CINCINNATI BELL INC
Form 10-K
February 22, 2019

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549
FORM 10-K

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

FOR THE FISCAL YEAR ENDED DECEMBER 31, 2018

o TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from to
Commission File Number 1-8519
CINCINNATI BELL INC.

Ohio	31-1056105
(State of Incorporation)	(I.R.S. Employer Identification No.)

221 East Fourth Street, Cincinnati, Ohio 45202
(Address of principal executive offices) (Zip Code)
(513) 397-9900
(Registrant’s telephone number, including area code)

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

Title of each class	Name of each exchange on which registered
Common Shares (par value $0.01 per share)	New York Stock Exchange
6 $^3/_4$% Cumulative Convertible Preferred Shares	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None
Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.
Yes x No o

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 o   No x

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).
Yes x No o
Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§232.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.
o
Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act:

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

Emerging growth company o
If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. o
Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes o No x
The aggregate market value of the voting common shares owned by non-affiliates of the registrant was $0.7 billion, computed by reference to the closing sale price of the common stock on the New York Stock Exchange on June 30, 2018, the last trading day of the registrant's most recently completed second fiscal quarter. The Company has no non-voting common shares.

At January 31, 2019, there were 50,337,778 common shares outstanding.

DOCUMENTS INCORPORATED BY REFERENCE
Portions of the definitive proxy statement relating to the Company's 2019 Annual Meeting of Shareholders are incorporated by reference into Part III of this report to the extent described herein.

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This report contains trademarks, service marks and registered marks of Cincinnati Bell Inc., as indicated.

Part I

Item 1. Business

Overview and Strategy

Cincinnati Bell Inc. and its consolidated subsidiaries ("Cincinnati Bell", "we", "our", "us" or the "Company") provide integrated communications and IT solutions that keep consumer and business customers connected with each other and with the world.

Through its Entertainment and Communications segment, the Company provides high speed data, video, and voice solutions to consumers and businesses over an expanding fiber network and a legacy copper network. During 2018, the Company acquired Hawaiian Telcom Holdco, Inc. ("Hawaiian Telcom"), the largest full service provider of communication services on all of Hawaii's major islands. This acquisition added operational scale to our business by adding access to both Honolulu, a well-developed, fiber-rich city, as well as the growing neighbor islands. After the acquisition the Company's combined fiber network is nearly 16,500 fiber route miles.

Through its IT Services and Hardware segment, business customers across the U.S., Canada and Europe rely on the Company for the sale and service of efficient, end-to-end communications and IT systems and solutions. During 2017, the Company expanded the geographic footprint of its IT Services and Hardware segment as a result of the acquisitions of SunTel Services LLC ("SunTel") and OnX Holdings LLC ("OnX"), transforming the segment into a North American hybrid-cloud services provider. In addition, the acquisition of Hawaiian Telcom in 2018 also expanded the IT Services and Hardware segment to Hawaii.

Our goal is to continue the transformation of Cincinnati Bell from a legacy copper-based telecommunications company into a technology company with state-of-the-art fiber assets servicing customers with data, video, voice and IT solutions to meet their evolving needs. To this end, we believe that, by leveraging our past and future investments, we have created a company with a healthy balance sheet, growing revenue, growing profitability and sustainable cash flows.

In an effort to achieve our objectives, we continue to focus on the following key initiatives:

- expand our fiber network; and
- grow our IT Services and Hardware segment.

Expand our fiber network

We invested $118.1 million of capital in the Entertainment and Communications segment in products that can be categorized as either Fioptics in Cincinnati or Consumer/SMB Fiber in Hawaii (collectively, "Consumer/SMB Fiber") during 2018. Revenue from these high demand products totaled $383.5 million, up 24% over the prior year including the contribution from Hawaii, and up 10% over the prior year in Cincinnati, mitigating the decline in legacy products. The primary focus of these investments is the expansion of high-speed internet and video products which are designed to compete directly with the cable Multiple System Operators, such as Charter Communications, serving the Company’s operating territories. Year-over-year growth in these products is outlined in the table below:

Cincinnati Operating Territory	2018	2017	2016
Consumer / SMB Fiber Revenue (in millions):	$341.2	$309.9	$254.1
Subscribers (in thousands):			
High-speed internet	239.0	226.6	197.6
Video	139.9	146.5	137.6
Voice	107.6	105.9	96.2

Hawaii Operating Territory	2018
Consumer / SMB Fiber Revenue (in millions):	$42.3
Subscribers (in thousands):	
High-speed internet	65.9
Video	48.8
Voice	30.3

During the year, we passed an additional 38,800 addresses in the Greater Cincinnati area with Fioptics, which included a reduction in Fiber to the Node ("FTTN") addresses of 2,200 as we upgraded these addresses to Fiber to the Premise ("FTTP") addresses as FTTP is becoming a more relevant solution for our customers. As of December 31, 2018, the Fioptics products are now available to approximately 611,000 customer locations or 75% of the Greater Cincinnati operating territory. During the six months ended December 31, 2018, we passed an additional 6,900 addresses in Hawaii. The Consumer/SMB Fiber products are now available to 240,500 addresses, or 49% of the operating territory in Hawaii, including Oahu and the neighbor islands.

In 2018, the Company also invested $25.1 million in Enterprise Fiber products, which includes fiber and IP-based core network technology. These investments position the Company to meet increased business and carrier demand within Greater Cincinnati and in contiguous markets in the Midwest region. In Hawaii expenditures are for high-bandwidth data transport products, such as metro-ethernet, including the Southeast Asia to United States ("SEA-US") cable. We continue to evolve and optimize network assets to support the migration of legacy products to new technology, and as of December 31, 2018, the Company has:

- increased the total number of commercial addresses with fiber-based services (referred to as a lit address) to 26,600 in Greater Cincinnati and 19,100 in Hawaii by connecting approximately 4,000 additional lit addresses in Greater Cincinnati during the twelve months ended December 31, 2018 and 1,500 additional lit addresses in Hawaii during the six months ended December 31, 2018;
- expanded the fiber network to span more than 11,900 route miles in Greater Cincinnati and 4,600 route miles in Hawaii; and
- provided cell site back-haul services to approximately 90% of the 1,000 cell sites in the Greater Cincinnati market, of which approximately 97% of these sites are lit with fiber, and 69% of the 900 cell sites in Hawaii, all of which are lit with fiber.

As a result of our investments, we have generated year-over-year Entertainment and Communications revenue growth each year since 2013. The Company's expanding fiber assets allow us to support the ever-increasing demand for data, video and internet devices with speed, agility and security. We believe our fiber investments are a long-term solution for our customers' bandwidth needs.

Grow our IT Services and Hardware Segment

Cincinnati Bell continues to grow the IT Services and Hardware segment by developing new products, as well as expanding its reach to new customers. During 2017, the Company completed the acquisitions of SunTel and OnX, which enabled us to extend our geographic footprint across the U.S., Canada and Europe, diversify our customer base, and expand our product portfolio. During 2018, the acquisition of Hawaiian Telcom helped to expand the segment even further across the U.S. to Hawaii. The Company continues to develop high-demand products for business customers through our investments in unified communications and cloud services. Our ability to be innovative and to react to the changing technology demands of our customers is important to the growth of our IT Services and Hardware segment. Our offerings under the Infrastructure Solutions practice provide a platform for buyer engagement and an opportunity for bridging the customer to higher value professional and managed services. In 2018, the Company saw significant increases in revenue from Communications solutions, specifically Unified Communications as a Service ("UCaaS"), Software-Defined Wide Area Network ("SD-WAN") and Network as a Service ("NaaS"), to customers that historically have purchased our hardware offerings.

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As a company with a long history of managing customers' network and technology needs, we combine the management of the network, whether owned or leased from other carriers out of territory, with integrated voice and IT offerings. We supply the architecture and integration intelligence, labor and hardware as well as any combination of these services. These projects can be established based on hourly billing rates, service-level driven agreements or utility-based managed service models. Customers are attracted to our ability to combine our historic knowledge, unique assets and talented workforce in order to help them improve their operational efficiency, mitigate risk and reduce costs.

Operations

As of December 31, 2018, the Company operated two segments: Entertainment and Communications and IT Services and Hardware.

The Entertainment and Communications segment provides products and services that can be categorized as either Consumer/SMB Fiber, Enterprise Fiber or Legacy. The table below demonstrates how our products and services are categorized:

Entertainment and Communications	Consumer / SMB Fiber	Enterprise Fiber	Legacy
Data	High-Speed Internet	Ethernet (>10Mb)	DSL (< 10 Mb) (2)
		Dedicated Internet Access	DS0 (3), DS1, DS3
		Wavelength	TDM (4)
		IRU	Ethernet (<10 Mb)
		Small Cell	
		SONET (1)	
Voice	Voice (Fiber)		Traditional Voice
			Consumer Long Distance
			Switched Access
			Digital Trunking
Video	Television Service		
Other			Maintenance
			Information Services
			Connect America Fund support
			Directory Assistance
			Advertising
			Wireless Handsets and Accessories
			Wireless Services
			Wiring Projects

(1) Synchronous Optical Network
(2) Digital Subscriber Line
(3) Digital Signal
(4) Time Division Multiplexing

We classify the products and services of our IT Services and Hardware segment into four distinct practices: Consulting, Cloud, Communications and Infrastructure Solutions. The table below demonstrates how our products and services are categorized:

IT Services and Hardware	
Consulting	IT Staffing
	Application Services
Cloud	Virtual Data Centers
	Storage
	Backup
	Network Management/Monitoring
	Security
	Data Center
	Cloud Consulting
Communications	Unified Communications as a Services ("UCaaS")
	Contact Center
	Software Defined Wide Area Networking ("SD-WAN")
	Networking Solutions
	Multi-Protocol Label Switching ("MPLS")
	Network as a Service ("NaaS")
Infrastructure Solutions	Hardware
	Software Licenses
	Maintenance

Entertainment and Communications

The Entertainment and Communications segment provides products and services such as high-speed internet, data transport, local voice, video and other services. Cincinnati Bell Telephone Company LLC ("CBT"), a subsidiary of the Company, is the incumbent local exchange carrier ("ILEC") for a geography that covers a radius of approximately 25 miles around Cincinnati, Ohio, and includes parts of northern Kentucky and southeastern Indiana. CBT has operated in this territory for over 145 years. Voice and data services in the Enterprise Fiber and Legacy categories that are delivered beyond the Company's ILEC territory, particularly in Dayton and Mason, Ohio, are provided through the operations of Cincinnati Bell Extended Territories LLC ("CBET"), a subsidiary of CBT. On July 2, 2018, the Company acquired Hawaiian Telcom. Hawaiian Telcom is the ILEC for the State of Hawaii and the largest full service provider of communications services and products in that state. Originally incorporated in Hawaii in 1883 as Mutual Telephone Company, Hawaiian Telcom has a strong heritage of over 135 years as Hawaii’s communications carrier. Its services are offered on all of Hawaii’s major islands, except its video service, which currently is only available on the island of Oahu. The key products and services provided by the Entertainment and Communications segment include the following:

Data

The Company's data products include high-speed internet access, data transport and interconnection services. Consumer demand for increased internet speeds is accelerating, and more customers are opting for higher bandwidth solutions. To address this demand, the Company is focused on building out FTTP addresses, enabling these addresses to receive speeds up to one gigabit per second ("Gbps"). FTTP addresses now cover 58% of the market in Greater Cincinnati and 34% of the market in Hawaii. The Company is now able to provide internet speeds of 30 megabits per second ("Mbps") or more to approximately 75% of Greater Cincinnati and 68% of homes and businesses on the island of Oahu, of which approximately 472,000 and 167,000 addresses are capable of receiving speeds up to one Gbps in Greater Cincinnati and Hawaii, respectively.

As business customers migrate from legacy products and copper-based technology, our metro-ethernet product becomes the access method of choice due to its ability to support multiple applications on a single physical connection. We are also expanding our metro-ethernet platform to deliver services across a wider geography to target business customers beyond our ILEC footprint. The Company’s regional network connects Greater Cincinnati, Columbus, and Dayton, Ohio, as well as Indianapolis, Indiana, Chicago, Illinois, and Louisville, Kentucky.

As a result of the acquisition of Hawaiian Telcom the Company gained access to the SEA-US trans Pacific submarine cable system connecting Indonesia, the Philippines, Guam, Hawaii and the mainland United States. The system provides an initial 20 Terabytes per second ("Tbps") of capacity using state-of-the-art 100Gbps technology to accommodate the increase in data consumption.

Voice

Voice represents local service over both copper and fiber. It also includes consumer long distance, digital trunking, switched access and other value-added services such as caller identification, voicemail, call waiting and call return. The Company's voice access lines over copper continue to decrease as our customers have increasingly employed wireless technologies in lieu of wireline voice services ("wireless substitution"), migrated to competitors, or migrated to VoIP services provided by the Company and others.

Customers purchasing traditional long distance service can choose from a variety of long distance plans, which include unlimited long distance for a flat fee, purchase of minutes at a per-minute-of-use rate, or a fixed number of minutes for a flat fee. The Company's long distance lines and related minutes of use have continued to decline as a result of wireless substitution.

Video

In the Greater Cincinnati territory, the Company launched Fioptics in 2009 and initially focused our fiber network investment on densely populated areas, such as apartments and condominiums. Since that time, Fioptics has been deployed over a much broader base and is now available to approximately 75% of Greater Cincinnati. As of December 31, 2018, we have 139,900 video subscribers in Greater Cincinnati. Our Fioptics customers enjoy access to over 400 entertainment channels, including digital music, local, movie and sports programming with over 150 high-definition channels, parental controls, HD DVR and video On-Demand.

In Hawaii, the Company launched its next-generation television service on the island of Oahu in July 2011. The TV service is 100% digital with hundreds of local, national, international and music channels, including high-definition, premium, pay-per-view channels and video on-demand service. TV service has been deployed to 48,800 subscribers in Hawaii as of the end of 2018.

Other

Other revenue consists of revenue generated from wiring projects for business customers, Connect America Fund support (see “—Regulation” for further discussion of universal service), advertising, directory assistance, maintenance and information services.

IT Services and Hardware

The IT Services and Hardware segment provides a full range of managed IT solutions, telephony and IT equipment sales, and professional IT staffing services. These services and products are provided through the Company's subsidiaries in various geographic areas throughout the U.S., Canada and Europe. By offering a full range of Infrastructure Solutions in addition to Cloud, Communications and Consulting services, the IT Services and Hardware segment provides end-to-end IT solutions designed to reduce cost and mitigate risk while optimizing performance for its customers.

The key products and services provided by the IT Services and Hardware segment include the following:

Consulting

The Company's consulting services offerings consist of IT staffing and project-based engagements, including engineering and installation of voice, connectivity and IT technologies, development of digital application solutions and staff augmentation by highly skilled and industry-certified technical resources. Engagements can be short-term IT implementation and project-based work as well as longer term staffing and permanent placement assignments. The

Company utilizes a team of experienced recruiting and hiring personnel to provide its customers with a wide range of skilled IT professionals.

Communications

The Company offers a complete portfolio of hosted solutions that include converged IP communications platforms of data, voice, video and mobility applications. We offer our customers expert management for all hardware and software components, including maintenance contracts and service level agreement ("SLA") based services. Fully hosted and managed, these voice platforms and applications can also be delivered as a service for a monthly utility fee allowing our customers to scale without a large capital investment.

The solutions offered in the Communications practice include UCaaS, SD-WAN, NaaS, Contact Center and other Networking Solutions. UCaaS provides a portfolio of solutions that includes VoIP, room-based video, mobile solutions, chat/presence, messaging, web conferencing, audio conferencing, social media, contact center solutions, and more in order to serve a customer's collaboration needs. Cloud delivered SD-WAN is a revolutionary, agile platform to deploy, manage and monitor hybrid public, private, wireline and wireless networks. NaaS is a fully managed networking solution with cloud integration, security, switching, Wi-Fi, management, monitoring and SD-WAN. Our Contact Center offering features speech-enabled Interactive Voice Response ("IVR"), call-back services, call analytics and surveys, speech analytics, alerts and notification, and improved customer satisfaction and productivity. Additionally, we manage the maintenance of a large base of customers with traditional voice systems as well as converged VoIP systems under Networking Solutions.

Cloud

Virtual data center ("VDC") is a robust and scalable virtual infrastructure consisting of equipment, security, people and processes. This offering is provided in three different models - private cloud, dedicated cloud or public cloud - and provides customers with either a long-term or a short-term flexible solution that is fully managed by the Company and monitored around the clock from our Enterprise Network Operations Center ("ENOC").

Storage is a flexible, on-demand solution that enables businesses to eliminate capital expenditures and ongoing asset management with SLA-based services. The Company offers Tier I, Tier II and Tier III storage to meet its customers' availability, accessibility, protection, performance and capacity needs.

Backup is a scalable solution that allows businesses to eliminate capital outlay and ongoing equipment management with SLA-based services and includes virtual data center, hardware, software, monitoring and support.

The Company provides SLA-based monitoring and management services utilizing our ENOC. The ENOC includes highly certified engineers and operation experts that proactively monitor and manage our customers’ technology environments and applications. Standalone monitoring services provide customers with scheduled and automatic checks of customers' servers, routers, switches, load balancers and firewalls. We also provide customers with advance trouble shooting, repair and changes of customers' servers, routers, switches, load balancers and other network devices from our ENOC. These services can be provided to customers with equipment provided by the Company, or customer-owned equipment, and do not have geographical constraints. Services can be purchased individually or bundled by combining multiple products, services, and assets into a utility or service model.

Infrastructure Solutions

The Company maintains premium resale relationships and certifications with a variety of branded technology vendors which allows it to competitively sell, architect and install a wide array of telecommunications and IT infrastructure equipment to meet the needs of its customers.

Sales and Distribution Channels

The Company’s Entertainment and Communications segment utilizes a number of distribution channels to acquire customers. As of December 31, 2018, the Company operated nine retail stores in the Cincinnati operating territory to market and distribute our Fioptics suite of products. The Company works to locate retail stores in high traffic but affordable areas, with a distance between each store that considers optimal returns per store and customer convenience. The Company also offers fully-automated, end-to-end web-based sales of various other Company services and accessories for both the Cincinnati operating territory and the Hawaii operating territory. In addition, the Company utilizes a call center, as well as a door-to-door sales force, to target the sale of our consumer products to residents.

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For both operating segments, we utilize a business-to-business sales force and a call center organization to reach business customers in our operating territories. Larger business customers are supported by sales account representatives and solution architects located in our branch offices across the U.S., Canada and Europe that understand the customer's technology needs and recommend Company offered solutions. Smaller business customers are supported through a telemarketing sales force, customer representatives and store locations.

The IT Services and Hardware segment utilizes an indirect distribution channel to sell services, primarily focused on Communications. Compensation to the distributor is success-based and typically involves a residual payment based on revenue from customers.

Suppliers and Product Supply Chain

The Company generally subjects purchases to competitive bids and selects its vendors based on price, service level, delivery terms, quality of product and terms and conditions.

The Entertainment and Communications segment's primary purchases are for video content, network equipment, software, fiber cable and contractors to maintain and support the growth of the fiber network. The Company maintains facilities and operations for storing cable and other equipment, product distribution and customer fulfillment.

The IT Services and Hardware segment primarily purchases IT and telephony equipment that is either sold to a customer, or used to provide service to the customer. The Company is a certified distributor of leading technology and software solutions including, but not limited to, Cisco, EMC, Avaya and Oracle. Most of this equipment is shipped directly to the customer from vendor locations, but the Company does maintain warehouse facilities for replacement parts and equipment testing and staging.

In addition, we have long-term commitments to outsource various services, such as certain information technology functions, cash remittance and accounts payable functions, call center operations and maintenance services.

Competition

The telecommunications industry is very competitive, and the Company competes against larger, well-capitalized national providers.

The Entertainment and Communications segment faces competition from other local exchange carriers, wireless service providers, inter-exchange carriers, as well as cable, broadband, and internet service providers. The Company has lost, and will likely continue to lose access lines as a portion of the customer base migrates to competitive wireline or wireless providers in lieu of the Company’s services. Wireless providers, particularly those that provide unlimited wireless service plans with no additional fees for long distance, offer customers a substitution service for the Company’s local voice and long-distance services. The Company believes wireless substitution and competition is the reason for the largest portion of the Company’s access line and long-distance line losses.

Our Consumer/SMB Fiber and Enterprise Fiber products also face intense competition from cable operators, other telecom companies and niche fiber companies. Many of our competitors have lower operating costs and access to resources that provide economies of scale that allow them to more aggressively price products, as well as provide products on a much broader scale given their expanded geographic operations. Our competitors continuously upgrade their service quality and offerings which could substantially erode the competitive advantage we currently have with our fiber-based products. These competitive factors could limit the Company's ability to grow revenue and cash flows despite the strategic initiatives implemented.

The Company's video product also faces competition from a number of different sources, including companies that deliver movies, television shows and other video programming over broadband Internet connections. Increasingly, content owners are utilizing Internet-based delivery of content directly to consumers, some without charging a fee for access to the content. Furthermore, due to consumer electronics innovations, consumers are able to watch such Internet-delivered content on television sets and mobile devices. Increased customer migration to these non-traditional entertainment products could result in increased churn and decreased penetration for video; however, this trend could also drive increased demand for our high speed internet product.

The IT Services and Hardware segment competes against numerous information technology consulting, web-hosting, and computer system integration companies, many of which are larger in scope and well-financed. The Company believes that participants in this market must grow rapidly and achieve significant scale to compete effectively. Other competitors may consolidate with larger companies or acquire software application vendors or technology providers, enabling them to more effectively compete. This consolidation could affect prices and other competitive factors in ways that could impede the ability of these businesses to compete successfully in the market. In addition, as more customers migrate to the public cloud, we will see declines in the demand for Infrastructure Solutions. However, this trend could provide an opportunity in Consulting, Communications and Cloud Services as the Company has IT professionals that can assist customers through this migration to the public cloud.

Customers

The Company had no customers whose revenue comprised greater than 10% of total revenue in 2018 and 2017. The Company had sales with one customer, GE, which contributed 11% to total revenue in 2016.

Employees

At December 31, 2018, the Company had approximately 4,300 employees. Approximately 35% of its employees are covered by collective bargaining agreements. Approximately 20% of total employees are covered by a collective bargaining agreement with the Communications Workers of America (“CWA”), which is affiliated with the AFL-CIO, and approximately 15% of total employees are covered by a collective bargaining agreement with the International Brotherhood of Electrical Workers (IBEW) Local 1357. The collective bargaining agreements with the CWA and IBEW are effective through the second quarter of 2021 and third quarter of 2022, respectively.

Website Access and Other Information

The Company was incorporated under the laws of Ohio in 1983 with its headquarters at 221 East Fourth Street, Cincinnati, Ohio 45202 (telephone number (513) 397-9900 and website address http://www.cincinnatibell.com). The Company files annual, quarterly and current reports, proxy statements and other information with the Securities and Exchange Commission (the "SEC") under the Exchange Act of 1934 (the "Exchange Act"). The SEC maintains an internet site that contains reports, proxy statements, and other information about issuers, like the Company, which file electronically with the SEC. The address of that site is http://www.sec.gov. The Company makes available its reports on Forms 10-K, 10-Q, and 8-K (as well as all amendments to these reports), proxy statements and other information, free of charge, at the Investor Relations section of its website.

Executive Officers

Refer to Part III, Item 10. "Directors, Executive Officers and Corporate Governance" of this Annual Report on Form 10-K for information regarding executive officers of the registrant.

Business Segment Information

The amounts of revenue, intersegment revenue, operating income, expenditures for long-lived assets, and depreciation and amortization attributable to each of the Company’s business segments for the years ended December 31, 2018, 2017, and 2016, and assets as of December 31, 2018 and 2017 are set forth in Note 16 to the consolidated financial statements.

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Item 1A. Risk Factors

In addition to the other information contained in this Form 10-K, the following risk factors should be considered carefully in evaluating us. Our business, financial condition, liquidity or results of operations could be materially affected by any of these risks.

Risk Factors Related to our Business and Operations

The Company operates in highly competitive industries, and customers may not continue to purchase products or services, which would result in reduced revenue and loss of market share.

The telecommunications industry is very competitive and the Company competes against larger, well-capitalized national providers. Competitors may reduce pricing, create new bundled offerings, or develop new technologies, products or services that they can offer in expanded geographic regions. Our competitors are expected to continuously upgrade their service quality and offerings. If the Company cannot continue to offer reliable, competitively priced, value-added services, or if the Company does not keep pace with technological advances and upgrades, competitive forces could adversely affect it through a loss of market share or a decrease in revenue and profit margins. The Company has lost access lines, and will likely continue to lose them as part of the customer base migrates to competitors or alternative products of the Company. These competitive factors could limit the Company's ability to grow revenue and cash flows despite the strategic initiatives implemented.

The Entertainment and Communications segment faces competition from other local exchange carriers, wireless service providers, inter-exchange carriers, cable, broadband and internet service providers, other telecom companies, niche fiber companies and companies that deliver movies, television shows and other video programming over broadband Internet connections. Wireless providers, particularly those that provide unlimited wireless voice and data plans with no additional fees for long distance, offer customers a substitution for the Company’s services. The Company believes wireless substitution accounts for the largest portion of its access line losses. Also, cable competitors that have existing service relationships with the Company's customers in the Entertainment and Communications segment offer substitution services, such as VoIP and long distance voice services in the Company's operating areas. As a result of wireless substitution and increased competition, legacy voice lines decreased by 14% in Cincinnati in 2018 compared to 2017.

In addition, our strategic products, particularly our fiber-based products, face competition from a number of different sources including cable operators, other telecom companies, niche fiber companies, and companies that deliver movies, television shows and other video programming over broadband Internet connections. Increasingly, content owners are utilizing Internet-based delivery of content directly to consumers, some without charging a fee for access to the content. Furthermore, due to consumer electronics innovations, consumers are able to watch such Internet-delivered content on television sets and mobile devices. Increased customer migration to these non-traditional entertainment products could result in increased churn and decreased penetration in our Consumer/SMB Fiber products. If the Company is unable to effectively implement strategies to attract and retain video and high-speed internet subscribers, retain access lines and long distance subscribers, or replace such customers with other sources of revenue, the Company's Entertainment and Communications segment will be adversely affected.

The IT Services and Hardware segment competes against numerous other information technology consulting, web-hosting, and computer system integration companies, many of which are large in scope and well-financed. Other competitors may consolidate with larger companies or acquire software application vendors or technology providers, which may provide competitive advantages. The Company believes that many of the participants in this market must grow rapidly and achieve significant scale to compete effectively. This consolidation could affect prices and other competitive factors in ways that could impede our ability to compete successfully in the market. The competitive forces described above could adversely affect the Company’s IT Services and Hardware segment and have a material adverse impact on the Company’s business, financial condition, results of operations and cash flows.

The Company may be unable to grow our revenues and cash flows despite the initiatives we have implemented.

We must produce adequate revenues and cash flows that, when combined with cash on hand and funds available under our revolving credit facilities, will be sufficient to service our debt, fund our capital expenditures, fund our pension and other employee benefit obligations and pay preferred dividends pursuant to our dividend policy. We have identified some potential areas of opportunity and implemented several growth initiatives. We cannot be assured that these opportunities will be successful or that these initiatives will improve our financial position or our results of operations.

Failure to anticipate the need to introduce new products and services, or to compete with new technologies, may compromise the Company’s success in the telecommunications industry.

The Company’s success depends, in part, on being able to anticipate the needs of current and future business, carrier and consumer customers. The Company seeks to meet these needs through new product introductions, service quality and technological improvements. New products and services are important to the Company’s success because its industry is technologically driven, such that new technologies can offer alternatives to the Company’s existing services. The development of new technologies and products could accelerate the Company’s loss of access lines or limit the growth from its strategic products, which would have a material adverse effect on the Company’s revenue, results of operations, financial condition and cash flows.

The Company’s access lines, which generate a significant portion of its cash flows and profits, are decreasing in number. If the Company continues to experience access line losses similar to the past several years, its revenues, earnings and cash flows from operations may be adversely impacted.

The Company generates a substantial portion of its revenues by delivering voice and data services over access lines. The Company's local telecommunications subsidiaries have experienced substantial access line losses over the past several years due to a number of factors, including wireless and broadband substitution and increased competition. The Company expects access line losses to continue into the foreseeable future. Failure to retain access lines without replacing such losses with an alternative source of revenue would adversely impact the Company's revenues, earnings and cash flow from operations.

The Company has provided alternative sources of revenue by way of our strategic products; however, these products may generate lower profit margins than our traditional services. In addition, as a larger portion of our customer base has already migrated to these new product offerings, a decreased growth rate of strategic products can be expected. Moreover, we cannot provide assurance that the revenues generated from our new offerings will mitigate revenue losses from the reduced sales of our legacy products or that our new strategic offerings will be as successful as anticipated.

Negotiations with the providers of content for our video programming may not be successful, potentially resulting in our inability to carry certain programming channels, which could result in the loss of subscribers. In addition, due to the influence of some content providers, we may be forced to pay higher rates for some content, resulting in increased costs.

We must negotiate with the content owners of the programming that we carry. These content owners are the exclusive provider of the channels they offer. If we are unable to reach a mutually-agreed upon contract with a content owner, our existing agreements to carry this content may not be renewed, resulting in the blackout of these channels. The loss of content could result in our loss of customers who place a high value on the particular content that is lost. In addition, many content providers own multiple channels. As a result, we typically have to negotiate the pricing for multiple channels rather than one, and carry and pay for content for which customers do not associate much value, in order to have access to other content that customers do associate value. Some of our competitors have materially larger scale than we do, and may, as a result, be better positioned than we are in such negotiations. As a result of these factors, the expense of content may continue to increase, and have a material adverse impact on the Company’s results of operations and cash flows.

The Company's failure to meet performance standards under its agreements could result in customers terminating their relationships with the Company, or customers being entitled to receive financial compensation, leading to reduced revenues and/or increased costs.

The Company's agreements with its customers contain various requirements regarding performance and levels of service. If the Company fails to provide the levels of service or performance required by its agreements, customers may be able to receive financial compensation, or may be able to terminate their relationship with the Company. In order to provide these levels of service, the Company is required to protect against human error, natural disasters, equipment failure, power failure, sabotage and vandalism, and have disaster recovery plans available in the event of disruption of service. The failure to address these or other events may result in a disruption of service. In addition, any inability to meet service level commitments, or other performance standards, could reduce the confidence of customers. Decreased customer confidence could impair the Company's ability to attract and retain customers, which could adversely affect the Company's ability to generate revenues and operating results.

The Company generates a substantial portion of its revenue by serving a limited geographic area.

The Company generates a substantial portion of its revenue by serving customers in Cincinnati, Ohio, Dayton, Ohio and the islands of Hawaii. Furthermore, because of Hawaii's geographic isolation, the successful operation and growth of the business in Hawaii is dependent on favorable economic and regulatory conditions in the state. An economic downturn or natural disaster occurring in any of these limited operating territories would have a disproportionate effect on the Company's business, financial condition, results of operations and cash flows compared to similar companies of a national scope and similar companies operating in different geographic areas.

The customer base for telecommunications services in Hawaii is small and geographically concentrated. The population of Hawaii is approximately 1.4 million, approximately 70% of whom live on the island of Oahu. Any adverse economic conditions affecting Oahu, or Hawaii generally, could materially impair our ability to operate our business. Labor shortages or increased labor costs in Hawaii could also have a material adverse effect on our business. In addition, we may be subject to increased costs for goods and services that the Company is unable to control or defray as a result of operating in this limited territory. Increased expenses including, but not limited to, energy and health care could have a material adverse effect on our business and results of operations.

Two large customers account for a significant portion of the Company's revenues and accounts receivable. The loss or significant reduction in business from either one of these customers would cause operating revenues to decline and could negatively impact profitability and cash flows.

As of December 31, 2018 Verizon comprised 18% of consolidated accounts receivable. As of December 31, 2017, GE comprised 10% of consolidated accounts receivable. During 2016, GE contributed 11% to consolidated revenue. As a result of these concentrations, the Company's results of operations and financial condition could be materially affected if the Company lost these customers or if services purchased were significantly reduced. In addition, if Verizon or GE were to default on their accounts receivable obligations, the Company would be exposed to potentially significant losses in excess of the provisions established. This would also negatively impact the available borrowing capacity under the Company's accounts receivable securitization facility ("Receivables Facility").

Maintaining the Company's telecommunications networks requires significant capital expenditures, and the Company's inability or failure to maintain its telecommunications networks could have a material impact on its market share and ability to generate revenue.

Over the past several years, the Company has improved its wireline network through increased capital expenditures for fiber optic cable in areas of its operating network. The Company intends to continue its capital expenditures for fiber optic cable.

In order to provide appropriate levels of service to the Company's customers, the network infrastructure must be protected against damage from human error, natural disasters, unexpected equipment failure, power loss or telecommunications failures, terrorism, sabotage or other intentional acts of vandalism. The Company's networks may not address all of the problems that may be encountered in the event of a disaster or other unanticipated problems, which may result in disruption of service to customers.

The Company may also incur significant additional capital expenditures as a result of unanticipated developments, regulatory changes and other events that impact the business.

Increases in broadband usage may cause network capacity limitations, resulting in service disruptions or reduced capacity for customers.

Video streaming services and peer-to-peer file sharing applications use significantly more bandwidth than traditional Internet activity such as web browsing and email. As utilization rates and availability of these services continue to grow, our high-speed Internet customers may use much more bandwidth than in the past. If this occurs, we could be required to make significant capital expenditures to increase network capacity in order to avoid service disruptions or reduced capacity for customers. We may not be able to recover the costs of the necessary network investments. This could result in an adverse impact to our results of operations and financial condition.

We may be liable for the material that content providers distribute over our networks.

The law relating to the liability of private network operators for information carried on, stored or disseminated through their networks is still unsettled. As such, we could be exposed to legal claims relating to content disseminated on our networks. Claims could challenge the accuracy of materials on our network or could involve matters such as defamation, invasion of privacy or copyright infringement. If we need to take costly measures to reduce our exposure to these risks or are required to defend ourselves against such claims, our financial results would be negatively affected.

An IT and/or network security breach or cyber-attack may lead to unauthorized use or disabling of our network, theft of customer data, unauthorized use or publication of our confidential business information and could have a material adverse effect on our business.

Cyber attacks or other breaches of network or information technology security may cause equipment failures or disruptions to our operations. Our inability to operate our wireline networks as a result of such events, even for a limited period of time, may result in significant expenses and/or loss of market share. In addition, the potential liabilities associated with these events could exceed the insurance coverage we maintain. Cyber attacks, which include the use of malware, computer viruses and other means for disruption or unauthorized access, have increased in frequency, scope and potential harm in recent years. These risks may be heightened as we expand our managed services, data center services and cloud-based services. While, to date, we have not been subject to cyber attacks or other cyber incidents which, individually or in the aggregate, have been material to our operations or financial condition, the preventative actions we take to reduce the risk of cyber incidents and protect our information technology and networks may be insufficient to repel a major cyber attack in the future. Significant security failures could result in the unauthorized use or disabling of our network elements. The costs associated with a major cyber attack could include material incentives offered to existing customers and business partners to retain their business, increased expenditures on cyber security measures, lost revenues from business interruption, litigation, fines from regulatory authorities and damage to our reputation. If we fail to prevent the theft of valuable information such as financial data, sensitive information about the Company and intellectual property, or if we fail to protect the privacy of customer and employee confidential data against breaches of network or information technology security, it could result in damage to our reputation, which could adversely impact customer and investor confidence. Any of these occurrences could result in a material adverse effect on our results of operations and financial condition.

Weather conditions, natural disasters, terrorist acts or acts of war could cause damage to our infrastructure and result in significant disruptions to our operations.

Our business operations are subject to interruption by natural disasters, power outages, terrorist attacks, other hostile acts and events beyond our control. Such events could cause significant damage to our infrastructure, resulting in degradation or disruption of service to our customers. The potential liabilities associated with these events could exceed the insurance coverage we maintain. Our system redundancy may be ineffective or inadequate and our disaster recovery planning may not be sufficient for all eventualities. These events could also damage the infrastructure of suppliers that provide us with the equipment and services we need to operate our business and provide products to our customers. A natural disaster or other event causing significant physical damage could cause us to experience substantial losses resulting in significant recovery time and expenditures to resume operations. In addition, these occurrences could result in lost revenues from business interruption as well as damage to our reputation.

In particular, from time to time the islands of Hawaii experience severe weather conditions such as high winds and heavy rainfall, and natural disasters such as earthquakes, volcanic eruptions and tsunami, which can overwhelm our employees, disrupt our services and severely damage our property. Such disruptions in service and damage to property could materially harm our business, financial condition, results of operations, liquidity and/or market price of our securities. Moreover, it is impossible to predict the extent to which climate change could cause extreme weather conditions to become more frequent or more extreme.

The regulation of the Company’s businesses by federal and state authorities may, among other things, place the Company at a competitive disadvantage, restrict its ability to price its products and services competitively, and threaten its operating licenses.

Several of the Company’s subsidiaries are subject to regulatory oversight of varying degrees at both the state and federal levels, which may differ from the regulatory scrutiny faced by the Company’s competitors. A significant portion of the Company's revenue is derived from pricing plans that are subject to regulatory review and approval. These regulated pricing plans limit the rates the Company can charge for some services while the competition has typically been able to set rates for services with limited or no restriction. In the future, regulatory initiatives that would put the Company at a competitive disadvantage or mandate lower rates for its services would result in lower profitability and cash flows for the Company. In addition, different regulatory interpretations of existing regulations or guidelines may affect the Company’s revenues and expenses in future periods.

At the federal level, the Company’s telecommunications services are subject to the Communications Act of 1934 as amended by the Telecommunications Act of 1996 (the "Act"), including rules adopted by the Federal Communications Commission ("FCC"). At the state level, CBT operates as the incumbent local exchange carrier (“ILEC”) and carrier of last resort in portions of Ohio, Kentucky, and Indiana, while Hawaiian Telcom, Inc. ("HTI") serves as the ILEC and carrier of last resort in Hawaii. As the ILEC in these states, these entities are subject to regulation by the Public Utilities Commissions in those states. Various regulatory decisions or initiatives at the federal or state level may from time to time have a negative impact on CBT’s and HTI’s ability to compete in their respective markets. In addition, although less heavily regulated than the Company’s ILEC operations, other subsidiaries are authorized to provide competitive local exchange service, long distance, and cable television service in various states, and are consequently also subject to various state and federal telecommunications and cable regulations that could adversely impact their operations.

There are currently many regulatory actions under way and being contemplated by federal and state authorities regarding issues that could result in significant changes to the business conditions in the telecommunications industry. In addition, in connection with our Internet access offerings, we could become subject to laws and regulations as they are adopted or applied to the Internet. There is currently only limited regulation applicable to these services although court decisions and/or legislative action could lead to greater regulation of the Internet (including Internet access services). We cannot provide any assurances that changes in current or future regulations adopted by the FCC or state regulators, or other legislative, administrative, or judicial initiatives relating to the telecommunications industry, will not have a material adverse effect on the Company’s business, financial condition, results of operations and cash flows.

From time to time, different regulatory agencies conduct audits to ensure that the Company is in compliance with the respective regulations. The Company could be subject to fines and penalties if found to be out of compliance with these regulations, and these fines and penalties could be material to the Company’s financial condition.

The inability of the Company to renew its license from the FCC to use the Hawaii Inter-Island Cable System (“HICS Cable”) on economically reasonable terms may negatively impact its ability to provide telecommunication services to the islands of Hawaii.

As a part of providing telecommunication services to the islands of Hawaii, the Company uses the Hawaii Inter-Island Cable System (“HICS Cable”) which is regulated by the FCC. The Company’s license to use the HICS Cable expires in July 2019. Although the Company is seeking an extension of its license to access the HICS Cable, it cannot guarantee that either its license will be renewed or that any renewal terms of cost or scope of access will not be materially detrimental to continued use of the HICS Cable by the Company. If the Company’s license for the HICS Cable is not renewed on terms reasonable to the Company, the Company may not be able to provide its telecommunication services to the islands of Hawaii in a cost-efficient manner, which may have an adverse effect on the Company’s customer relations and revenues.

The Company depends on a number of third-party providers, and the loss of, or problems with, one or more of these providers may impede the Company's growth or cause it to lose customers.

The Company depends on third-party providers to supply products and services. For example, many of the Company's information technology and call center functions are performed by third-party providers, and network equipment is purchased from and maintained by vendors. The loss of, or problems with, one or more of these third-party providers may result in an adverse effect on our ability to provide products and services to our customers and on our results of operations and financial condition.

A failure of back-office information technology systems could adversely affect the Company's results of operations and financial condition.

The efficient operation of the Company's business depends on back-office information technology systems. The Company relies on back-office information technology systems to effectively manage customer billing, business data, communications, supply chain, order entry and fulfillment and other business processes. A failure of the Company's information technology systems to perform as anticipated could disrupt the Company's business and result in a failure to collect accounts receivable, transaction errors, processing inefficiencies, and the loss of sales and customers, causing the Company's reputation and results of operations to suffer. In addition, information technology systems may be vulnerable to damage or interruption from circumstances beyond the Company's control, including fire, natural disasters, systems failures, security breaches and viruses. Any such damage or interruption could have a material adverse effect on the Company's business.

If the Company fails to extend or renegotiate its collective bargaining agreements with its labor unions when they expire, or if its unionized employees were to engage in a strike or other work stoppage, the Company's business and operating results could be materially harmed.

The Company is a party to collective bargaining agreements with its labor unions in both the Cincinnati and Hawaii operating territories, which represents approximately 35% of its employees. No assurance can be given that the Company will be able to successfully extend or renegotiate its collective bargaining agreements in the future. If the Company fails to extend or renegotiate its collective bargaining agreements, if disputes with its union arise, or if its unionized workers engage in a strike or a work stoppage, the Company could experience a significant disruption of operations or incur higher ongoing labor costs, either of which could have a material adverse effect on the business.

The loss of any of the senior management team or attrition among key sales associates could adversely affect the Company's business, financial condition, results of operations and cash flows.

The Company's success will continue to depend on its senior management team and key sales associates and the Company's ability to retain such key management personnel and other key employees. Senior management has specific knowledge relating to the Company and the industry that would be difficult to replace. In particular, the success of the Company's acquisition of Hawaiian Telcom will depend in part on the ability of the Company to retain key management and other key personnel of Hawaiian Telcom after the acquisition and to continue to attract such persons to the Company. The loss of key sales associates could hinder the Company's ability to continue to benefit from long-standing relationships with customers. The Company cannot provide any assurance that it will be able to retain the current senior management team or key sales associates nor any key management personnel or other key employees from Hawaiian Telcom. The loss of any of these individuals could adversely affect the Company's business, financial condition, results of operations and cash flows.

The Company may not achieve its intended results from recent acquisitions if the Company is unable to successfully integrate the operations from the acquired companies with the Company.

The Company completed the acquisition of OnX in October 2017 and Hawaiian Telcom in July 2018. The acquisitions were made with the expectation that they would result in various benefits, including, among other things, expanding the Company's asset base and creating synergies and opportunities for cost savings. Achieving the anticipated benefits of the acquisition is subject to a number of uncertainties, including whether the businesses of the Company, OnX and Hawaiian Telcom can be fully integrated in an efficient and effective manner.

While the Company continues to actively effectuate this integration, it is possible that the integration process could take longer than anticipated and could result in the loss of valuable employees, the disruption of each company's ongoing businesses, processes and systems or inconsistencies in standards, controls, procedures, practices, policies and compensation arrangements, any of which could adversely affect the Company's ability to achieve the anticipated benefits of the acquisitions of OnX and Hawaiian Telcom. The Company's results of operations could also be adversely affected by any issues attributable to an acquired company's operations that arose or are based on events or actions that occurred prior to the closing of the acquisition. The integration process is subject to a number of uncertainties, and no assurance can be given that the anticipated benefits will be realized or, if realized, the timing of their realization. Failure to achieve these anticipated benefits could result in increased costs or decreases in the amount of expected revenues and could adversely affect the Company's future business, financial condition, operating results and prospects.

The Company may incur expenses related to the integration of acquired operations, including OnX and Hawaiian Telcom, into the Company.

The Company is incurring expenses in connection with the integration of the Company and the operations of acquired companies, in particular OnX and Hawaiian Telcom. There are a number of back-office information technology systems, processes and policies that are being addressed during the integration. While the Company has assumed that a certain level of expenses will be incurred and have been incurred, there are many factors beyond their control that could affect the total amount or the timing of the integration expenses. Moreover, many of the expenses that will be incurred are, by their nature, difficult to estimate accurately. These integration expenses likely will result in the Company taking charges against earnings in the future, and the amount and timing of such charges are uncertain at present.

The future results of the Company will suffer if the Company does not effectively manage its expanded operations following the acquisitions of OnX and Hawaiian Telcom.

The size of the Company has increased significantly as a result of the acquisitions of OnX and Hawaiian Telcom. The Company’s future success depends, in part, upon its ability to manage this expanded business, which could pose substantial challenges for management. There can be no assurances that the Company will be successful or that it will realize the expected operating efficiencies, cost savings, revenue enhancements and other benefits anticipated deriving from these acquisitions.

Risks Related to our Indebtedness

The Company’s debt could limit its ability to fund operations, raise additional capital, and fulfill its obligations, which, in turn, would have a material adverse effect on its businesses and prospects generally.

As of December 31, 2018, the Company and its subsidiaries had outstanding indebtedness of $1,929.8 million, on which it incurred $131.5 million of interest expense in 2018, and had a total shareowners’ deficit of $75.0 million. In October 2017, the Company entered into a new Credit Agreement. The Credit Agreement provides for (i) a five year $200 million senior secured revolving credit facility including both a letter of credit subfacility of up to $30 million and a swingline loan subfacility of up to $25 million (the "Revolving Credit Facility") and (ii) a seven-year $600 million senior secured term loan facility (the "Tranche B Term Loan due 2024"). At December 31, 2018, the Company and its subsidiaries had $9.1 million of borrowing availability under its Receivables Facility and had the ability to borrow up to an additional $182.0 million under the Revolving Credit Facility, subject to compliance with certain conditions.

The Company’s debt has important consequences, including the following:
- the Company is required to use a substantial portion of its cash flow from operations to pay principal and interest on its debt, thereby reducing the availability of cash flow to fund working capital, capital expenditures, strategic acquisitions, investments and alliances, and other general corporate requirements;
- there is a variable interest rate on a portion of its debt which will increase if the market interest rates increase;
- the Company’s debt increases its vulnerability to adverse changes in the credit markets, which adverse changes could increase the Company's borrowing costs and limit the availability of financing;
- the Company’s debt service obligations limit its flexibility to plan for, or react to, changes in its business and the industries in which it operates;
- the Company’s level of debt and shareowners’ deficit may restrict it from raising additional financing on satisfactory terms to fund working capital, capital expenditures, strategic acquisitions, investments and alliances, and other general corporate requirements; and

- the Company’s debt instruments contain limitations on the Company and require the Company to comply with specified financial ratios and other restrictive covenants. Failure to comply with these covenants, if not cured or waived, could limit availability to the cash required to fund the Company's operations and general obligations and could result in the Company’s dissolution, bankruptcy, liquidation or reorganization.

In addition, certain of our variable rate debt uses LIBOR as a benchmark for establishing the rate of interest and may be hedged with LIBOR-based interest rate derivatives. LIBOR is the subject of recent regulatory guidance and proposals for reform. These reforms and other pressures may cause LIBOR to be replaced with a new benchmark or to perform differently than in the past. The consequences of these developments cannot be entirely predicted, but could include an increase in the cost of our variable rate indebtedness.

The Company’s creditors and preferred stockholders have claims that are superior to claims of the holders of the Company's common stock. Accordingly, in the event of the Company’s dissolution, bankruptcy, liquidation, or reorganization, payment is first made on the claims of creditors of the Company and its subsidiaries, then preferred stockholders, and finally, if amounts are available, to holders of the Company's common stock.

The Credit Agreement, the indenture governing the Company's notes due 2024, the indenture governing the Company's notes due 2025 and other indebtedness impose significant restrictions on the Company.

The Company’s debt instruments impose, and the terms of any future debt may impose, operating and other restrictions on the Company. These restrictions affect, and in many respects limit or prohibit, among other things, the Company’s ability to:

- incur additional indebtedness;
- create liens;
- make investments;
- enter into transactions with affiliates;
- sell assets;
- guarantee indebtedness;
- declare or pay dividends or make other distributions to shareholders;
- repurchase equity interests;
- redeem debt that is junior in right of payment to such indebtedness;
- enter into agreements that restrict dividends or other payments from subsidiaries;
- issue or sell capital stock of certain of its subsidiaries;
- consolidate, merge, or transfer all or substantially all of its assets and the assets of its subsidiaries on a consolidated basis; and
- change its fiscal year

In addition, the Company’s Credit Agreement and debt instruments include restrictive covenants that may materially limit the Company’s ability to prepay debt and redeem preferred stock. The agreements governing the Credit Agreement also require the Company to achieve and maintain compliance with specified financial ratios.

The restrictions contained in the terms of the Credit Agreement and its other debt instruments could:

- limit the Company’s ability to plan for or react to market conditions or meet capital needs or otherwise restrict the Company’s activities or business plans; and
- adversely affect the Company’s ability to finance its operations, strategic acquisitions, investments or alliances, other capital needs, or to engage in other business activities that would be in its interest.

A breach of any of the debt's restrictive covenants or the Company’s inability to comply with the required financial ratios would result in a default under some or all of the debt agreements. During the occurrence and continuance of a default, lenders may elect to declare all outstanding borrowings, together with accrued interest and other fees, to be immediately due and payable. Additionally, under the Credit Agreement, the lenders may elect not to provide loans under the Revolving Credit Facility until such default is cured or waived. The Company’s debt instruments also contain cross-acceleration provisions, which generally cause each instrument to be subject to early repayment of outstanding principal and related interest upon a qualifying acceleration of any other debt instrument. Failure to comply with these covenants, if not cured or waived, would limit the cash available to the Company required to fund operations and its general obligations and could result in the Company’s dissolution, bankruptcy, liquidation or reorganization.

The Company depends on its Revolving Credit Facility and Receivables Facility to provide for its short-term financing requirements in excess of amounts generated by operations, and the availability of those funds may be reduced or limited.

The Company depends on the Revolving Credit Facility and its Receivables Facility to provide for short-term financing requirements in excess of amounts generated by operations. The Revolving Credit Facility has a maturity date of October 2022. The Receivables Facility has a termination date of May 2021, and is subject to renewal every 364 days, with the next renewal occurring in May 2019.

The Company's ability to borrow under its Revolving Credit Facility is subject to the Company's compliance with covenants, including covenants requiring compliance with specified financial ratios. Failure to satisfy these covenants would constrain or prohibit its ability to borrow under these facilities.

As of December 31, 2018, the Company had $18.0 million of outstanding borrowings under the Revolving Credit Facility, leaving $182.0 million in additional borrowing availability under this facility. The $200.0 million available under the Revolving Credit Facility is funded by various financial institutions. If one or more of these banks is not able to fulfill its funding obligations, the Company’s financial condition could be adversely affected.

As of December 31, 2018, the Company had a total borrowing capacity of $193.7 million on a maximum borrowing capacity of $225.0 million on its Receivables Facility. At that date, there were $176.6 million of outstanding borrowings and $8.0 million of outstanding letters of credit. The available borrowing capacity is calculated monthly based on the amount, and quality, of outstanding accounts receivable, and thus may be lower than the maximum borrowing limit. If the quality of the Company’s accounts receivables deteriorates, this will negatively impact the available capacity under this facility. As of December 31, 2018, the Company had $9.1 million of borrowing capacity remaining under its Receivables Facility.

The servicing of the Company’s indebtedness is dependent on its ability to generate cash, which could be impacted by many factors beyond its control.

The Company’s ability to generate cash is subject to general economic, financial, competitive, legislative, regulatory, and other factors, many of which are beyond its control. The Company cannot provide assurance that its business will generate sufficient cash flow from operations, that additional sources of debt financing will be available, or that future borrowings will be available under its Revolving Credit Facility Credit or Receivables Facility, in each case, in amounts sufficient to enable the Company to service its indebtedness or to fund other liquidity needs. If the Company cannot service its indebtedness, it will have to take actions such as reducing or delaying capital expenditures, strategic acquisitions, investments and alliances, selling assets, restructuring or refinancing indebtedness, or seeking additional equity capital, which may adversely affect its shareholders, debt holders and customers. The Company may not be able to negotiate remedies on commercially reasonable terms, or at all. In addition, the terms of existing or future debt instruments may restrict the Company from adopting any of these alternatives. The Company’s inability to generate the necessary cash flows could result in its dissolution, bankruptcy, liquidation or reorganization.

The Company depends on the receipt of dividends or other intercompany transfers from its subsidiaries and investments.

Virtually all of the Company's operations are conducted through its subsidiaries and most of the Company's debt is held at the parent company. Certain of the Company's material subsidiaries are subject to regulatory authority which may potentially limit the ability of such subsidiaries to distribute funds or assets. If any of the Company's subsidiaries were to be prohibited from paying dividends or making distributions, the Company may not be able to make the scheduled interest and principal repayments on its debt. This failure would have a material adverse effect on the Company's liquidity and the trading price of the Company's common stock, preferred stock, and debt instruments, which could result in its dissolution, bankruptcy, liquidation or reorganization.

Other Risk Factors

The trading price of the Company's common stock may be volatile, and the value of an investment in the Company's common stock may decline.

The market price of the Company's common stock has been volatile and could be subject to wide fluctuations in response to, among other things, the risk factors described in this report and other factors beyond the Company's control, such as volatility in equity markets and fluctuations in the valuation of companies perceived by investors to be comparable to the Company.

Equity markets have experienced price and volume fluctuations that have affected the Company's stock price and the market prices of equity securities of many other companies. These broad market and industry fluctuations, as well as general economic, political, and market conditions, may negatively affect the market price of the Company's stock.

Companies that have experienced volatility in the market price of common shares have periodically been subject to securities class action litigation. The Company may be the target of this type of litigation in the future. Securities litigation could result in substantial costs and/or damages and divert management's attention from other business concerns.

The uncertain economic environment, including uncertainty in the U.S. and world securities markets, could impact the Company's business and financial condition.

The uncertain economic environment could have an adverse effect on the Company's business and financial liquidity. The Company's primary source of cash is customer collections. If economic conditions were to worsen, some customers may cancel services or have difficulty paying their accounts receivable. These conditions would result in lower revenues and increases in the allowance for doubtful accounts, which would negatively affect the results of operations. Furthermore, the sales cycle would be further lengthened if business customers slow spending or delay decision-making on the Company's products and services, which would adversely affect revenues. If competitors lower prices as a result of economic conditions, the Company would also experience pricing pressure. If the economies of the U.S. and the world deteriorate, this could have a material adverse effect on the Company's business, financial condition, results of operations and cash flows.

The Company’s future cash flows could be adversely affected if it is unable to fully realize its deferred tax assets.

As of December 31, 2018, the Company had deferred tax assets of $244.2 million, which are primarily composed of deferred tax assets associated with U.S. federal net operating loss carryforwards of $124.4 million, state and local net operating loss carryforwards of $58.3 million, and foreign net operating loss carryforwards of $1.3 million. The Company has recorded a valuation allowance against deferred tax assets related to certain state, local and foreign net operating losses and other deferred tax assets due to the uncertainty of the Company’s ability to utilize the assets within the statutory expiration period. In addition the Company has recorded a valuation allowance against the portion of interest expense that is not currently deductible for domestic federal income tax due to the The Tax Cuts and Jobs Act of 2017 (the "Tax Act") effective December 31, 2017. The use of the Company’s deferred tax assets enables it to satisfy current and future tax liabilities without the use of the Company’s cash resources. If the Company is unable for any reason to generate sufficient taxable income to fully realize its deferred tax assets, or if the use of its net operating loss carryforwards is limited by Internal Revenue Code Section 382 or similar state statutes, the Company’s net income, shareowners’ deficit and future cash flows would be adversely affected.

Changes in tax laws and regulations, and actions by federal, state and local taxing authorities related to the interpretation and application of such tax laws and regulations, could have a negative impact on the Company's financial results and cash flows.

The Company calculates, collects and remits various federal, state, and local taxes, surcharges, and regulatory fees to numerous federal, state and local governmental authorities, including but not limited to federal Universal Service Fund contributions, sales tax, regulatory fees and use tax on purchases of goods and services used in our business. Tax laws are subject to change, and new interpretations of how various statutes and regulations should be adhered to are frequently issued. In many cases, the application of tax laws are uncertain and subject to differing interpretations, especially when evaluated against new technologies and telecommunications services, such as broadband internet access and cloud services. In the event that we have incorrectly calculated, assessed, or remitted amounts due to governmental authorities, or if revenue and taxing authorities disagree with positions we have taken, we could be subject to additional taxes, fines, penalties, or other adverse actions. In the event that federal, state, or local municipalities were to significantly increase taxes on goods and services used to construct and maintain our network, operations, or provision of services, or seek to impose new taxes, there could be a material adverse impact on financial results.

The Company's interpretation of the Tax Cuts and Jobs Act of 2017 could change, and have an adverse impact on financial results.

The Tax Act signed into law on December 22, 2017 has resulted in significant changes to the U.S. Corporate income tax system. These changes include a federal statutory rate reduction from 35% to 21%, limitations on the deductibility of interest expense and executive compensation, and elimination of the corporate alternative minimum tax. The final impact of the Tax Act may differ from what the Company has currently recorded, possibly materially, due to, among other things, changes in interpretations of the Tax Act, any legislative action taken to address questions that arise because of the Tax Act, any changes in accounting standards for income taxes or related interpretations in response to the Tax Act, or any updates or changes to amounts recorded to calculate the transition impacts.

Adverse changes in the value of assets or obligations associated with the Company's employee benefit plans could negatively impact shareowners' deficit and liquidity.

The Company sponsors noncontributory defined benefit pension plans for eligible management employees, non-management employees and certain former executives. The Company also provides healthcare and group life insurance benefits for eligible retirees. The Company's Consolidated Balance Sheets indirectly reflect the value of all plan assets and benefit obligations under these plans. The accounting for employee benefit plans is complex, as is the process of calculating the benefit obligations under the plans. Adverse changes in interest rates or market conditions, among other assumptions and factors, could cause a significant increase in the Company's benefit obligations or a significant decrease of the asset values, without necessarily impacting the Company's net income. In addition, the Company's benefit obligations could increase significantly if it needs to unfavorably revise the assumptions used to calculate the obligations. These adverse changes could have a further significant negative impact on the Company's shareowners' deficit. Additionally, the Company's postretirement costs are adversely affected by increases in medical and prescription drug costs. Further, if there are adverse changes to plan assets or if medical and prescription drug costs increase significantly, the Company could be required to contribute additional material amounts of cash to the plans, or to accelerate the timing of required payments.

Third parties may claim that the Company is infringing upon their intellectual property, and the Company could suffer significant litigation or licensing expenses or be prevented from selling products.

The Company may be unaware of intellectual property rights of others that may cover some of its technology, products or services. Any litigation growing out of third-party patents or other intellectual property claims could be costly and time-consuming and would divert the Company's management and key personnel from its business operations. The complexity of the technology involved and the uncertainty of intellectual property litigation increases these risks. Resolution of claims of intellectual property infringement might also require the Company to enter into costly license agreements. Likewise, the Company may not be able to obtain license agreements on acceptable terms. The Company also may be subject to significant damages or injunctions against the development and sale of certain of its products or services. Further, the Company often relies on licenses of third-party intellectual property for its businesses. The Company cannot ensure these licenses will be available in the future on favorable terms or at all.

Third parties may infringe upon the Company's intellectual property, and the Company may expend significant resources enforcing its rights or suffer competitive injury.

The Company's success significantly depends on the competitive advantage it gains from its proprietary technology and other valuable intellectual property assets. The Company relies on a combination of patents, copyrights, trademarks and trade secrets protections, confidentiality provisions and licensing arrangements to establish and protect its intellectual property rights. If the Company fails to successfully enforce its intellectual property rights, its competitive position could suffer, which could harm its operating results.

The Company may also be required to spend significant resources to monitor and police its intellectual property rights. The Company may not be able to detect third-party infringements and its competitive position may be harmed before the Company does so. In addition, competitors may design around the Company's technology or develop competing technologies. Furthermore, some intellectual property rights are licensed to other companies, allowing them to compete with the Company using that intellectual property.

The Company could be subject to a significant amount of litigation, which could require the Company to pay significant damages or settlements.

The industry that the Company operates in faces a substantial risk of litigation, including, from time to time, patent infringement lawsuits, antitrust class actions, securities class actions, wage and hour class actions, personal injury claims and lawsuits relating to our advertising, sales, billing and collection processes. We may incur significant expenses in defending these lawsuits. In addition, we may be required to pay significant awards and settlements.

The Company could incur significant costs resulting from complying with, or potential violations of, environmental, health and human safety laws.

The Company's operations are subject to laws and regulations relating to the protection of the environment, health, and human safety, including those governing the management and disposal of, and exposure to, hazardous materials and the cleanup of contamination, and the emission of radio frequencies. While the Company believes its operations are in substantial compliance with environmental, health, and human safety laws and regulations, as an owner or operator of property, and in connection with the current and historical use of hazardous materials and other operations at its sites, the Company could incur significant costs resulting from complying with or violations of such laws, the imposition of cleanup obligations and third-party suits. For instance, a number of the Company's sites formerly contained underground storage tanks for the storage of used oil and fuel for back-up generators and vehicles.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

As of December 31, 2018, the Company owned or maintained properties throughout the U.S. and Canada. Our headquarters is located in Cincinnati, Ohio where we lease approximately 240,000 square feet for executive, administrative and business offices for the Company. In addition to the space in Cincinnati, we own a building with approximately 465,000 square feet of office space in Honolulu, Hawaii for the Hawaiian Telcom operations. We lease office space in multiple locations in Canada for operations to support our Canadian operations.

Our properties include copper and fiber warehouses and associated equipment in each of our local operating markets. Each of the Company's subsidiaries maintains some investment in furniture and office equipment, computer equipment and associated operating system software, application system software, leasehold improvements and other assets.

With regard to its Cincinnati Entertainment and Communications operations, the Company owns substantially all of the central office switching stations and the land upon which they are situated. Some business and administrative offices are located in leased facilities, which are recorded as operating leases. The Company's network assets include a fiber network warehouse, internet protocol and circuit switches and integrated access terminal equipment. In addition, as of year-end, we lease nine Company-run retail locations.

With regard to its Hawaii Entertainment and Communications operations, the Company has properties consisting of both owned and leased properties, including our administrative facilities and facilities for call centers, customer service sites for the television business, switching equipment, fiber optic networks, cable head end equipment, coaxial distribution networks, routers and servers used in our telecommunications business. Leased properties are recorded as operating leases.

With regard to the IT Services and Hardware operations, the majority of business and administrative offices are located in leased facilities, which are recorded as either capital or operating leases depending on respective terms.

For additional information about the Company's properties, see Note 6 to the consolidated financial statements.

Item 3. Legal Proceedings

The Company is subject to various lawsuits, actions, proceedings, claims and other matters asserted under laws and regulations in the normal course of business. We believe that the liabilities accrued for legal contingencies in our consolidated financial statements, as prescribed by generally accepted accounting principles ("GAAP"), are adequate in light of those contingencies that are probable and able to be estimated. However, there can be no assurances that the actual amounts required to satisfy alleged liabilities from various legal proceedings, claims, tax examinations, and other matters, and to comply with applicable laws and regulations, will not exceed the amounts reflected in our consolidated financial statements. As such, costs, if any, that may be incurred in excess of those amounts provided as of December 31, 2018, cannot be reasonably determined.

Based on information currently available, consultation with counsel, available insurance coverage and established reserves, management believes the eventual outcome of all outstanding claims will not, individually or in the aggregate, have a material effect on the Company's financial position, results of operations or cash flows.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

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

(a) Market Information

The Company’s common shares (symbol: CBB) are listed on the New York Stock Exchange. The Company filed an amendment to its Amended and Restated Articles of Incorporation to affect a one-for-five reverse split of its issued common stock ("the Reverse Split") effective 11:59 p.m. October 4, 2016.

(b) Holders

As of January 31, 2019, the Company had 4,971 holders of record of the 50,337,778 common shares outstanding and 155,250 shares outstanding of the 6 $^{3}/_{4}$% Cumulative Convertible Preferred Stock.

(c) Dividends

In both 2018 and 2017, the Company paid $10.4 million of dividends on its 6 $^{3}/_{4}$% Cumulative Convertible Preferred Stock. In 2018 and 2017, the Company did not pay any dividends on its common stock and does not intend to pay any common stock dividends in 2019.

(d) Stock Performance

The following graph compares Cincinnati Bell Inc.'s cumulative five-year total shareholder return on common stock with the cumulative total returns of the S&P 500 index and the S&P Integrated Telecommunication Services index. The graph tracks the performance of a $100 investment in our common stock and in each index (with the reinvestment of all dividends) from December 31, 2013 to December 31, 2018.

	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18
Cincinnati Bell Inc.	$100	$90	$101	$126	$117	$44
S&P 500	$100	$114	$115	$129	$157	$150
S&P Integrated Telecommunication Services	$100	$102	$105	$131	$130	$121

(e) Issuer Purchases of Equity Securities

The following table provides information regarding the Company’s purchases of its common stock during the quarter ended December 31, 2018:

Period	Total Number of Shares (or Units) Purchased	Average Price Paid per Share (or Unit)	Total Number of Shares (or Units) Purchased as Part of Publicly Announced Plans or Programs *	Approximate Dollar Value of Shares that May Yet Be Purchased Under Publicly Announced Plans or Programs (in millions)*
10/1/2018 - 12/31/2018	—	$ ——		$ 124.4

* In February 2010, the Board of Directors approved an additional plan for the repurchase of the Company’s outstanding common stock in an amount up to $150.0 million. This repurchase plan does not have a stated maturity.

Item 6. Selected Financial Data
We ceased operations of our wireless business as of March 2015. As a result, wireless financial results during 2015 and 2014 are presented as discontinued operations.

All shares of common stock and per share information presented in the following table have been adjusted to reflect the Reverse Split on a retroactive basis for all periods presented.

Accounting Standard Update ("ASU") 2015-03 Simplifying the Presentation of Debt Issuance Costs was adopted effective January 1, 2016. As a result, certain note issuance costs were reclassed from "Other noncurrent assets" to "Long-term debt, less current portion." All periods presented in the following table have been recast to present the impact of ASU 2015-03.

ASU 2016-09 Compensation - Stock Compensation was adopted effective January 1, 2017. As a result, cash flows related to excess tax benefits were reclassed from "Cash flows from operating activities" to "Cash flows from financing activities." All periods presented in the following table have been recast to present the impact of ASU 2016-09.

ASU 2014-09 Revenue from Contracts with Customers, was adopted effective January 1, 2018. As a result, there was a change to the treatment of hardware revenue in the Infrastructure Solutions category from recording hardware revenue as a principal (gross) to recording revenue as an agent (net), and as such recorded hardware sales net of the related cost of products. Additionally, contract assets related to fulfillment costs and costs of acquisition were recorded to "Other noncurrent assets." The periods ending in 2018, 2017 and 2016 have been recast to present the impact of ASU 2014-09, respectively. Financial data for the periods ending in 2015 and 2014, have not been adjusted to reflect the adoption of ASU 2014-09. See Note 3 of Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K for further information regarding our adoption of Accounting Standards Codification ("ASC") 606.

ASU 2017-07 Improving the Presentation of Net Period Pension Cost and Net Periodic Postretirement Benefit Cost, was adopted effective January 1, 2018. As a result, expenses related to other components of net benefit cost were reclassed from, "Cost of Services," "Selling, general and administrative" and "Other operating costs and losses" to a new line below Operating income, "Other components of pension and postretirement benefit plans expense." All periods presented in the following table have been recast to present the impact of ASU 2017-07.

The selected financial data should be read in conjunction with the consolidated financial statements and "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in this document.

(dollars in millions, except per share amounts)	2018 (f)	2017 (g)	2016	2015	2014
Operating Data					
Revenue	$1,378.2	$1,065.7	$1,017.6	$1,167.8	$1,161.5
Cost of services and products, selling, general and administrative, depreciation and amortization expense	1,264.1	959.1	905.8	1,023.4	976.4
Other operating costs and losses (a)	30.8	51.2	13.0	8.2	5.1
Operating income	83.3	55.4	98.8	136.2	180.0
Interest expense	131.5	85.2	75.7	103.1	145.9
Loss on extinguishment of debt, net	1.3	3.2	19.0	20.9	19.6
Loss from CyrusOne investment (b)	—	—	—	5.1	7.0
Gain on sale of CyrusOne investment	—	(117.7)	(157.0)	(449.2)	(192.8)
(Loss) income from continuing operations	(60.4)	66.7	164.4	290.8	117.7
Income (loss) from discontinued operations, net of tax	—	—	0.3	62.9	(42.1)
Net (loss) income	(69.8)	40.0	103.0	353.7	75.6
Basic (loss) earnings per common share from continuing operations	$(1.73)	$0.70	$2.19	$6.69	$2.57
Basic earnings (loss) per common share from discontinued operations	$—	$—	$0.01	$1.50	$(1.01)
Basic (loss) earnings per common share	$(1.73)	$0.70	$2.20	$8.19	$1.56
Diluted (loss) earnings per common share from continuing operations	$(1.73)	$0.70	$2.19	$6.68	$2.56
Diluted earnings (loss) per common share from discontinued operations	$—	$—	$0.01	$1.49	$(1.00)
Diluted (loss) earnings per common share	$(1.73)	$0.70	$2.20	$8.17	$1.56
Dividends declared per common share	$—	$—	$—	$—	$—
Weighted-average common shares outstanding					
Basic	46.3	42.2	42.0	41.9	41.7
Diluted	46.3	42.4	42.1	42.0	41.9
Financial Position					
Property, plant and equipment, net	$1,844.0	$1,129.0	$1,085.5	$975.5	$815.4
Total assets (c)	2,730.2	2,187.6	1,561.3	1,446.4	1,807.0
Total long-term obligations (d)	2,263.5	1,948.2	1,429.8	1,485.4	2,044.7
Other Data					
Cash flow provided by operating activities	$214.7	$203.4	$173.1	$111.0	$175.3
Cash flow (used in) provided by investing activities	(437.4)	(236.8)	(95.5)	383.2	392.6
Cash flow (used in) provided by financing activities	(158.1)	420.2	(75.3)	(544.7)	(514.6)
Capital expenditures (e)	(220.6)	(210.5)	(286.4)	(283.6)	(182.3)

(a) Other operating costs and losses consist of restructuring and severance related charges (reversals), loss (gain) on disposal of assets - net, impairment of assets and transaction and integration costs.

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(b) Losses represent our equity method share of CyrusOne's losses from the date of the IPO through December 31, 2015. Effective January 1, 2016, our ownership in CyrusOne was no longer accounted for using the equity method.

(c) Total assets include current and noncurrent assets from discontinued operations.

(d) Total long-term obligations are comprised of long-term debt, less current portion, deferred income tax liabilities, pension and postretirement benefit obligations, pole license agreement obligations, other noncurrent liabilities and noncurrent liabilities from discontinued operations. See Notes 1, 8, 9 and 11 to the consolidated financial statements for discussions related to 2018 and 2017.

(e) Capital expenditures include capital expenditures from discontinued operations.

(f) Operating data includes Hawaiian Telcom results beginning with the date of acquisition in July 2018.

(g) Operating data includes OnX results beginning with the date of acquisition in October 2017.

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

This Annual Report on Form 10-K and the documents incorporated by reference herein contain forward-looking statements regarding future events and results that are subject to the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. All statements, other than statements of historical facts, are statements that could be deemed forward-looking statements. See "Private Securities Litigation Reform Act of 1995 Safe Harbor Cautionary Statement" for further information on forward-looking statements.

Executive Summary

Segment results described in the Executive Summary and Consolidated Results of Operations section are net of intercompany and intersegment eliminations.

On July 2, 2018, the Company acquired Hawaiian Telcom Holdco, Inc. ("Hawaiian Telcom"). The Unified Communications as a Service ("UCaaS"), hardware, and enterprise long distance products and services provided by the Hawaiian Telcom business are included within the IT Services and Hardware Segment. The Entertainment and Communications segment includes products delivered by Hawaiian Telcom such as high-speed internet access, digital subscriber lines, ethernet, dedicated internet access, IRU, video, voice lines, consumer long distance and digital trunking.

Consolidated revenue totaled $1,378.2 million for the year ended December 31, 2018 an increase of $312.5 million compared to the same period in 2017, primarily due to the acquisitions completed in 2018 and 2017. The acquisition of Hawaiian Telcom contributed $175.0 million of revenue in 2018. The acquisition of OnX Holdings LLC ("OnX") completed in the fourth quarter of 2017 contributed $199.0 million of revenue in 2018, an increase of approximately $146.0 million as compared to 2017. In addition to revenue growth from these acquisitions, the increase in revenue due to the demand for our fiber offerings was offset by a decline in Legacy revenue. Fioptics revenue in Cincinnati increased $31.3 million for 2018 compared to the same period in 2017. Legacy revenue in Cincinnati decreased $41.4 million for 2018, compared to the same period in 2017.

The increases in Cost of services and products, Selling, general and administrative, and Depreciation and amortization expenses are primarily related to the acquisitions of OnX and Hawaiian Telcom.

Operating income in 2018 was $83.3 million, up $27.9 million from the prior year primarily due to a reduction in restructuring and severance related charges of $24.4 million as compared to 2017.

Loss before income taxes totaled $60.4 million for the year ended December 31, 2018, down $127.1 million from 2017. The loss before income taxes is primarily due to increased interest expense of $46.3 million due to additional debt acquired to fund the acquisitions of OnX in October 2017 and Hawaiian Telcom in July 2018. In addition, the Company recognized a Gain on Sale of CyrusOne investment of $117.7 million in 2017.

Consolidated Results of Operations
Revenue

(dollars in millions)	2018	2017	$ Change 2018 vs. 2017	% Change 2018 vs. 2017	2016	$ Change 2017 vs. 2016	% Change 2017 vs. 2016
Revenue							
Entertainment and Communications	$831.1	$684.9	$146.2	21 %	$670.3	$14.6	2 %
IT Services and Hardware	547.1	380.8	166.3	44 %	347.3	33.5	10 %
Total revenue	$1,378.2	$1,065.7	$312.5	29 %	$1,017.6	$48.1	5 %

Entertainment and Communications revenue increased in 2018 compared to 2017 primarily due to the acquisition of Hawaiian Telcom, which contributed $155.1 million in 2018. In Cincinnati, the growth in Fioptics partially mitigated the decline in Legacy revenue. Revenue increased $14.6 million in 2017 compared to 2016 primarily due to growth in Fioptics in Cincinnati. Fioptics revenue in Cincinnati totaled $341.2 million, $309.9 million and $254.1 million for the years ended December 31, 2018, 2017 and 2016, respectively, up 10% in 2018 and up 22% in 2017 from the comparable prior year.

IT Services and Hardware revenue increased in 2018 compared to 2017 primarily due to the acquisition of OnX that closed in the fourth quarter of 2017, and to a lesser extent, the acquisition of Hawaiian Telcom. Revenue increased $33.5 million in 2017 compared to 2016 due to the acquisition of OnX in the fourth quarter of 2017, which was offset by declines in revenue related to decreased billable headcount as a key customer pursued cost saving initiatives by in-sourcing IT professionals.

Operating costs

(dollars in millions)	2018	2017	$ Change 2018 vs. 2017	% Change 2018 vs. 2017	2016	$ Change	% Change