	9,100	(6,634)	2016
MD1 MADRID (METRO), SPAIN	—	—	7,917	10,961	1,086	10,961	9,003	(3,074)	2017
MD2 MADRID (METRO), SPAIN	—	—	40,952	—	29,913	—	70,865	(18,467)	2017
ML2 MILAN (METRO), ITALY	—	—	—	—	18,941	—	18,941	(8,119)	2016
ML3 MILAN (METRO), ITALY	—	—	—	3,564	41,678	3,564	41,678	(11,036)	2016
ML4 MILAN (METRO), ITALY	—	—	—	—	8,978	—	8,978	(4,812)	2016
ML5 MILAN (METRO), ITALY	—	7,741	20,952	—	—	7,741	20,952	—	2019
MU1 MUNICH (METRO), GERMANY	—	—	—	—	26,282	—	26,282	(15,088)	2007
MU3 MUNICH (METRO), GERMANY	—	—	—	—	4,759	—	4,759	(2,001)	2010
PA1 PARIS (METRO), FRANCE	—	—	—	—	21,810	—	21,810	(11,154)	2007
PA2 & PA3 PARIS (METRO), FRANCE	—	—	29,615	25,290	286,113	25,290	315,728	(121,808)	2007
PA4 PARIS (METRO), FRANCE	—	1,598	9,503	—	225,703	1,598	235,206	(61,380)	2011
PA5 PARIS (METRO), FRANCE	—	—	16,554	—	442	—	16,996	(5,081)	2016
PA6 PARIS (METRO), FRANCE	—	—	—	—	66,720	—	66,720	(25,375)	2016
PA7 PARIS (METRO), FRANCE	—	—	—	—	18,611	—	18,611	(7,477)	2016
PA9x PARIS (METRO), FRANCE	—	—	—	—	54,834	—	54,834	—	2019
SA1 SEVILLE (METRO), SPAIN	—	—	1,567	—	809	—	2,376	(1,459)	2017
SK1 STOCKHOLM, (METRO), SWEDEN	—	—	15,495	—	7,865	—	23,360	(7,424)	2016
SK2 STOCKHOLM, (METRO), SWEDEN	—	—	80,148	3,775	59,319	3,775	139,467	(20,755)	2016
SK3 STOCKHOLM, (METRO), SWEDEN	—	—	—	—	15,769	—	15,769	(3,738)	2016
SO1 SOFIA (METRO), BULGARIA	—	—	5,236	—	2,471	—	7,707	(1,780)	2016
SO2 SOFIA (METRO), BULGARIA	—	2,719	—	—	17,074	2,719	17,074	(454)	2017
WA1 WARSAW (METRO), POLAND	—	—	5,950	—	10,951	—	16,901	(5,390)	2016
WA2 WARSAW (METRO), POLAND	—	—	4,709	—	8,536	—	13,245	(3,528)	2016
WA3 WARSAW (METRO), POLAND	—	2,784	—	—	33,930	2,784	33,930	(67)	2017
ZH1 ZURICH (METRO), SWITZERLAND	—	—	—	—	36	—	36	—	2007
ZH2 ZURICH (METRO), SWITZERLAND	—	—	—	—	3,158	—	3,158	(2,579)	2002
ZH4 ZURICH (METRO), SWITZERLAND	—	—	11,284	—	23,137	—	34,421	(23,774)	2009

		Initial Costs to Company (1)		Costs Capitalized Subsequent to Acquisition or Lease		Total Costs			
	Encumbrances	Land	Buildings and Improvements (2)	Land	Buildings and Improvements (2)	Land	Buildings and Improvements (2)	Accumulated Depreciation (3)	Date of Acquisition or Lease (4)
ZH5 ZURICH (METRO), SWITZERLAND	—	—	—	7,613	122,801	7,613	122,801	(20,735)	2009
ZW1 ZWOLLE (METRO), THE NETHERLANDS	—	—	—	—	9,934	—	9,934	(6,829)	2008
OTHERS (5)	—	16,652	7,956	16,763	54,557	33,415	62,513	(3,756)	Various
Asia-Pacific:									
AE1 ADELAIDE (METRO), AUSTRALIA	—	2,654	1,015	—	1,689	2,654	2,704	(400)	2018
BR1 BRISBANE (METRO), AUSTRALIA	—	3,159	1,053	—	1,712	3,159	2,765	(249)	2018
CA1 CANBERRA (METRO), AUSTRALIA	—	—	18,410	—	1,416	—	19,826	(1,397)	2018
HK1 HONG KONG (METRO), CHINA	—	—	—	—	217,236	—	217,236	(102,231)	2003
HK2 HONG KONG (METRO), CHINA	—	—	—	—	230,373	—	230,373	(117,462)	2010
HK3 HONG KONG (METRO), CHINA	—	—	—	—	137,773	—	137,773	(70,771)	2012
HK4 HONG KONG (METRO), CHINA	—	—	—	—	67,853	—	67,853	(7,278)	2012
HK5 HONG KONG (METRO), CHINA	—	—	70,002	—	36,845	—	106,847	(13,545)	2017
ME1 MELBOURNE (METRO), AUSTRALIA	—	14,926	—	—	83,929	14,926	83,929	(18,291)	2013
ME2 MELBOURNE (METRO), AUSTRALIA	—	—	—	—	74,262	—	74,262	(130)	2018
ME4 MELBOURNE (METRO), AUSTRALIA	—	3,426	84,175	—	7,387	3,426	91,562	(10,436)	2018
ME5 MELBOURNE (METRO), AUSTRALIA	—	6,655	4,094	—	3,523	6,655	7,617	(1,167)	2018
OS1 OSAKA (METRO), JAPAN	—	—	14,876	—	97,754	—	112,630	(26,774)	2013
OS2x OSAKA (METRO), JAPAN	—	12,023	—	651	4,255	12,674	4,255	—	2018
PE1 PERTH (METRO), AUSTRALIA	—	1,348	1,337	—	1,064	1,348	2,401	(184)	2018
PE2 PERTH (METRO), AUSTRALIA	—	—	16,327	—	12,344	—	28,671	(3,003)	2018
SG1 SINGAPORE (METRO)	—	—	—	—	173,068	—	173,068	(116,934)	2003
SG2 SINGAPORE (METRO)	—	—	—	—	293,336	—	293,336	(188,277)	2008
SG3 SINGAPORE (METRO)	—	—	34,844	—	210,664	—	245,508	(50,346)	2013
SG4 SINGAPORE (METRO)	—	—	54,602	—	72,084	—	126,686	(287)	2019
SG5 SINGAPORE (METRO)	—	—	—	—	24,320	—	24,320	—	2019
SH2 SHANGHAI (METRO), CHINA	—	—	—	—	5,037	—	5,037	(1,919)	2012
SH3 SHANGHAI (METRO), CHINA	—	—	7,066	—	9,950	—	17,016	(5,570)	2012
SH5 SHANGHAI (METRO), CHINA	—	—	11,284	—	20,369	—	31,653	(11,965)	2012
SH6 SHANGHAI (METRO), CHINA	—	—	16,545	—	12,469	—	29,014	(1,448)	2017
SL1 SEOUL (METRO), SOUTH KOREA	—	—	29,236	—	4,729	—	33,965	(1,306)	2019
SY1 SYDNEY (METRO), AUSTRALIA	—	—	—	—	28,195	—	28,195	(17,494)	2003
SY2 SYDNEY (METRO), AUSTRALIA	—	—	3,080	—	23,572	—	26,652	(20,289)	2008
SY3 SYDNEY (METRO), AUSTRALIA	—	—	8,712	—	140,746	—	149,458	(68,935)	2010
SY4 SYDNEY (METRO), AUSTRALIA	—	—	—	—	160,001	—	160,001	(28,402)	2014
SY5 SYDNEY (METRO), AUSTRALIA	—	82,091	—	—	167,426	82,091	167,426	(374)	2018
SY6 SYDNEY (METRO), AUSTRALIA	—	8,859	64,197	—	5,540	8,859	69,737	(5,847)	2018

	Initial Costs to Company (1)			Costs Capitalized Subsequent to Acquisition or Lease		Total Costs			
	Encumbrances	Land	Buildings and Improvements (2)	Land	Buildings and Improvements (2)	Land	Buildings and Improvements (2)	Accumulated Depreciation (3)	Date of Acquisition or Lease (4)
SY7 SYDNEY (METRO), AUSTRALIA	—	2,745	47,350	—	3,057	2,745	50,407	(3,921)	2018
SY8 SYDNEY (METRO), AUSTRALIA	—	—	1,073	—	367	—	1,440	(487)	2018
TY1 TOKYO (METRO), JAPAN	—	—	—	—	23,400	—	23,400	(18,214)	2000
TY2 TOKYO (METRO), JAPAN	—	—	—	—	90,190	—	90,190	(65,613)	2006
TY3 TOKYO (METRO), JAPAN	—	—	—	—	78,646	—	78,646	(39,806)	2010
TY4 TOKYO (METRO), JAPAN	—	—	—	—	75,422	—	75,422	(26,281)	2012
TY5 TOKYO (METRO), JAPAN	—	—	102	—	57,228	—	57,330	(13,578)	2014
TY6 TOKYO (METRO), JAPAN	—	—	37,941	—	11,992	—	49,933	(25,728)	2015
TY7 TOKYO (METRO), JAPAN	—	—	13,175	—	5,958	—	19,133	(11,043)	2015
TY8 TOKYO (METRO), JAPAN	—	—	53,848	—	7,981	—	61,829	(22,012)	2015
TY9 TOKYO (METRO), JAPAN	—	—	106,710	—	20,043	—	126,753	(63,550)	2015
TY10 TOKYO (METRO), JAPAN	—	—	69,881	—	17,422	—	87,303	(20,679)	2015
TY11 TOKYO (METRO), JAPAN	—	—	22,099	—	134,708	—	156,807	(3,320)	2018
TY12x TOKYO (METRO), JAPAN	—	10,285	—	101	66,560	10,386	66,560	—	2018
OTHERS (5)	—	14,536	875	—	14,593	14,536	15,468	(8,213)	Various
TOTAL LOCATIONS	**$30,310**	**$509,259**	**$3,777,257**	**$277,406**	**$12,363,410**	**$786,665**	**$16,140,667**	**$(5,329,182)**	

(1) The initial cost was $0 if the lease of the respective IBX was classified as an operating lease.

(2) Building and improvements include all fixed assets except for land.

(3) Buildings and improvements are depreciated on a straight line basis over estimated useful live as described under described in Note 1 within the Consolidated Financial Statements.

(4) Date of lease or acquisition represents the date the Company leased the facility or acquired the facility through purchase or acquisition.

(5) Includes various IBXs that are under initial development and costs incurred at certain central locations supporting various IBX functions.

The aggregate gross cost of the Company's properties for federal income tax purpose approximated $23,111.1 million (unaudited) as of December 31, 2019.

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The following table reconciles the historical cost of the Company's properties for financial reporting purposes for each of the years in the three-year period ended December 31, 2019 (in thousands).

Gross Fixed Assets:

	2019	2018	2017
Balance, beginning of period	$ 15,020,198	$ 12,947,735	$ 9,855,811
ASC 842 adoption impact [(1)]	(276,671)	—	—
Additions (including acquisitions and improvements)	2,632,472	2,756,218	2,508,333
Disposals	(463,485)	(289,157)	(78,886)
Foreign currency transaction adjustments and others	14,818	(394,598)	662,477
Balance, end of year	$ 16,927,332	$ 15,020,198	$ 12,947,735

Accumulated Depreciation:

	2019	2018	2017
Balance, beginning of period	$ (4,517,016)	$ (3,980,198)	$ (3,175,972)
ASC 842 adoption impact [(1)]	(7,846)	—	—
Additions (depreciation expense)	(926,046)	(882,848)	(748,942)
Disposals	128,352	261,928	65,922
Foreign currency transaction adjustments and others	(6,626)	84,102	(121,206)
Balance, end of year	$ (5,329,182)	$ (4,517,016)	$ (3,980,198)

(1) Upon the adoption of Topic 842 on January 1, 2019, the Company de-recognized certain fixed assets under built-to-suite leases due to the conversion of certain build-to-suit leases to operating leases. See Note 1 within the Consolidated Financial Statements.

Exhibit 4.31

DESCRIPTION OF SECURITIES REGISTERED UNDER SECTION 12 OF THE SECURITIES EXCHANGE ACT

The following description of our capital stock is based upon our restated certificate of incorporation, as amended (the "Restated Certificate of Incorporation"), our bylaws, as amended (the "Bylaws"), and applicable provisions of law. We have summarized certain portions of the Restated Certificate of Incorporation and Bylaws below. The summary is not complete. The Restated Certificate of Incorporation and Bylaws are incorporated by reference as exhibits 3.1 and 3.6, respectively, to our Annual Report on Form 10-K. You should read the Restated Certificate of Incorporation and Bylaws for the provisions that are important to you.

Certain provisions of the Delaware General Corporation Law (the "DGCL"), the Restated Certificate of Incorporation and Bylaws summarized in the following paragraphs may have an anti-takeover effect. This may delay, defer or prevent a tender offer or takeover attempt that a stockholder might consider in its best interests, including those attempts that might result in a premium over the market price for the shares held by such stockholder.

Authorized Capital Stock

Under our Restated Certificate of Incorporation, our authorized capital stock consists of 300,000,000 shares of common stock, par value $0.001 per share, and 100,000,000 shares of preferred stock, $0.001 par value per share of which 25,000,000 is designated Series A, 25,000,000 is designated as Series A-1 and 50,000,000 is undesignated. At December 31, 2019, there were issued and outstanding:

- 85,308,386 shares of our common stock (not counting shares held in treasury);
- restricted stock units covering an aggregate of 1,312,725 shares of our common stock; and
- zero shares of our preferred stock.

Common Stock

The holders of our common stock are entitled to one vote per share on all matters to be voted on by the stockholders. Subject to preferences that may be applicable to any outstanding preferred stock, the holders of common stock are entitled to receive ratably such dividends, if any, as may be declared from time to time by the board of directors out of funds legally available for the payment of dividends. All dividends are non-cumulative. In the event of the liquidation, dissolution or winding up of Equinix, the holders of common stock are entitled to share ratably in all assets remaining after payment of liabilities, subject to prior distribution rights of preferred stock, if any, then outstanding. Our common stock has no preemptive or conversion rights or other subscription rights. There are no redemption or sinking fund provisions applicable to the common stock. All outstanding shares of our common stock are fully paid and nonassessable.

Our common stock is listed on the Nasdaq Global Select Market under the symbol "EQIX."

Preferred Stock

Preferred stock may be issued from time to time in one or more series, each of which is to have the voting powers, designation, preferences and relative, participating, optional or other special rights and qualifications, limitations or restrictions thereof as are stated and expressed in our Restated Certificate of Incorporation, or in a resolution or resolutions providing for the issue of that series adopted by our board of directors.

Our board of directors has the authority, without stockholder approval, to create one or more series of preferred stock and, with respect to each series, to fix or alter as permitted by law, among other things, the number of shares of the series and the designation thereof, dividend rights, dividend rate, conversion rights, voting rights, rights and terms of any redemption, redemption price or prices and liquidation preferences.

The preferred stock will be issued under a certificate of designations relating to each series of preferred stock and is also subject to our Restated Certificate of Incorporation.

Restrictions on Ownership and Transfer

To facilitate compliance with the ownership limitations applicable to a real estate investment trust ("REIT") under the Internal Revenue Code of 1986, as amended (the "Code"), our Restated Certificate of Incorporation contains restrictions on the ownership and transfer of our capital stock.

These ownership and transfer restrictions could delay, defer or prevent a transaction or a change in control that might involve a premium price for our common stock or that our stockholders might otherwise deem to be in their best interests.

For us to qualify for taxation as a REIT under the Code, 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. To facilitate compliance with these ownership requirements and other requirements for continued qualification as a REIT and to otherwise protect us from the consequences of a concentration of ownership among our stockholders, our Restated Certificate of Incorporation contains provisions restricting the ownership or transfer of shares of capital stock.

The relevant sections of our Restated Certificate of Incorporation provide that, subject to the exceptions and the constructive ownership rules described below, no person (as defined in our Restated Certificate of Incorporation) may beneficially or constructively own more than 9.8% in value of the aggregate of outstanding shares of capital stock, including common stock and preferred stock, or more than 9.8% in value or number (whichever is more restrictive) of the outstanding shares of any class or series of capital stock. We refer to these restrictions as the "ownership limits."

The applicable constructive ownership rules under the Code are complex and may cause capital stock owned actually or constructively by an individual or entity to be treated as owned by another individual or entity. As a result, the acquisition of less than 9.8% in value of outstanding capital stock or less than 9.8% in value or number of outstanding shares of any class or series of capital stock (including through the acquisition of an interest in an entity that owns, actually or constructively, any class or series of capital stock) by an individual or entity could nevertheless cause that individual or entity, or another individual or entity, to own, constructively or beneficially, in excess of 9.8% in value of outstanding capital stock or 9.8% in value or number of outstanding shares of any class or series of capital stock.

In addition to the ownership limits, our Restated Certificate of Incorporation prohibits any person from actually or constructively owning shares of capital stock to the extent that such ownership would cause any of our income that would otherwise qualify as "rents from real property" for purposes of Section 856(d) of the Code to fail to qualify as such.

Our board of directors has in the past granted ownership limitation waivers and may, in its sole discretion, in the future grant such a waiver to a person exempting them from the ownership limits and certain other REIT limits on ownership and transfer of capital stock described above, and may establish a different limit on ownership for any such person. However, our board of directors may not exempt any person whose ownership of outstanding capital stock in violation of these limits would result in our failing to qualify as a REIT. In order to be considered by our board of directors for an ownership limitation waiver or a different limit on ownership, a person must make such representations and undertakings as are reasonably necessary to ascertain that such person's beneficial or constructive ownership of capital stock will not now or in the future jeopardize our ability to qualify as a REIT under the Code and must generally agree that any violation or attempted violation of such representations or undertakings (or other action that is contrary to the ownership limits and certain other REIT limits on ownership and transfer of capital stock described above) will result in the shares of capital stock being automatically transferred to a trust as described below. As a condition of its waiver, our board of directors may require an opinion of counsel or Internal Revenue Service ruling satisfactory to our board of directors with respect to our qualification as a REIT and may impose such other conditions as it deems appropriate in connection with the granting of the waiver or a different limit on ownership.

In connection with the waiver of the ownership limits or at any other time, our board of directors may from time to time increase the ownership limits for one or more persons and decrease the ownership limits for all other persons; provided that the new ownership limits may not, after giving effect to such increase and under certain assumptions stated in our Restated Certificate of Incorporation, result in us being "closely held" within the meaning of Section 856(h) of the Code (without regard to whether the ownership interests are held during the last half of a taxable year). Reduced ownership limits will not apply to any person whose percentage ownership of total shares of capital stock or of the shares of a class or series of capital stock, as applicable, is in excess of such decreased ownership limits until such time as such person's percentage of total shares of capital stock or of the shares of a class or series of capital stock, as applicable, equals or falls below the decreased ownership limits, but any further acquisition of capital stock in excess of such percentage will be in violation of the ownership limits.

Our Restated Certificate of Incorporation further prohibits:

- any person from transferring shares of capital stock if such transfer would result in shares of capital stock being beneficially owned by fewer than 100 persons (determined without reference to any rules of attribution); and
- any person from beneficially or constructively owning shares of capital stock if such ownership would result in our failing to qualify as a REIT.

The foregoing provisions on transferability and ownership will not apply if our board of directors determines that it is no longer in our best interests to attempt to qualify, or to continue to qualify, as a REIT.

Any person who acquires or attempts or intends to acquire beneficial or constructive ownership of shares of capital stock that will or may violate the ownership limits or any of the other foregoing restrictions on transferability and ownership will be required to give notice to us immediately (or, in the case of a proposed or attempted transaction, at least 15 days prior to such transaction) and provide us with such other information as we may request in order to determine the effect, if any, of such transfer on our qualification as a REIT.

Pursuant to our Restated Certificate of Incorporation, if there is any purported transfer of our capital stock or other event or change of circumstances that, if effective or otherwise, would violate any of the restrictions described above, then the number of shares causing the violation (rounded up to the nearest whole share) will be automatically transferred to a trust for the exclusive benefit of a designated charitable beneficiary, except that any transfer that results in the violation of the restriction relating to our capital stock being beneficially owned by fewer than 100 persons will be automatically void and of no force or effect. The automatic transfer will be effective as of the close of business on the business day prior to the date of the purported transfer or other event or change of circumstances that requires the transfer to the trust. We refer below to the person that would have owned the shares if they had not been transferred to the trust as the purported transferee. Any ordinary dividend paid to the purported transferee, prior to our discovery that the shares had been automatically transferred to a trust as described above, must be repaid to a trustee designated in accordance with the Restated Certificate of Incorporation upon demand. Our Restated Certificate of Incorporation also provides for adjustments to the entitlement to receive extraordinary dividends and other distributions as between the purported transferee and the trust. If the transfer to the trust as described above is not automatically effective, for any reason, to prevent violation of the applicable restriction contained in our Restated Certificate of Incorporation, then the transfer of the excess shares will be automatically void and of no force or effect.

Shares of our capital stock transferred to the trustee are deemed to be offered for sale to us or our designee at a price per share equal to the lesser of (i) the price per share in the transaction that resulted in such transfer to the trust or, if the purported transferee did not give value for the shares in connection with the event causing the shares to be held in trust (e.g., in the case of a gift, devise or other such transaction), the market price at the time of such event and (ii) the market price on the date we accept, or our designee accepts, such offer. We have the right to accept such offer until the trustee has sold the shares of our capital stock held in the trust pursuant to the clauses described below. Upon a sale to us, the interest of the charitable beneficiary in the shares sold terminates and the trustee must distribute the net proceeds of the sale to the purported transferee, except that the trustee may reduce the amount payable to the purported transferee by the amount of any ordinary dividends that we paid to the purported transferee prior to our discovery that the shares had been transferred to the trust and that is owed by the purported transferee to the trustee as described above. Any net sales proceeds and extraordinary dividends in excess of the amount payable to the purported transferee shall be immediately paid to the charitable beneficiary, and any ordinary dividends held by the trustee with respect to such capital stock will be promptly paid to the charitable beneficiary.

If we do not buy the shares, the trustee must, as soon as reasonably practicable (and, if the shares are listed on a national securities exchange, within 20 days) after receiving notice from us of the transfer of shares to the trust, sell the shares to a person or entity who could own the shares without violating the restrictions described above. Upon such a sale, the trustee must distribute to the purported transferee an amount equal to the lesser of (i) the price paid by the purported transferee for the shares or, if the purported transferee did not give value for the shares in connection with the event causing the shares to be held in trust (e.g., in the case of a gift, devise or other such transaction), the market price of the shares on the day of the event causing the shares to be held in the trust, and (ii) the sales proceeds (net of commissions and other expenses of sale) received by the trustee for the shares. The trustee may reduce the amount payable to the purported transferee by the amount of any ordinary dividends that we paid to the purported transferee before our discovery that the shares had been transferred to the trust and that is owed by the purported transferee to the trustee as described above. Any net sales proceeds in excess of the amount payable to the purported transferee will be immediately paid to the charitable beneficiary, together with any ordinary dividends held by the trustee with respect to such capital stock. In addition, if prior to discovery by us that shares of our capital stock have been transferred to a trust, such shares of capital stock are sold by a purported transferee, then such shares will be deemed to have been sold on behalf of the trust and, to the extent that the purported transferee received an amount for or in respect of such shares that exceeds the amount that such purported transferee was entitled to receive as described above, such excess amount shall be paid to the trustee upon demand. The purported transferee has no rights in the shares held by the trustee.

The trustee will be indemnified by us or from the proceeds of sales of capital stock in the trust for its costs and expenses reasonably incurred in connection with conducting its duties and satisfying its obligations under our Restated Certificate of Incorporation. The trustee will also be entitled to reasonable compensation for services provided as determined by agreement between the trustee and the board of directors, which compensation may be funded by us or the trust. If we pay any such indemnification or compensation, we are entitled on a first priority basis (subject to the trustee's indemnification and compensation rights) to be reimbursed from the trust. To the extent the trust funds any such indemnification and compensation, the amounts available for payment to a purported transferee (or the charitable beneficiary) would be reduced.

The trustee will be designated by us and must be unaffiliated with us and with any purported transferee. Prior to the sale of any shares by the trust, the trustee will receive, in trust for the beneficiary, all distributions paid by us with respect to the shares, and may also exercise all voting rights with respect to the shares.

Subject to the DGCL, effective as of the date that the shares have been transferred to the trust, the trustee will have the authority, at the trustee's sole discretion:

- to rescind as void any vote cast by a purported transferee prior to our discovery that the shares have been transferred to the trust; and
- to recast the vote in accordance with the desires of the trustee acting for the benefit of the charitable beneficiary of the trust.

However, if we have already taken corporate action, then the trustee may not rescind and recast the vote.

In addition, if the board of directors determines that a proposed or purported transfer would violate the restrictions on ownership and transfer of our capital stock set forth in our Restated Certificate of Incorporation, the board of directors may take such action as it deems advisable to refuse to give effect to or to prevent such violation, including but not limited to, causing us to repurchase shares of our capital stock, refusing to give effect to the transfer on our books or instituting proceedings to enjoin the transfer.
From time to time, at our request, every person that is an owner of 5% or more (or such lower percentage as required by the Code or the Treasury regulations thereunder) of the outstanding shares of any class or series of our capital stock, must provide us written notice of its name and address, the number of shares of each class and series of our capital stock that the person beneficially owns and a description of the manner in which the shares are held. Each such owner must also provide us with such additional information as we may request in order to determine the effect, if any, of such owner's beneficial ownership on our qualification as a REIT and to ensure compliance with the ownership limits. In addition, each beneficial owner or constructive owner of our capital stock, and any person (including the stockholder of record) who is holding shares of our capital stock for a beneficial owner or constructive owner will, upon demand, be required to provide us with such information as we may request in good faith in order to determine our qualification as a REIT and to comply with the requirements of any taxing authority or governmental authority or to determine such compliance.

Anti-Takeover Effects of Provisions of Our Restated Certificate of Incorporation, Bylaws and Delaware law

Provisions of our Restated Certificate of Incorporation and Bylaws may delay or discourage transactions involving an actual or potential change in control or change in our management, including transactions in which stockholders might otherwise receive a premium for their shares, or transactions that our stockholders might otherwise deem to be in their best interests. Therefore, these provisions could adversely affect the price of our common stock.

Among other things, our Restated Certificate of Incorporation and Bylaws:

- permit our board of directors to issue up to 100,000,000 shares of preferred stock, with any rights, preferences and privileges as they may designate;
- provide that, subject to the terms of any series of preferred stock, the authorized number of directors may be changed only by resolution of the board of directors;
- provide that, subject to the terms of any series of preferred stock, all vacancies, including newly created directorships, may, except as otherwise required by law, be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum;
- eliminate the personal liability of our directors for monetary damages resulting from breaches of their fiduciary duty to the extent permitted by the DGCL and indemnify our directors and officers to the fullest extent permitted by the DGCL;
- provide that stockholders seeking to present proposals before a meeting of stockholders or to nominate candidates for election as directors at a meeting of stockholders must provide notice in writing in a timely manner, and also specify requirements as to the form and content of a stockholder's notice;
- do not provide for cumulative voting rights, therefore allowing the holders of a majority of the shares of common stock entitled to vote in any election of directors to elect all of the directors standing for election, if they should so choose;

- provide that, subject to exceptions, certain waivers we may grant and constructive ownership rules, no person may own, or be deemed to own by virtue of the attribution provisions of the Code, in excess of (i) 9.8% in value of the outstanding shares of all classes or series of Equinix stock or (ii) 9.8% in value or number (whichever is more restrictive) of the outstanding shares of any class or series of Equinix stock (as described above in "Restrictions on Ownership and Transfer");
- provide that our Bylaws can be amended or repealed at any regular or special meeting of stockholders or by the board of directors;
- permit stockholders to act by written consent so long as stockholders holding at least 25% of the voting power of the outstanding capital stock request that the board of directors set a record date for the action by written consent, and in connection with such a request for the establishment of a record date, provide certain information, make certain representations and comply with certain requirements relating to the proposed action and their ownership of our stock; and
- provide that special meetings of our stockholders may be called in limited circumstances. Special meetings of stockholders may be called by our board of directors or the chairman of the board of directors, the President or the Secretary and may not be called by any other person. A special meeting of stockholders shall be called by our Secretary at the written request of holders of record of at least 25% of the voting power of our outstanding capital stock entitled to vote on the matters to be brought before the proposed special meeting.

Delaware Takeover Statute. We are subject to Section 203 of the DGCL, which regulates corporate acquisitions. DGCL Section 203 restricts the ability of certain Delaware corporations, including those whose securities are listed on the Nasdaq Global Select Market, from engaging under certain circumstances in a business combination with any interested stockholder for three years following the date that such stockholder became an interested stockholder. For purposes of DGCL Section 203, a business combination includes, among other things, a merger or consolidation involving us and the interested stockholder and the sale of 10% or more of our assets. In general, DGCL Section 203 defines an interested stockholder as any entity or person beneficially owning 15% or more of our outstanding voting stock and any entity or person affiliated with or controlling or controlled by such entity or person. A Delaware corporation may opt out of DGCL Section 203 with an express provision in its original certificate of incorporation or an express provision in its certificate of incorporation or bylaws resulting from amendments approved by the holders of at least a majority of the corporation's outstanding voting shares. We have not opted out of the provisions of DGCL Section 203 in our Restated Certificate of Incorporation or Bylaws.

Forum Selection

Our bylaws include a forum selection provision providing that, unless the Company consents in writing, a state court located in the State of Delaware (or, if no state court located within the State of Delaware has jurisdiction, the federal district court for the District of Delaware) will be the sole and exclusive forum for any stockholder to bring any derivative action, any action asserting a claim of breach of fiduciary duties, any action asserting a claim arising from a provision of the Delaware General Corporation Law or the certificate of incorporation or our bylaws or any action asserting a claim governed by the internal affairs doctrine. There is uncertainty as to whether a court would enforce this provision with respect to claims brought to enforce any duty or liability under the Securities Act and our stockholders cannot waive compliance with the federal securities laws and the rules and regulations thereunder.

Transfer Agent and Registrar

The transfer agent and registrar for the shares of our common stock is Computershare Trust Company, N.A.

Exhibit 21.1

Subsidiaries of Equinix, Inc.

Entity	Jurisdiction
Equinix (Australia) Enterprises Holdings Pty Limited	Australia
Equinix (Australia) Enterprises Pty Limited	Australia
Equinix Australia Pty Limited	Australia
McLaren Pty Limited	Australia
Metronode (ACT) Pty Limited	Australia
Metronode (NSW) Pty Ltd	Australia
Metronode C1 Pty Limited	Australia
Metronode Group Pty Limited	Australia
Metronode Investments Pty Limited	Australia
Metronode M2 Pty Ltd	Australia
Metronode P2 Pty Limited	Australia
MGH Pegasus Pty Ltd	Australia
Equinix Australia National Pty. Ltd.	Australia
Metronode S2 Pty Ltd	Australia
MGH Bidco Pty Limited	Australia
MGH Finco Pty Limited	Australia
MGH Holdco Pty Ltd	Australia
McLaren Unit Trust	Australia
Equinix do Brasil Soluções de Tecnologia em Informática Ltda.	Brazil
Equinix do Brasil Telecomunicações Ltda.	Brazil
Equinix Colombia, Inc.	British Virgin Islands
Equinix (Bulgaria) Data Centers EOOD	Bulgaria
Equinix (Canada) Enterprises Ltd.	Canada
Equinix Canada Ltd.	Canada
CHI 3, LLC	Delaware, U.S.
DCI Management, Inc.	Delaware, U.S.
DCI Tech Holdings Infomart, LLLP	Delaware, U.S.
Equinix (EMEA) Management, Inc.	Delaware, U.S.
Equinix (Government) LLC	Delaware, U.S.
Equinix (US) Enterprises, Inc.	Delaware, U.S.
Equinix (Velocity) Holding Company	Delaware, U.S.
Equinix Impact LLC	Delaware, U.S.
Equinix LLC	Delaware, U.S.
Equinix Pacific LLC	Delaware, U.S.
Equinix Professional Services, Inc.	Delaware, U.S.

Entity	Jurisdiction
Equinix Government Solutions LLC	Delaware, U.S.
Equinix RP II LLC	Delaware, U.S.
Equinix South America Holdings, LLC	Delaware, U.S.
Infomart Dallas GP, LLC	Delaware, U.S.
Infomart Dallas, LP	Delaware, U.S.
Infomart Holdings, LLC	Delaware, U.S.
Infomart Venture, LLC	Delaware, U.S.
LA4, LLC	Delaware, U.S.
Moran Road Partners, LLC	Delaware, U.S.
NY2 Hartz Way, LLC	Delaware, U.S.
SV1, LLC	Delaware, U.S.
Switch & Data Facilities Company LLC	Delaware, U.S.
Switch & Data LLC	Delaware, U.S.
Switch & Data MA One LLC	Delaware, U.S.
Switch & Data WA One LLC	Delaware, U.S.
Switch & Data/NY Facilities Company LLC	Delaware, U.S.
Switch and Data CA Nine LLC	Delaware, U.S.
Switch and Data NJ Two LLC	Delaware, U.S.
Switch and Data Operating Company LLC	Delaware, U.S.
Switch and Data VA Four LLC	Delaware, U.S.
VDC I, LLC	Delaware, U.S.
VDC II, LLC	Delaware, U.S.
VDC III, LLC	Delaware, U.S.
VDC IV, LLC	Delaware, U.S.
VDC V, LLC	Delaware, U.S.
VDC VI, LLC	Delaware, U.S.
VDC VII, LLC	Delaware, U.S.
VDC VIII, LLC	Delaware, U.S.
Equinix Hyperscale (LP) LLC	Delaware, U.S.
Equinix Hyperscale (GP) LLC	Delaware, U.S.
Equinix (Finland) Enterprises Oy	Finland
Equinix (Finland) Oy	Finland
Equinix (France) Enterprises SAS	France
Equinix (Real Estate) Holdings SC	France
Equinix (Real Estate) SCI	France
Equinix France SAS	France
Equinix (Germany) Enterprises GmbH	Germany
Equinix (Germany) GmbH	Germany
Equinix (Real Estate) GmbH	Germany

Entity	**Jurisdiction**
Upminster GmbH	Germany
Equinix Hyperscale 1 (FR9) GmbH	Germany
Equinix Hyperscale 1 (FR11) GmbH	Germany
Equinix (Hong Kong) Enterprises Limited	Hong Kong
Equinix Hong Kong Limited	Hong Kong
CHI 3 Procurement, LLC	Illinois, U.S.
Equinix (Ireland) Enterprises Limited	Ireland
Equinix (Ireland) Limited	Ireland
Equinix (Italia) Enterprises S.r.l.	Italy
Equinix Italia S.r.l.	Italy
Open Hub Med Societa Consortile a responsabilita limitata	Italy
Equinix (Japan) Enterprises K.K.	Japan
Equinix (Japan) Technology Services K.K.	Japan
Equinix Japan K.K	Japan
Metronode New Zealand Limited	New Zealand
Equinix Muscat LLC	Oman
Equinix Middle East Services LLC	Oman
Equinix (China) Investment Holding Co., Ltd (亿利互连(中国)投资有限公司)	People’s Republic of China
Equinix Information Technology (Shanghai) Co., Ltd. (亿利互连信息技术(上海)有限公司)	People’s Republic of China
Equinix WGQ Information Technology (Shanghai) Co., Ltd. (亿利互连(上海)通讯科技有限公司)	People’s Republic of China
Equinix YP Information Technology (Shanghai) Co., Ltd. (亿利互连数据系统(上海)有限公司)	People’s Republic of China
Gaohong Equinix (Shanghai) Information Technology Co., Ltd (高鸿亿利(上海)信息技术有限公司)	People’s Republic of China
Equinix (Poland) Technology Services sp. z o.o.	Poland
Equinix (Poland) Enterprises sp. z o.o.	Poland
Equinix (Poland) sp. z o.o.	Poland
Equinix (Portugal) Data Centers, S.A.	Portugal
Equinix II (Portugal) Enterprises Data Centers, Unipessoal Lda	Portugal
Equinix Korea LLC	Republic of Korea
Equinix (Singapore) Enterprises Pte. Ltd.	Singapore
Equinix Asia Pacific Holdings Pte. Ltd.	Singapore
Equinix Asia Pacific Pte. Ltd.	Singapore
Equinix Singapore Holdings Pte. Ltd.	Singapore
Equinix Singapore Pte. Ltd.	Singapore
Equinix (Spain) Enterprises, S.L.U.	Spain
Equinix (Spain), S.A.U.	Spain

Entity	Jurisdiction
Equinix (Sweden) AB	Sweden
Equinix (Sweden) Enterprises AB	Sweden
Equinix (Switzerland) Enterprises GmbH	Switzerland
Equinix (Switzerland) GmbH	Switzerland
EMEA Hyperscale 1 C.V.	The Netherlands
Equinix Hyperscale 1 Holdings B.V.	The Netherlands
Equinix (EMEA) Acquisition Enterprises B.V.	The Netherlands
Equinix (EMEA) B.V.	The Netherlands
Equinix (Netherlands) B.V.	The Netherlands
Equinix (Netherlands) Enterprises B.V.	The Netherlands
Equinix (Netherlands) Holdings B.V.	The Netherlands
Equinix (Real Estate) B.V.	The Netherlands
Virtu Secure Webservices B.V.	The Netherlands
Equinix (EMEA) Hyperscale Services B.V.	The Netherlands
Equinix Turkey Data Merkezi Üretim Insaat Sanayi ve Ticaret Anonim Sirketi	Turkey
Equinix Turkey Enterprises Data Merkezi Üretim Insaat Sanayi ve Ticaret Anonim Sirketi	Turkey
Equinix Middle East FZ-LLC	United Arab Emirates
Equinix Hyperscale 1 (LD11) Limited	United Kingdom
Equinix (Services) Limited	United Kingdom
Equinix (UK) Enterprises Limited	United Kingdom
Equinix (UK) Limited	United Kingdom
Equinix Hyperscale (France) Holdings SAS	France
Equinix Hyperscale 1 (PA9) SAS	France
Equinix Hyperscale 1 (PA8) SAS	France
Equinix Hyperscale 1 (UK) Financing Limited	United Kingdom
Equinix Hyperscale 1 (LD13) Limited	United Kingdom
Equinix Canada (TR3) Ltd.	Canada
Equinix (MA5) Limited	United Kingdom
Steinfort Investments sp. z o.o	Poland
Equinix Hyperscale 1 (TY14) TMK	Japan
Equinix Hyperscale 1(OS2) TMK	Japan
Equinix Hyperscale 1 (TY12)TMK	Japan
Equinix Information Technologies (India) Private Limited	India
Equinix Mexico Holdings, S. de R.L. de C.V.	Mexico
Equinix Hyperscale (GP) Pte. Ltd.	Singapore
Equinix APAC Hyperscale 1 (LP) LLC	Delaware
Equinix Hyperscale (LP) Pte. Ltd.	Singapore

Entity	**Jurisdiction**
APAC 1 Hyperscale LP	Singapore
Equinix APAC 1 Hyperscale Holdings Pte. Ltd.	Singapore

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 (No. 333-221380) and Form S-8 (Nos. 333-45280, 333- 58074, 333-71870, 333-85202, 333-104078, 333-113765, 333-117892, 333-122142, 333-132466, 333-140946, 333-149452, 333-157545, 333-165033, 333-166581, 333-172447, 333-179677, 333-186873, 333-194229) of Equinix, Inc. of our report dated February 21, 2020 relating to the financial statements, financial statement scheduleand the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP
San Jose, California
February 21, 2020

Exhibit 31.1

CERTIFICATION PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Charles Meyers, certify that:

1. I have reviewed this annual report on Form 10-K of Equinix, Inc.;

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.

/s/ Charles Meyers

Charles Meyers
Chief Executive Officer and President

Dated: February 21, 2020

Exhibit 31.2

CERTIFICATION PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Keith D. Taylor, certify that:

1. I have reviewed this annual report on Form 10-K of Equinix, Inc.;

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.

/s/ Keith D. Taylor

Keith D. Taylor
Chief Financial Officer

Dated: February 21, 2020

Exhibit 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Equinix, Inc. (the “Company”) on Form 10-K for the period ending December 31, 2019, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Charles Meyers, Chief Executive Officer and President of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
(2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

/s/ Charles Meyers

Charles Meyers
Chief Executive Officer and President

February 21, 2020

Exhibit 32.2

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Equinix, Inc. (the “Company”) on Form 10-K for the period ending December 31, 2019, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Keith D. Taylor, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
(2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

/s/ Keith D. Taylor

Keith D. Taylor
Chief Financial Officer
February 21, 2020