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

(Mark one)

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

For the fiscal year ended December 31, 2017

OR

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from to

Commission file number: 1-8606

Verizon Communications Inc.
(Exact name of registrant as specified in its charter)

Delaware	**23-2259884**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
1095 Avenue of the Americas New York, New York	**10036**
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: (212) 395-1000

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

Title of each class	Name of each exchange on which registered
Common Stock, $.10 par value	New York Stock Exchange The NASDAQ Global Select Market

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 ü No__

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

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 ü No __

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted 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 ü No __

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

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

Large accelerated filer ü		Accelerated filer __	Emerging growth company__
Non-accelerated filer __	(Do not check if a smaller reporting company)	Smaller reporting company__	

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

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

At June 30, 2017, the aggregate market value of the registrant's voting stock held by non-affiliates was approximately $182,142,289,318.

At January 31, 2018, 4,079,486,153 shares of the registrant's common stock were outstanding, after deducting 162,888,087 shares held in treasury.

Documents Incorporated By Reference:

Portions of the registrant's Annual Report to Shareowners for the year ended December 31, 2017 (Parts I and II).

TABLE OF CONTENTS

PART I

Item 1. Business

General

Verizon Communications Inc. (Verizon or the Company) is a holding company that, acting through its subsidiaries, is one of the world’s leading providers of communications, information and entertainment products and services to consumers, businesses and governmental agencies. With a presence around the world, we offer voice, data and video services and solutions on our wireless and wireline networks that are designed to meet customers’ demand for mobility, reliable network connectivity, security and control. Formerly known as Bell Atlantic Corporation (Bell Atlantic), we were incorporated in 1983 under the laws of the State of Delaware. We began doing business as Verizon on June 30, 2000 following our merger with GTE Corporation. We have a highly diverse workforce of approximately 155,400 employees.

Our principal executive offices are located at 1095 Avenue of the Americas, New York, New York 10036 (telephone number 212-395-1000).

We have two reportable segments, Wireless and Wireline, which we operate and manage as strategic business units and organize by products and services, and customer groups, respectively.

Wireless	Wireless’ communications products and services include wireless voice and data services and equipment sales, which are provided to consumer, business and government customers across the United States (U.S.).
Wireline	Wireline’s voice, data and video communications products and enhanced services include broadband video and data services, corporate networking solutions, security and managed network services and local and long distance voice services. We provide these products and services to consumers in the U.S., as well as to carriers, businesses and government customers both in the U.S. and around the world.

Additional discussion of our reportable segments is included in the 2017 Verizon Annual Report to Shareowners under the headings "Management’s Discussion and Analysis of Financial Condition and Results of Operations - Overview and - Segment Results of Operations" and in Note 12 to the consolidated financial statements of Verizon Communications Inc. and subsidiaries, which are incorporated by reference into this report.

Wireless

Background

Our Wireless segment, doing business as Verizon Wireless, provides wireless communications products and services across one of the most extensive wireless networks in the U.S. Verizon Wireless is the largest wireless service provider in the U.S. as measured by retail connections and revenue. At December 31, 2017, Verizon Wireless had 116.3 million retail connections and 2017 revenues of approximately $87.5 billion, representing approximately 69% of Verizon’s aggregate revenues.

Cellco Partnership (Cellco), which originally held the wireless assets of Bell Atlantic, began operating as "Verizon Wireless" in April 2000 with both Vodafone Group Plc (Vodafone) and Bell Atlantic as partners, following Vodafone’s contribution of its U.S. wireless assets into Cellco. We acquired all of Vodafone’s indirect 45% interest in Verizon Wireless in 2014, which resulted in full ownership of Verizon Wireless.

We have the largest fourth-generation (4G) Long-Term Evolution (LTE) technology network of any U.S. wireless service provider. Our 4G LTE network is available to over 98% of the U.S. population in more than 500 markets covering approximately 319 million people, including those in areas served by our LTE in Rural America partners. Under this program, we are working with wireless carriers in rural areas to collaboratively build and operate a 4G LTE network using each carrier’s network assets and our core 4G LTE equipment and 700 MHz C Block and Advanced Wireless Services (AWS) spectrum. Approximately 98.5% of our total data traffic in 2017 was carried on our 4G LTE network.

Over the past several years, we have been leading the development of fifth-generation (5G) wireless technology industry standards and the ecosystems for fixed and mobile 5G wireless services. We continue to work with key partners on innovation, standards development and requirements for this next generation of wireless technology. During 2017, we deployed the largest 5G trial network in the U.S. with active customers. In November 2017, we announced that we will commercially launch 5G wireless residential broadband services in three to five U.S. markets in 2018.

Wireless Service and Product Offerings

Our wireless services are available to our customers receiving service under the Verizon Wireless brand, customers that obtain wireless products and services that operate on our network from resellers that purchase network access from us on a wholesale basis and customers that utilize Internet of Things (IoT) services via our network.

Wireless Services

We offer our wireless services on a postpaid and prepaid basis. Retail (non-wholesale) postpaid accounts primarily represent retail customers with Verizon Wireless that are directly served and managed by Verizon Wireless and use its branded services. A single account may include monthly wireless services for a variety of connected devices. A retail postpaid connection represents an individual line of service for a wireless device for which a customer is billed one month in advance a monthly access charge in return for access to and usage of network service. Approximately 95% of our total retail connections were postpaid connections as of December 31, 2017. Our prepaid service enables individuals to obtain wireless services without credit verification by paying for all services in advance.

We offer various postpaid account service plans, including unlimited plans, shared data plans, single connection plans and other plans tailored to the needs of our customers. Our unlimited plans, available to our consumer and business customers, offer, among other things, unlimited domestic voice, data and texting. Our shared data plans typically feature domestic unlimited voice minutes, unlimited domestic and international text, video and picture messaging, and a single data allowance that can be shared among the wireless devices on a customer’s account. These allowances will vary from time to time as part of promotional offers or in response to market circumstances. Our unlimited and shared data plans include High Definition (HD) Voice and Video Calling on compatible devices, and certain plans also include Mobile Hotspot services on compatible devices. Our HD Voice services, enabled by Voice over LTE (VoLTE), deliver calls over our 4G LTE network, and our Video Calling service combines an HD Voice call with real-time video. Our Mobile Hotspot service enables a customer to activate a personal Wi-Fi hotspot that can provide Internet access to multiple Wi-Fi enabled devices. Our unlimited plans provide customers the ability to stream DVD or HD quality videos, based on the service plan. We also offer various voice and shared data plans for small and large business customers.

Customers on our fixed-term service plans historically paid higher access fees for their wireless service in exchange for the ability to purchase their wireless devices at subsidized prices. As of January 2017, we no longer offer consumers new fixed-term service plans for phones; however, we continue to offer subsidized plans to our business customers, and we also continue to service existing fixed-term plans as consumers move to unsubsidized pricing driven by the activation of devices purchased under the Verizon device payment program. Under this program, eligible customers can purchase wireless devices under a device payment plan agreement. Customers that activate service on such devices pay lower service fees as compared to those under our fixed-term service plans.

We also offer prepaid single connection service plans that feature domestic unlimited voice minutes and unlimited domestic and international text. On compatible devices, certain of our prepaid plans also feature video and picture messaging, Carryover Data and Always-On Data, which allows a customer to stay online at reduced data speeds after using their data allowance. HD Voice, Video Calling and Mobile Hotspot service are available on compatible devices. While each of our prepaid plans has traditionally covered a single line of service for one device, in 2017, we expanded our prepaid offerings by giving families the ability to combine individual prepaid plans and choose the data allotment for each member of the family. As with all of our prepaid plans, the family plan does not require an annual contract or credit check.

We offer our customers a wide variety of wireless services accessible on a broad range of devices. Access to the Internet is available on all smartphones and nearly all basic phones. We also offer service that enables our customers to access the Internet wirelessly at broadband speeds on notebook computers and tablets that either have embedded 4G LTE or third generation (3G) modules or that are used in conjunction with separate devices that enable access to this service, such as USB modems, Jetpacks™ and other dedicated devices that provide a mobile Wi-Fi connection.

Our customers can access multimedia offerings, provided by Verizon and by third parties, through applications that provide music, video, gaming, news and other content. Our business-focused offerings, which are designed to increase productivity, include solutions that enable customers to access the Internet, their corporate intranets and e-mail across our diverse portfolio of wireless devices. Our location-based services provide our customers with directions to their destination and enable our business customers to locate, monitor and communicate with their mobile field workers. Our international travel services allow our customers to access voice, text and data services and the Internet on many of our "World" 3G or 4G smartphones, tablets or basic phones from over 200 international destinations.

We also provide network access needed to deliver various IoT products and services. In addition, we work with various companies that purchase network access from us to connect their Open Development certified devices, bundled together with their own solutions, which they sell to end-users.

Wireless Devices

We offer several categories of wireless devices, including smartphones and basic phones, tablets and other Internet access devices, manufactured by various suppliers.

Smartphones and Basic Phones. All of the smartphones we offer are enabled to utilize our 4G LTE high-speed data services and some are also enabled to utilize 3G as well. These devices run on various operating systems. We offer both 3G enabled and 4G enabled basic phones that also have HTML-browsing capabilities.

Tablets and Other Internet Devices. We offer tablets that can access the Internet via our 4G LTE network or a Wi-Fi connection. In addition, we offer dedicated devices, which we refer to as Jetpacks™, that provide a mobile Wi-Fi 4G LTE and/or 3G connection and are capable of connecting multiple Wi-Fi enabled devices to the Internet at one time. Our customers can also access the Internet wirelessly at broadband speeds on their computers via data cards, USB modems or through the use of certain laptop computers and netbooks enabled to access our wireless network.

Wearables. Customers can also choose from connected wearable devices that allow for calls, text, and other notifications when they are away from their compatible phones. These smart watches can share the same mobile number as the customer's phone, allowing for seamless communications on-the-go.

Network

We have the largest 4G LTE network of any service provider in the U.S., with licensed and operational coverage in all of the 100 most populous U.S. Metropolitan areas. As of December 31, 2017, our 4G LTE network covered approximately 319 million people in the U.S., including those in areas served by our LTE in Rural America partners. We currently have 22 LTE in Rural America partners that provide 4G LTE coverage to an area covering approximately three million people.

We consider the reliability of our wireless network as a key factor for our continued success and we strive to provide our customers with the highest network reliability for their wireless services. We believe that steady and consistent network and platform investments provide the foundation for innovative products and services that will fuel profitable growth.

We design and deploy our network in an efficient manner that we believe maximizes the number of successful data sessions, including video, permitting the completion of large file downloads and uploads while delivering on our advertised throughput speeds, and also maximizes the number of calls that are connected on the first attempt and completed without being dropped. We have been densifying our 4G LTE network by utilizing small cell technology, in-building solutions and distributed antenna systems. Network densification not only enables us to add capacity to address increasing mobile video consumption and the growing demand for IoT products and services, but also positions us for the future deployment of 5G technology. We are also utilizing existing network capabilities to handle increased traffic without interrupting the quality of the customer experience. We have and will continue to deploy advanced technologies such as higher orders of modulation, 4x4 multiple input multiple output, licensed assistance access, and increased cell site density primarily through small cell deployment. Just over 50% of our available low- and mid-band spectrum portfolio is being used for 4G LTE.

Our network includes various elements of redundancy designed to enhance the reliability of our service. To mitigate the impact of power disruptions on our operations, we have battery backup at every switch and every macrocell in our network. We also utilize backup generators at a majority of our macrocells and at every switch location. In addition, we have a fleet of portable backup generators that can be deployed, if needed. We further enhance reliability by using a fully redundant Multiprotocol Label Switching backbone network in critical locations.

In addition to our own network coverage, we have roaming agreements with a number of wireless service providers to enable our customers to receive wireless service in nearly all other areas in the U.S. where wireless service is available. We also offer a variety of international wireless voice and data services to our customers through roaming arrangements with wireless service providers outside of the U.S. Certain of our roaming agreements can be terminated at-will by either party upon several months' notice; however, we do not believe that the termination of any of these at-will agreements would have a material adverse effect on our business.

Technology

Our primary network technology platform is 4G LTE, which provides higher data throughput performance for data services at a lower cost compared to that offered by 3G technologies.

We use HD Calling, enabled by VoLTE, in addition to 3G Code Division Multiple Access (CDMA) technology, to provide voice calling services to our customers.

We are committed to developing and deploying 5G wireless technology. We launched the Verizon 5G Technology Forum with key industry partners to develop 5G requirements and standards and conduct testing to accelerate the introduction of 5G technologies. We expect that 5G technology will provide higher throughput than the current 4G LTE technology, lower latency and enable our network to handle more traffic as the number of Internet-connected devices grows. We intend to be the first company to deploy a 5G fixed wireless broadband network in the U.S. Based on the outcome of our pre-commercial trials in 2017, we announced in November 2017 that we will commercially launch 5G wireless residential broadband services in three to five U.S. markets in 2018.

Our Intelligent Edge Network is aggressively evolving our network architecture to a multi-use platform built on deep fiber penetration, providing increased virtualization and opportunities for edge computing services.

Spectrum

The spectrum licenses we hold can be used for mobile wireless voice, video and data communications services. We are licensed by the Federal Communications Commission (FCC) to provide these wireless services on portions of the 800 MHz band, also known as cellular spectrum, the 1800-1900 MHz band, also known as Personal Communication Services (PCS) spectrum, portions of the 700 MHz upper C band and AWS 1 and 3 spectrum in the 1700 and 2100 MHz bands, in areas that, collectively, cover nearly all of the population of the U.S.

In 2017, we entered into transactions to acquire NextLink Wireless LLC (NextLink) and Straight Path Communications Inc. (Straight Path), each of which hold millimeter-wave spectrum licenses. The NextLink acquisition closed on January 10, 2018. The Straight Path acquisition is expected to close by the end of the first quarter of 2018. The spectrum acquired as part of these transactions will be used for our 5G technology deployment in the 28 and 39 GHz bands.

In January 2015, the FCC completed an auction of 65 MHz of spectrum in the AWS-3 band. We participated in that auction and were the high bidder on 181 spectrum licenses, for which we paid cash of approximately $10.4 billion. The FCC granted us these spectrum licenses in April 2015.

We are aggressively refarming 3G bands on 800 MHz and PCS bands for 4G LTE use. We anticipate that we will need additional spectrum to meet future demand. This increasing demand is driven by growth in customer connections and the increased usage of wireless broadband services that use more bandwidth and require faster rates of speed. We can meet our future spectrum needs by acquiring licenses or leasing spectrum from other licensees, or by acquiring new spectrum licenses from the FCC, if and when future FCC spectrum auctions occur. In addition to spectrum, we believe that future demand will also be met as we increase the density of our networks and deploy advanced technologies.

From time to time we have exchanged spectrum licenses with other wireless service providers through secondary market swap transactions. We expect to continue to pursue similar opportunities to trade spectrum licenses in order to meet capacity and expansion needs in the future. In certain cases, we have entered into intra market spectrum swaps designed to increase the amount of contiguous spectrum within frequency bands in a specific market. Contiguous spectrum improves network performance and efficiency. These swaps, as well as any spectrum purchases, require us to obtain governmental approvals for the transfer of spectrum licenses.

Additional information regarding spectrum license transactions is included in the 2017 Verizon Annual Report to Shareowners in Note 2 to the consolidated financial statements of Verizon Communications Inc. and Subsidiaries, which is incorporated by reference into this report.

Network Equipment and Build-out

As we continue to build and upgrade our existing LTE network, we must complete a variety of steps, including securing rights to a large number of sites as well as obtaining zoning and other governmental approvals and fiber facilities for both our macro and small cells. As we densify our network, we follow a similar process for small cells, in-building systems and antennas and related radio equipment that comprise distributed antenna systems. We have relationships with a wide variety of vendors that supply various products and services that support our network operations. We utilize tower site management firms as lessors or managers of a portion of our existing tower sites.

During March 2015, we completed a transaction with American Tower Corporation (American Tower), pursuant to which American Tower acquired the exclusive rights to lease and operate approximately 11,300 of our wireless towers for an upfront payment of $5.0 billion. Under the terms of the lease agreements, American Tower has exclusive rights to lease and operate towers over an average term of approximately 28 years. As the leases expire, American Tower has fixed-price purchase options to acquire these towers based on their anticipated fair market values at the end of the lease terms. As part of this transaction, we also sold 162 towers for $0.1 billion. We have subleased capacity on the towers from American Tower for a minimum of 10 years at current market rates, with options to renew.

Marketing and Distribution

Our marketing strategy is focused on offering solutions tailored to the needs of our various customer market groups; promoting our brand; leveraging our extensive distribution network; and jointly marketing our products and services to large business and government customers with Verizon’s Wireline businesses through the Wireless Business Group, a sales and marketing organization that encompasses all of Verizon Wireless’ solutions for medium and large business, and Verizon Wireline's Enterprise Solutions group, which serves all of our government customers. Our marketing plan includes a coordinated program of television, print, radio, outdoor signage, Internet and point-of-sale media promotions designed to present our corporate message consistently across all of our markets. We use a combination of direct, indirect and alternative distribution channels in order to increase customer growth while controlling customer acquisition costs.

Our direct channel includes our business-to-business sales operations and systems organization and is focused on supporting the wireless communications needs of consumers and local, regional and national business customers. Company-operated stores are a core component of our distribution strategy. We continue to redesign our retail stores nationwide into the "Next Gen Design," which focuses on our customer's evolving digital lifestyle. We also have Verizon Destination Stores in various major metropolitan areas, which focus on the mobile lifestyle and highlight the many ways consumers can use wireless technology in their daily lives.

Our indirect channel includes agents that sell our postpaid and prepaid wireless products and services at retail locations throughout the U.S., as well as through the Internet. The majority of these agents sell both our postpaid and prepaid products and services and do so under exclusive selling arrangements with us. We also have relationships with high-profile national retailers, which sell our postpaid and prepaid wireless products and services, and with various drugstore chains, which sell our prepaid products and services.

Competition

We operate in a highly competitive industry. We compete against other national wireless service providers, including AT&T Inc., Sprint Corporation and T-Mobile USA, Inc., as well as various regional wireless service providers. We also compete for retail activations with resellers that buy bulk wholesale service from facilities-based wireless service providers for resale, including resellers that buy from us. Competition remains intense as a result of saturation in the wireless market, increased network investment by our competitors, the development and deployment of new technologies, the introduction of new products and services, new market entrants, the availability of additional spectrum, both licensed and unlicensed, and regulatory changes. Competition may also increase as smaller, stand-alone wireless service providers merge or transfer licenses to larger, better capitalized wireless service providers.

The wireless industry also faces competition from other communications and technology companies seeking to increase their brand recognition and capture customer revenue with respect to the provision of wireless products and services, in addition to non-traditional offerings in mobile data. For example, Microsoft, Google, Apple and others are offering alternative means for making wireless voice calls that, in certain cases, can be used in lieu of the wireless provider's voice service, as well as alternative means of accessing video content.

We believe that the following are the most important competitive factors in our industry:

- *Network reliability, capacity and coverage.* We consider a wireless network that consistently provides high-quality and reliable service to be a key differentiator in the U.S. market and driver of customer satisfaction. Lower prices, improved service quality and new wireless service offerings, which in many cases include video content, have led to increased customer usage of wireless services, which, in turn, puts pressure on network capacity. In order to compete effectively, wireless service providers must keep pace with network capacity needs and offer highly reliable national coverage through their networks. We believe that the depth and breadth of our network provides our fundamental strength and is the basis for our competitive advantage in the wireless marketplace. We expect that our investments in our 4G LTE network to increase network capacity will enable us to meet consumer demand.

- *Pricing.* Service and equipment pricing play an important role in the wireless competitive landscape, with plans that address both the postpaid and prepaid customer. As the demand for wireless services continues to grow, we and other wireless service providers are offering service plans at competitive prices that include unlimited data access, voice minutes and text messages, and we also offer plans with data access in varying megabyte or gigabyte sizes. We and many other wireless service providers also allow customers on certain plans to carry over unused data allowances to the next billing period, or to stay online at a reduced data speed after using all of a data allowance for a billing period. In addition, some wireless service providers have bundled wireless service offerings with other products while others offer promotional pricing and incentives targeted specifically to customers of Verizon Wireless.

  We and other wireless service providers, as well as equipment manufacturers, offer device payment options that distinguish service pricing from equipment pricing and blur the traditional boundary between prepaid and postpaid plans. These payment options include device payment plans, which provide customers with the ability to pay for their device over a period of time, and device leasing arrangements. Historically, wireless service providers offered customers wireless plans whereby, in exchange for the customer entering into a fixed-term service agreement, the wireless service provider significantly, and in some cases fully, subsidized the customer's device purchase. Wireless providers recovered those subsidies through higher service fees as compared to those paid by customers on device payment plans. We and many other wireless providers have limited or discontinued this form of device subsidy. As of December 31, 2017 we had approximately 80% of our postpaid phone base on unsubsidized service pricing plans, compared with approximately 67% at December 31, 2016. As of January 2017, we no longer offer consumers new fixed-term service plans for phones. However we continue to service existing plans and provide these plans to business customers.

- *Customer service.* We believe that high-quality customer service is a key factor in retaining customers and attracting new customers, including those of other wireless providers. Our customer service, retention and satisfaction programs are based on providing customers with convenient and easy-to-use products and services and focusing on their needs in order to promote long-term relationships and minimize churn. Our competitors also recognize the importance of customer service and are also focused on improving in this area. As part of our effort to transform and simplify the customer experience, we developed the My Verizon app, which enables customers to manage their price plan, data usage, account and billing from their devices. To promote long-term relationships with our customers, we launched the Verizon Up program, which offers a variety of rewards to customers in exchange for points they earn in connection with their account-related transactions with Verizon Wireless. The program offers customers discounts on products, services and access to experiences, such as sporting events, shows and concerts.

- *Product and service development.* As wireless technologies develop and wireless broadband networks proliferate, continued customer and revenue growth will be increasingly dependent on the development of new and enhanced data products and services. We continue to pursue the development and rapid deployment of new and innovative wireless products and services both independently and in collaboration with application and content providers. We also collaborate with various device manufacturers in the development of distinctive smartphones and other wireless devices that can access the growing array of data applications and content available over the Internet. We continue to focus on increasing the penetration of smartphones, tablets and other connected devices throughout our customer base.

- *Sales and distribution.* The key to achieving sales success in the wireless industry is the reach and quality of sales channels and distribution points. We believe that attaining the optimal combination of varying distribution channels is important to achieving industry-leading profitability, as measured by operating income. We endeavor to increase sales through our company-operated stores, outside sales teams and telemarketing, web-based sales and fulfillment capabilities, our extensive indirect distribution network of retail outlets and prepaid replenishment locations, and through manufacturers of laptops and netbooks with embedded 4G LTE and 3G modules that can access the Internet on our network at broadband speeds. In addition, we sell network access to both traditional resellers, which resell network services to their end-users, and to various companies to enable wireless communications for their IoT devices or services.

- *Capital resources.* In order to expand the capacity and coverage of their networks and introduce new products and services, wireless service providers require significant capital resources. We generate significant cash flow from operations, as do some of our competitors.

Our success will depend on our ability to anticipate and respond to various factors affecting the wireless industry. These include the factors described above, as well as new technologies, new business models, changes in customer preferences, regulatory changes, demographic trends, economic conditions and pricing strategies that bundle the services of wireless and cable competitors.

Wireline

Background

Our Wireline segment provides voice, data and video communications products and enhanced services, including broadband video and data services, corporate networking solutions, security and managed network services and local and long distance voice services. We provide these products and services to consumers in the U.S., as well as to carriers, businesses and government customers both in the U.S. and around the world. In 2017, Wireline revenues were $30.7 billion, representing approximately 24% of Verizon’s aggregate revenues.

During the first quarter of 2017, Verizon reorganized the customer groups within its Wireline segment. Previously, the customer groups in the Wireline segment consisted of Mass Markets (which included Consumer Retail and Small Business subgroups), Global Enterprise, and Global Wholesale. Pursuant to the reorganization, there are now four customer groups within the Wireline segment: Consumer Markets, which includes the customers previously included in Consumer Retail; Enterprise Solutions, which includes the large business customers, including multinational corporations, and federal government customers previously included in Global Enterprise; Partner Solutions, which includes the customers previously included in Global Wholesale; and Business Markets, a new customer group, which includes U.S.-based small business customers previously included in Mass Markets and U.S.-based medium business customers, state and local government customers and educational institutions previously included in Global Enterprise.

To compensate for the shrinking market for traditional copper based products (such as voice services), we continue to build our Wireline business around a fiber-based network supporting data, video and advanced business services - areas where demand for reliable high-speed connections is growing. We are reinventing our network architecture around a common fiber platform that will support both our wireless and wireline businesses. We expect our One Fiber "multi-use fiber" initiative will aid in the densification of our 4G LTE wireless network and position us for the future deployment of 5G technology. The expansion of our multi-use fiber footprint also creates opportunities to generate revenue from fiber-based services in our Wireline business. We continue to seek ways to increase revenue, further realize operating and capital efficiencies and maximize profitability across the segment.

Strategic Transactions

In April 2016, we completed the sale (Access Line Sale) of our local exchange business and related landline activities in California, Florida and Texas, including Fios Internet and video customers, switched and special access lines and high-speed Internet service and long distance voice accounts in these three states to Frontier Communications Corporation (Frontier) for approximately $10.5 billion (approximately $7.3 billion net of income taxes), subject to certain adjustments and including the assumption of $0.6 billion of indebtedness from Verizon by Frontier. The transaction, which included the acquisition by Frontier of the equity interests of Verizon’s incumbent local exchange carriers (ILECs) in California, Florida and Texas, did not involve any assets or liabilities of Verizon Wireless.

The transaction resulted in Frontier acquiring approximately 3.3 million voice connections, 1.6 million Fios Internet subscribers, 1.2 million Fios video subscribers and the related ILEC businesses from Verizon. Approximately 9,300 Verizon employees who served customers in California, Florida and Texas continued employment with Frontier.

In December 2016, we entered into a definitive agreement, which was subsequently amended in March 2017, with Equinix, Inc. (Equinix) pursuant to which we agreed to sell 23 customer-facing data center sites in the U.S. and Latin America for approximately $3.6 billion, subject to certain adjustments (Data Center Sale). The transaction closed in May 2017.

The operating results of these businesses are excluded from our Wireline segment for all periods presented to reflect comparable segment operating results consistent with the information regularly reviewed by our chief operating decision maker.

In February 2016, we entered into a purchase agreement to acquire XO Holdings’ wireline business (XO), which owned and operated one of the largest fiber-based Internet Protocol (IP) and Ethernet networks in the U.S. Concurrently, we entered into a separate agreement to utilize certain wireless spectrum from a wholly-owned subsidiary of XO Holdings, NextLink, that holds its wireless spectrum, which included an option, subject to certain conditions, to buy the subsidiary. In February 2017, we completed our acquisition of XO for total cash consideration of approximately $1.5 billion, of which $0.1 billion was paid in 2015.

In April 2017, we exercised our option to buy NextLink for approximately $0.5 billion, subject to certain adjustments. The transaction closed in January 2018. The spectrum acquired as part of the transaction will be used for our 5G technology deployment.

In August 2017, we entered into a definitive agreement to purchase certain fiber-optic network assets in the Chicago market from WideOpenWest, Inc. (WOW!), a leading provider of communications services. The transaction closed in December 2017. In addition, the parties entered into a separate agreement pursuant to which WOW! will complete the build-out of the network assets we acquired by the second half of 2018. The total cash consideration for the transactions is expected to be approximately $0.3 billion, of which $0.2 billion is related to the transaction that closed in December 2017.

Additional information regarding these strategic transactions is included in the 2017 Verizon Annual Report to Shareowners in Note 2 to the consolidated financial statements of Verizon Communications Inc. and Subsidiaries, which is incorporated by reference into this report.

Wireline Service and Product Offerings

We organize our service and product offerings by the primary customer groups targeted by these offerings - Consumer Markets, Enterprise Solutions, Partner Solutions and Business Markets.

Consumer Markets

Consumer Markets provides residential fixed connectivity solutions including Internet, TV, and voice services. We provide these services over our 100% fiber-optic network under the brand "Fios" and over a traditional copper-based network to customers who are not served by Fios. In 2017, Consumer Markets revenues were $12.8 billion, representing approximately 42% of Wireline's aggregate revenues.

*Internet serv*ices. We offer our Fios customers fast and reliable 100% fiber-optic internet connectivity. As customers connect more devices in their home and stream more high definition video, the need for a fast and reliable internet connection is growing. In 2017, we introduced our Gigabit Connection in the marketplace, offering speeds of up to 940 Mbps on download and 880 Mbps on upload. As additional cloud-based applications are introduced, we believe that customers will place an increasing value on upstream bandwidth performance that matches what they already receive for download. In other areas of our footprint where Fios service is not available, we offer high speed Internet (HSI) using Digital Subscriber Line (DSL) technology.

Video services. We offer video service over our fiber-optic network. As of December 31, 2017, Fios video services were available to approximately 14 million homes across 9 states, as well as the District of Columbia. We have several offerings available to our Fios TV customers, including

- *Fios Custom TV,* which provides customers with seven distinct package offerings. The seven choices are: Kids and Pop, Sports and News, Action and Entertainment, News and Variety, Home and Family, Lifestyle and Reality, and Infotainment and Drama. Each package includes the local versions of the major broadcast stations and other similar local content and then adds on 45 + specialty channels driven by popular viewership choices;

- *Fios on Demand,* which gives Fios customers the ability to watch content virtually anytime and anywhere, on any compatible device. Customers who subscribe to Fios Internet and video services also have the ability to upload their photos, music and videos to their personal Fios on Demand Library, which gives them access to this content via various data-capable devices. With the Fios Mobile App, programming can be streamed to a customer's tablet or other mobile device; and

- *Fios Multi-Room DVR,* which provides customers the ability to record up to 12 shows at once and control live TV from any room in their home.

We continue to develop and enhance our video platform to continue driving engagement and improving the customer experience.

Voice services. We offer voice services on our fiber and copper networks, providing local, long distance, and calling features.

Enterprise Solutions

Enterprise Solutions helps customers transform their businesses to compete in the digital economy, with solutions that adapt to increasingly dynamic needs for connectivity, security and collaboration. With the accelerating pace of digital transformation, mitigating risk, maintaining business continuity, and capitalizing on data to create personalized experiences are key priorities for global enterprise companies. Enterprise Solutions offers traditional circuit-based network products and services and advanced networking solutions, including Private IP, Ethernet, and Software-Defined Wide Area Network, cyber security services, along with our traditional voice services, and advanced workforce productivity and customer contact center solutions. In 2017, Enterprise Solutions revenues were $9.2 billion, representing approximately 30% of Wireline's aggregate revenues.

- *Networks.* We offer a robust portfolio of network connectivity products to help our enterprise and business customers connect with their employees, partners, vendors, customers and, for our government customers, their constituents.

    - *Internet.* We offer our enterprise and business customers the ability to connect to the Internet via our Fios Internet and our dedicated Internet access services, which provide extensive bandwidth, configuration and billing options designed to address specific business needs.

    - *Private Networks.* Our private networking services connect multiple business locations securely through our Private IP (MPLS) and Ethernet services, generally via fiber optic based connectivity. Point to point connectivity via Ethernet or Wavelength is also available.

    - *Virtual and Software Defined Networks.* We provide our enterprise and business customers with the ability to leverage the power of Software Defined Networking technologies, such as SD-WAN or Virtual Network Services (VNS), with easily ordered and deployed "on demand" capabilities. These services can function "over the top" of our network or those of other carriers, enabling significant customer flexibility, advanced security options and digital/software enablement of their network.

- *Advanced Communications Services.* We offer a suite of services to our enterprise and business customers to help them communicate with their employees, partners, vendors, constituents and customers.

    - *Voice over IP (VoIP).* Our VoIP services enable communications via our cost-effective and simple-to-operate managed IP based communications services for enterprise and business customers that seek a hosted IP communications/phone system or an IP based telephony service for on-premise phone systems or private branch exchanges (PBX).

    - *Unified Communications & Collaboration (UC&C).* Our UC&C services, an expansion of our VoIP services, provide our business customers with unified tools for communications and collaboration such as instant messaging, video, collaboration, presence, etc.

    - *Customer Experience/Contact Center.* We offer our business customers the ability to deliver integrated support services to their own customers, employees or constituents. Hosted and on-premise versions are available, which include the ability to support remote agents and integration with our business customer's back office systems and tools.

- *Security services.* We offer a suite of management and data security services to help enterprise, business and governments protect, detect and respond to security threats spanning their networks, data, applications and infrastructure, which enable them to maintain customer trust and confidence.

- *Core services.* Core services include core voice and data services, which consist of a comprehensive portfolio of domestic and global solutions utilizing traditional telecommunications technology. Voice services include local exchange, regional, long distance and toll-free calling along with voice messaging services, conferencing and contact center solutions. Core data includes private line and data access networks. Core services also include the provision of customer premises equipment, and installation, maintenance and site services. We continue to transition customers out of copper-based legacy voice and data services to fiber services, including IP and Ethernet.

Partner Solutions

Partner Solutions provides communications services including data, voice, local dial tone and broadband services primarily to local, long distance, and wireless carriers that use our facilities to provide services to their customers. In 2017, Partner Solutions revenues were $4.9 billion, representing approximately 16% of Wireline's aggregate revenues. A portion of Partner Solutions revenues are generated by a few large telecommunications companies, most of which compete directly with us.

Partner Solutions provides the following key services to both Wireless and Wireline carriers:

- *Data services.* We offer a robust portfolio of data services with varying speeds and options to enhance our wholesale customers' networks and provide connections to their end-users and subscribers. Our data services include high-speed digital data offerings, such as Ethernet and Wavelength services, as well as core time-division multiplexing (TDM) data circuits, such as DS1s and DS3s. In addition, we receive revenue from data services that is generated from carriers that buy dedicated local exchange capacity to support their private networks. We have also launched a dark fiber product for wireless carriers as demand for wireless data continues to grow and dark fiber plays a larger role in their network architecture.

- *Voice services.* We provide switched access services that allow carriers to complete their end-user calls that originate or terminate within our territory. In addition, we provide originating and terminating voice services throughout the U.S. and globally utilizing our TDM and VoIP networks.

- *Local services.* We offer an array of local dial tone and broadband services to competitive local exchange carriers, some of which are offered to comply with telecommunications regulations. In addition, we offer services such as colocation, resale and unbundled network elements in compliance with applicable regulations.

Business Markets

Business Markets offers tailored voice and networking products, Fios services, IP Networking, advanced voice solutions, security, and managed information technology (IT) services to U.S.-based small and medium businesses, state and local governments, and educational institutions. In 2017, Business Markets revenues were $3.6 billion, representing approximately 12% of Wireline's aggregate revenues.

In addition to the traditional voice and networking products and Fios services noted in the Consumer Markets section above, Business Markets also offers traditional circuit-based network products and services, advanced networking solutions, advanced communications services, and security services, as noted in the Enterprise Solutions section above.

Network

Verizon operates a large and advanced telecommunications network in the U.S. and around the world to provide services and solutions to its customers. With the advancement of our Intelligent Edge Network; we are evolving our network architecture around a multi-use common fiber platform that will support both our wireless and wireline technologies and will, we believe, drive even greater levels of cost efficiency. We expect that the new architecture will improve our 4G LTE coverage, speed the deployment of 5G technology, deliver high-speed Fios broadband to homes and businesses, and create new enterprise opportunities in the business market.

- *Fios.* Our fiber-to-the-home network through which we provide our Fios residential broadband service has passed over 17.3 million premises in the U.S. as of December 31, 2017. Residential broadband service has seen significant growth in bandwidth demand over the past several years, and we believe that demand will continue to grow. The continued emergence of new video services, new data applications and the proliferation of IP devices in the home will continue to drive new network requirements for increased data speeds and throughput. We believe that the Passive Optical Network (PON) technology underpinning Fios makes us well positioned to meet these demands in a cost-effective and efficient manner. Our PON technology provides the flexibility to adapt our network to deliver increased data speeds and new services without major overhauls or replacements to the fiber-optic infrastructure.

  While deployed initially as a consumer broadband network, the PON infrastructure is also finding more widespread application in the enterprise sector, especially as businesses increasingly migrate to Ethernet-based access services.

- *Global IP*. Verizon owns and operates one of the largest global fiber networks in the world, providing connectivity to business customers in more than 150 countries. Our global IP network includes long-haul, metro and submarine assets that span over 900,000 route miles and enable and support far reaching international operations.

  Global business is rapidly evolving to an "everything-as-a-service" model in which business customers seek cloud-based, converged enterprise solutions delivered securely via managed and professional services. With the continued deployment of packet optical transport strategy, Verizon is creating a single, high-capacity global network platform that combines optical transport with advanced packet switching technology. The result is a global IP network that can offer powerful solutions to these service demands.

We believe that our continued focus on enhancing our domestic and global fiber-based networks, and achieving cost efficient solutions through new technology deployments, will help Verizon advance its position as a provider of choice to residential, small to medium business, Government and enterprise customers.

Competition

The wireline telecommunications industry is highly competitive. We expect competition to intensify further with traditional, non-traditional and emerging players seeking increased market share. Current and potential competitors include cable companies, wireless service providers, domestic and foreign telecommunications providers, satellite television companies, Internet service providers, over the top providers and other companies that offer network services and managed enterprise solutions.

In addition, companies with a global presence increasingly compete with our wireline businesses. A relatively small number of telecommunications and integrated service providers with global operations serve customers in the global enterprise market and, to a lesser extent, the global wholesale market. We compete with these providers for large contracts to provide integrated services to global enterprises. Many of these companies have strong market presence, brand recognition and existing customer relationships, all of which contribute to intensifying competition that may affect our future revenue growth.

We believe the following are the most important competitive factors and trends in the wireline industry:

- *Bandwidth (speed) and network reliability.* Consumers and small business customers are seeking to leverage fast and reliable connections for entertainment, communications and productivity. As online and online-enabled activities increase, so will bandwidth requirements, both downstream and upstream. To succeed, we and other network-based providers must ensure that our networks can meet these increasing bandwidth requirements. In addition, network reliability and security are increasingly important competitive factors for our Enterprise Solutions and Business Markets customers, which include State, Local and Education (SLED), and Small and Medium Business (SMB) customers. We continue to invest in our network to be able to meet growing bandwidth demand and provide reliable and secure networks.

- *Pricing.* Cable operators, telecommunications companies and integrated service providers use pricing to capture market share from incumbents. Pricing is also a significant factor as non-traditional modes of providing communication services emerge and new entrants compete for customers. For example, VoIP and portal-based calling is free or nearly free to customers and is often supported by advertising revenues.

- *Customer service.* Customers expect industry-leading service from their service providers. As technologies and services evolve, the ability to excel in this area is important for customer acquisition and retention. For our Consumer Markets and Business Markets customers, we compete in this area through our service representatives and online support. We provide our Enterprise Solutions customers with ready access to their system and performance information and we conduct proactive testing of our network to identify issues before they affect their customers. In the Partner Solutions business, we believe service improvement can be achieved through continued system automation initiatives.

- *Product differentiation.* As a result of pricing pressures, providers need to differentiate their products and services. Customers are shifting their focus from access to applications and are seeking ways to leverage their broadband and video connections. Converged features, such as integrated wireless and wireline functionality, are becoming similarly important, driven by both customer demand and technological advancement.

- *Innovation.* The delivery of new and innovative products and services has been accelerating. To compete effectively, providers need to continuously review, improve and refine their product portfolio and customer service experience and develop and rapidly deploy new products and services tailored to the needs of the customer.

In the Consumer Markets business, cable operators are significant competitors. Cable operators have increased the size and capacity of their networks in order to deliver digital products and services. We continue to market competitive bundled offerings that include Fios Internet, TV, and voice services. In addition, in 2017 we introduced market offers targeted to our Verizon Wireless customers. Several major cable operators also offer bundles with wireless services through strategic relationships.

Customers have more choices for obtaining video content from various online services and that content can be accessed on a TV, computer, tablet or mobile phone. We expect the market will continue to shift from traditional linear video to over the top offerings.

We expect customer migration from traditional voice services to wireless services to continue as a growing number of customers place greater value on mobility and wireless companies position their service as a landline alternative. We also face increasing competition from cable companies and other providers of VoIP services as well as Internet portal providers.

In the Enterprise Solutions market, competition remains intense, primarily as a result of increased industry focus on technology convergence. We compete in this area with system integrators, carriers and hardware and software providers. In addition, some of the biggest companies in IT services are making strategic acquisitions, divesting non-strategic assets or forging new alliances to be better positioned for a rebound in technology spending. Many new alliances and acquisitions have focused on emerging fields, such as cloud computing, software delivery, communication applications and other computing tasks via the network, rather than on in-house machines. Carriers have also utilized acquisitions to make significant inroads into enterprise outsourcing markets that have long been dominated by the major IT outsourcers.

In the Partner Solutions business, we serve as a global wholesale partner that connects customers to the digital world. Partner Solutions competes with traditional carriers for long-haul, voice and IP services. In addition, mobile video and data needs are driving a greater need for wireless backhaul. Network providers, cable companies and niche players are competitors for this new revenue opportunity.

In Business Markets, customer purchasing behaviors and preferences continue to evolve. Solution speed and simplicity with a consumer-like "look and feel" are becoming key differentiators for both our SMB and SLED customers. SMB customers are seeking full life-cycle offers that radically simplify the process of starting, running and growing their businesses, while SLED customers want similar services that are high quality and secure that enable material improvement in citizen outreach, public safety and city infrastructure performance, all of which help attract inward investment and community prosperity.

Media and Telematics

Technology developments, interconnected markets, shifting consumer needs and converging industry ecosystems are creating innovative opportunities for Verizon. We are transforming around the capabilities of our high-performing networks, with a goal of future growth based on delivering what customers want and need in the new digital world. Our three tier strategy is to lead at the network connectivity level in the markets we serve, develop new business models through global platforms in digital media and IoT, and deliver solutions to key industry segments for incremental monetization. Verizon is focused on leveraging all of our assets to create innovative products and services that can provide our customers with integrated solutions that address their needs. Several strategic initiatives have been undertaken by Verizon in the areas of digital media, interactive entertainment and IoT (including telematics) products and services.

Media

Verizon has been investing in emerging technology that taps into the market shift to digital content and advertising. We have been investing in video assets and capabilities with a goal of building a global platform and developing new business models for reaching the digital video customer. We believe the growth in video consumption using mobile devices provides us with an opportunity for revenue growth. Through various acquisitions and investments and the launch of video streaming products and services, we are expanding the ways in which we can deliver content to our customers, including the following:

- In June 2015, we completed our acquisition of AOL Inc. (AOL), a leader in digital content and advertising. AOL's business model aligns with our approach, and we believe that its combination of owned and operated content properties plus a digital advertising platform enhances our ability to further develop future revenue streams.

- In June 2017, we completed our acquisition of the operating business of Yahoo! Inc. (Yahoo), a leader in search, communications, digital content and advertising. Yahoo informs, connects and entertains through its search, communications and digital content products. Yahoo also connects advertisers with target audiences through a streamlined advertising technology stack that utilizes a combination of data, content and technology. Verizon has combined Yahoo's operating business with our existing Media business, which included AOL's operations and the content delivery platform of Verizon Digital Media Services (VDMS), to create a new organization named Oath, which includes diverse media and technology brands that engage approximately a billion people around the world. We believe that Oath, with its technology, content and data, will help us expand the global scale of our digital media business and build brands for the future. Additional discussion of the transaction is included in the 2017 Verizon Annual Report to Shareowners in Note 2 to the consolidated financial statements of Verizon Communications Inc. and Subsidiaries, which is incorporated by reference into this report.

- We continue to invest in VDMS, which offers a scalable platform for delivering content, including live broadcasts, video on demand, games, software and websites, to our customers on their devices at any time. As the digital platform reshapes the delivery of media and entertainment content, there is an increasing need for a stable, high-quality video delivery platform. We are focused on providing a simple end-to-end global platform for the delivery of media to consumers, which we believe will be superior to that offered by the existing and highly fragmented media delivery ecosystem. This platform is targeted at media and entertainment companies and other businesses focused on delivering their digital products and services through the Internet. We also expect, through the VDMS platform, to support video initiatives and offerings, such as Fios and wireless, across the business.

- We have established relationships with leading sports leagues to bring compelling content to our customers across our digital platforms. We recently announced a multi-year partnership with the National Football League (NFL) in which Verizon's portfolio of premium digital and mobile media properties, such as Yahoo Sports, will stream in-market and national games, including national pre-season, regular season and playoff games, and the Super Bowl to mobile phones. We also recently announced an innovative, multi-year partnership with the National Basketball Association (NBA) that will deliver one of the most comprehensive video streaming offerings of NBA content - from live out-of-market games via NBA League Pass to highlights, fantasy basketball, original programming and more via Yahoo Sports, Yahoo Fantasy and across Verizon's family of media brands. As part of the partnership, the NBA and Verizon will unveil a series of innovative collaborations leveraging Verizon's leading network and technology to deliver premium NBA content and unique fan experiences. Verizon also has rights to deliver leading soccer games, including La Liga and Liga MX, to its customers.

- We have made investments in converging technologies and services involving content delivery networks (CDNs), video streaming and related consumer hardware to leverage new content models. Our wireless network enables us to move towards a unified video strategy that positions us to take advantage of this growth opportunity. We began using Multimedia Broadcast Multicast Service (MBMS) technology to develop our LTE Multicast service. MBMS has the potential to enhance our network efficiency and provide our customers with access to live streaming video content with virtually no buffering, regardless of the number of devices using the service.

- During 2016, we established Verizon Hearst Media Partners, LLC, a content joint venture with Hearst Entertainment & Syndication (Hearst), to build new multiplatform digital video channels targeted to the mobile millennial audience. In partnership with Hearst, we have also invested in two media companies, AwesomenessTV Holdings, LLC and Complex Media, Inc., which are leaders in producing content targeted at key demographics, in order to further diversify our content and distribution businesses within our digital media portfolio.

Internet of Things and Telematics

The adoption of IoT technology continues to grow as companies across a wide range of industries are leveraging IoT technologies to increase efficiency, gain better customer insights, facilitate compliance and build new business models. IoT growth is expanding broadly, and adoption is particularly strong in the telematics and transportation industries in addition to the fields of smart communities, healthcare, utilities and energy management. We are building IoT capabilities by leveraging business models that monetize usage on our network at the connectivity, platform and solution layers. We have developed IoT solutions that address key market needs for electric and other utilities, farms and other purveyors of food and agriculture, drug companies and others with complex supply chains. In addition, our IoT customers can turn the data that our solutions provide into actionable opportunities to develop new services and create revenue growth.

Our IoT services offer end-to-end solutions for various IoT vertical markets, such as:

- *Fleet management and telematics.* We provide in-vehicle solutions that enable vehicle navigation, GPS tracking, engine diagnostic monitoring and maintenance alerts;

- *Energy.* We offer solutions targeted to providing the energy sector with greater visibility into energy usage and the ability to remotely monitor devices used to track energy usage; and

- *Smart Communities.* Our solutions enable localities to collect data from IoT and connected machine technologies with the goal of improving public safety, managing traffic, reducing pollution, identifying revenue generation opportunities, making efficient use of limited resources and attracting businesses, residents and workers.

Through Verizon Telematics, we are automating, and helping our customers to optimize, the way people, vehicles and things move through the world. Our telematics business offers a full array of solutions to both businesses and consumers that combine location-based software, services and data intelligence. We enable our customers to track, safeguard and optimize their most prized assets: people, vehicles, equipment and data. Through organic and inorganic growth, Verizon has built one of the largest telematics businesses worldwide based on its advanced mobile telematics platforms.

Our consumer offering is anchored by our Hum product. Hum is an aftermarket vehicle technology and subscription service that provides consumers with diagnostic technology in their vehicles, access to live assistance and roadside assistance with GPS accuracy when needed. Our Hum service also offers the ability to connect with a certified mechanic to diagnose potential problems and offer solutions. Since its market introduction in 2015, Hum has grown rapidly, becoming one of the largest consumer telematics platforms in North America. We also offer consumer telematics services via automotive OEMs such as Mercedes Benz, Volkswagen and others in select markets.

Verizon Telematics has also developed one of the largest commercial telematics businesses worldwide. In addition to our Networkfleet business, in 2016 we acquired both Fleetmatics Group PLC, a global provider of fleet and mobile workforce management solutions, and Telogis, Inc., a global, cloud-based mobile enterprise management software business. With these combined businesses, Verizon Telematics is a top commercial telematics provider globally. We serve both the enterprise and SMB market segments with advanced solutions and scale in distribution, research and development, and customer support.

Patents, Trademarks and Licenses

We own or have licenses to various patents, copyrights, trademarks, domain names and other intellectual property rights necessary to conduct our business. We actively pursue the filing and registration of patents, copyrights, domain names, trademarks and service marks to protect our intellectual property rights within the United States and abroad. We also actively grant licenses, in exchange for appropriate fees or other consideration and subject to appropriate safeguards and restrictions, to other companies that enable them to utilize certain of our intellectual property rights and proprietary technology as part of their products and services. Such licenses enable the licensees to take advantage of the results of Verizon's research and development efforts. While these licenses result in valuable consideration being paid to us, we do not believe that the loss of such consideration, or the expiration of any of our intellectual property rights, would have a material effect on our results of operations.

We periodically receive offers from third parties to purchase or obtain licenses for patents and other intellectual property rights in exchange for royalties or other payments. We also periodically receive notices alleging that our products or services infringe on third-party patents or other intellectual property rights. These claims, whether against us directly or against third-party suppliers of products or services that we, in turn, sell to our customers, if successful, could require us to pay damages or royalties, or cease offering the relevant products or services.

Acquisitions and Divestitures

Information about our acquisitions and divestitures is included in the 2017 Verizon Annual Report to Shareowners under the heading "Management's Discussion and Analysis of Financial Condition and Results of Operations - Acquisitions and Divestitures" and in Note 2 to the consolidated financial statements of Verizon Communications Inc. and subsidiaries, which is incorporated by reference into this report.

Regulatory and Competitive Trends

Regulatory and Competitive Landscape

Verizon operates in a regulated and highly competitive market. Current and potential competitors include other voice and data service providers such as other wireless companies, traditional telephone companies, cable companies, Internet service providers, software and application providers, and other non-traditional companies. Many of these companies have strong market presence, brand recognition and existing customer relationships, all of which contribute to intensifying competition that may affect our future revenue growth. Some of our competitors also are subject to fewer regulatory constraints than Verizon. For many services offered by Verizon, the FCC is our primary regulator. The FCC has jurisdiction over interstate telecommunications services and other matters under the Communications Act of 1934, as amended (Communications Act or Act). Other Verizon services are subject to state and local regulation.

Federal Regulation

Wireless Services

The FCC regulates several aspects of our wireless operations. Generally, the FCC has jurisdiction over the construction, operation, acquisition and transfer of wireless communications systems. All wireless services require use of radio frequency spectrum, the assignment and distribution of which is subject to FCC oversight. Verizon anticipates that it will need additional spectrum to meet future demand. We can meet our needs for licensed spectrum by purchasing licenses or leasing spectrum from others, or by participating in a competitive bidding process to acquire new spectrum from the FCC. Those processes are subject to certain reviews, approvals and potential conditions.

Today, Verizon holds FCC spectrum licenses that allow it to provide a wide range of mobile and fixed communications services, including both voice and data services. FCC spectrum licenses typically have a term of 10 years, at which time they are subject to renewal. While the FCC has routinely renewed all of Verizon's wireless licenses, challenges could be raised in the future. If a wireless license was revoked or not renewed, Verizon would not be permitted to provide services on the spectrum covered by that license. Some of our licenses require us to comply with so-called "open access" FCC regulations, which generally require licensees of particular spectrum to allow customers to use devices and applications of their choice, subject to certain technical limitations. The FCC has also imposed certain specific mandates on wireless carriers, including construction and geographic coverage requirements, technical operating standards, provision of enhanced 911 services, roaming obligations and requirements for wireless tower and antenna facilities.

Broadband

Verizon offers many different broadband services. Traditionally, the FCC recognized broadband Internet access services as "information services" subject to a "light touch" regulatory approach rather than to the traditional, utilities-style regulations. In 2015, the FCC declared that broadband Internet access services are "telecommunications services" subject to common carriage regulation under Title II of the Communications Act. In December 2017, the FCC adopted an order reversing the 2015 Title II Order to return to "light touch" regulation of broadband Internet access services. Regardless of regulation, Verizon remains committed to the open Internet, which provides consumers with competitive choices and unblocked access to lawful websites and content when, where, and how they want, and our commitment to our customers can be found on our website at http://responsibility.verizon.com/broadband-commitment.

Wireline Voice

Verizon offers many different wireline voice services, including traditional telephone service and other services that rely on technologies such as VoIP. For regulatory purposes, legacy telephone services are generally considered to be "common carrier" services. Common carrier services are subject to heightened regulatory oversight with respect to rates, terms and conditions and other aspects of the services. The FCC has not decided the regulatory classification of VoIP but has said VoIP service providers must comply with certain rules, such as 911 capabilities and law enforcement assistance requirements.

Video

Verizon offers a multichannel video service that is regulated like traditional cable service. The FCC has a body of rules that apply to cable operators, and these rules also generally apply to Verizon. In areas where Verizon offers its facilities-based multichannel video services, Verizon has typically been required to obtain a franchise from local authorities.

Privacy and Data Security

We are subject to federal, state and international laws and regulations relating to privacy and data security that impact all parts of our business, including wireline, wireless, broadband and the development and roll out of new products, such as those in the media and IoT space. At the federal level, our voice business is subject to the FCC's privacy requirements. Oversight of broadband Internet access privacy and data security, which had shifted from the Federal Trade Commission (FTC) to the FCC following the FCC's adoption of its 2015 Title II Order, will return to the FTC as a result of the FCC's repeal of the 2015 Title II Order in December 2017. Generally, attention to privacy and data security requirements is increasing at both the state and federal level. In addition, a new data protection regulation will go into effect in Europe in May 2018 that includes significant penalties for non-compliance.

Public Safety and Cybersecurity

The FCC has played a role in addressing public safety concerns by regulating emergency communications services and mandating widespread availability of both media (broadcast/cable) and wireless emergency alerting services. In response to cyber attacks that have occurred or could occur in the future, however, the FCC or other regulators may attempt to increase regulation of the cybersecurity practices of providers.

Intercarrier Compensation and Network Access

The FCC regulates some of the rates that carriers pay each other for the exchange of voice traffic (particularly traditional wireline traffic) over different networks and other aspects of interconnection for some voice services. The FCC also regulates some of the rates and terms and conditions for certain wireline "business data services" and other services and network facilities. Verizon is both a seller and a buyer of these services, and both makes and receives interconnection payments. In April 2017, the FCC issued an order, which is currently under appeal, that revised the regulatory structure for business data services, eliminating tariffing obligations and ex ante price regulations in markets the FCC determined to be competitive. The FCC has focused in recent years on whether changes in the rates, terms and conditions for both the exchange of traffic and for business data services may be appropriate.

State Regulation and Local Regulation

Wireless Services

The Act generally preempts regulation by state and local governments of the entry of, or the rates charged by, wireless carriers. The Act does not prohibit states from regulating the other "terms and conditions" of wireless service. For example, some states attempt to regulate wireless customer billing matters and impose reporting requirements. Several states also have laws or regulations that address safety issues (e.g., use of wireless handsets while driving) and taxation matters. In addition, wireless tower and antenna facilities are often subject to state and local zoning and land use regulation, and securing approvals for new or modified facilities is often a lengthy and expensive process.

Wireline Services

State public utility commissions regulate Verizon’s telephone operations with respect to certain telecommunications intrastate matters. Verizon operates as an "incumbent local exchange carrier" in nine states and the District of Columbia. These incumbent operations are subject to various levels of pricing flexibility and other state oversight and requirements. Verizon also has other wireline operations that are more lightly regulated.

In addition, as a video services operator in many states, Verizon has been required to obtain a cable franchise from local government entities, or in some cases a state-wide franchise, and comply with certain one-time and ongoing obligations, as a result.

Environmental Matters

Reserves have been established to cover environmental matters relating to discontinued businesses and past telecommunications activities. These reserves include funds to address contamination at the site of a former Sylvania facility in Hicksville, NY, which had processed nuclear fuel rods in the 1950s and 1960s. In September 2005, the Army Corps of Engineers (ACE) accepted the site into its Formerly Utilized Sites Remedial Action Program. As a result, the ACE has taken primary responsibility for addressing the contamination at the site. An adjustment to the reserves may be made after a cost allocation is conducted with respect to the past and future expenses of all of the parties. Adjustments to the environmental reserve may also be made based upon the actual conditions found at other sites requiring remediation.

Executive Officers

See Part III, Item 10. "Directors, Executive Officers and Corporate Governance" of this Annual Report on Form 10-K for information about our executive officers.

Employees

As of December 31, 2017, Verizon and its subsidiaries had approximately 155,400 employees. Unions represent approximately 23% of our employees.

Information on Our Internet Website

We make available, free of charge on our website, our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and all amendments to those reports at http://www.verizon.com/about/investors as soon as reasonably practicable after such reports are electronically filed with the Securities and Exchange Commission (SEC).

Reports filed with the SEC may be viewed at www.sec.gov or obtained at the SEC Public Reference Room in Washington, D.C. Information about the operation of the Public Reference Room may be obtained by calling the SEC at 1-800-SEC-0330.

Website references in this report are provided as a convenience and do not constitute, and should not be viewed as, incorporation by reference of the information contained on, or available through, the websites. Therefore, such information should not be considered part of this report.

Cautionary Statement Concerning Forward-Looking Statements

In this report we have made forward-looking statements. These statements are based on our estimates and assumptions and are subject to risks and uncertainties. Forward-looking statements include the information concerning our possible or assumed future results of operations. Forward-looking statements also include those preceded or followed by the words "anticipates," "believes," "estimates," "expects," "hopes" or similar expressions. For those statements, we claim the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995. We undertake no obligation to revise or publicly release the results of any revision to these forward-looking statements, except as required by law. Given these risks and uncertainties, readers are cautioned not to place undue reliance on such forward-looking statements.

The following important factors, along with those discussed elsewhere in this report and in other filings with the SEC, could affect future results and could cause those results to differ materially from those expressed in the forward-looking statements:

- adverse conditions in the U.S. and international economies;
- the effects of competition in the markets in which we operate;
- material changes in technology or technology substitution;
- disruption of our key suppliers’ provisioning of products or services;
- changes in the regulatory environment in which we operate, including any increase in restrictions on our ability to operate our networks;
- breaches of network or information technology security, natural disasters, terrorist attacks or acts of war or significant litigation and any resulting financial impact not covered by insurance;
- our high level of indebtedness;
- an adverse change in the ratings afforded our debt securities by nationally accredited ratings organizations or adverse conditions in the credit markets affecting the cost, including interest rates, and/or availability of further financing;
- material adverse changes in labor matters, including labor negotiations, and any resulting financial and/or operational impact;
- significant increases in benefit plan costs or lower investment returns on plan assets;
- changes in tax laws or treaties, or in their interpretation;
- changes in accounting assumptions that regulatory agencies, including the SEC, may require or that result from changes in the accounting rules or their application, which could result in an impact on earnings;
- the inability to implement our business strategies; and
- the inability to realize the expected benefits of strategic transactions.

Item 1A. Risk Factors

The following discussion of "Risk Factors" identifies the most significant factors that may adversely affect our business, operations, financial condition or future performance. This information should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Result of Operations" and the consolidated financial statements and related notes. The following discussion of risks is not all-inclusive but is designed to highlight what we believe are important factors to consider when evaluating our business and expectations. These factors could cause our future results to differ materially from our historical results and from expectations reflected in forward-looking statements.

Adverse conditions in the U.S. and international economies could impact our results of operations.

Unfavorable economic conditions, such as a recession or economic slowdown in the U.S. or elsewhere, could negatively affect the affordability of and demand for some of our products and services. In difficult economic conditions, consumers may seek to reduce discretionary spending by forgoing purchases of our products, electing to use fewer higher margin services, dropping down in price plans or obtaining lower-cost products and services offered by other companies. Similarly, under these conditions, the business customers that we serve may delay purchasing decisions, delay full implementation of service offerings or reduce their use of services. In addition, adverse economic conditions may lead to an increased number of our consumer and business customers that are unable to pay for services. If these events were to occur, it could have a material adverse effect on our results of operations.

We face significant competition that may reduce our profits.

We face significant competition in our industry. The rapid development of new technologies, services and products has eliminated many of the traditional distinctions among wireless, cable, Internet, local and long distance communication services and brought new competitors to our markets, including other telephone companies, cable companies, wireless service providers, satellite providers, application and device providers and providers of VoIP services. While these changes have enabled us to offer new types of products and services, they have also allowed other providers to broaden the scope of their own competitive offerings. In addition, wireless service providers are significantly altering the financial relationships with their customers through commercial offers that vary service and device pricing, promotions, incentives and levels of service provided – in some cases specifically targeting Verizon Wireless customers. Our ability to compete effectively will depend on, among other things, our network quality, capacity and coverage, the pricing of our products and services, the quality of our customer service, our development of new and enhanced products and services, the reach and quality of our sales and distribution channels and our capital resources. It will also depend on how successfully we anticipate and respond to various factors affecting our industry, including new technologies and business models, changes in consumer preferences and demand for existing services, demographic trends and economic conditions. If we are not able to respond successfully to these competitive challenges, we could experience reduced profits.

If we are not able to adapt to changes and disruptions in technology and address changing consumer demand on a timely basis, we may experience a decline in the demand for our services, be unable to implement our business strategy and experience reduced profits.

Our industries are rapidly changing as new technologies are developed that offer consumers an array of choices for their communications needs and allow new entrants into the markets we serve. In order to grow and remain competitive, we will need to adapt to future changes in technology, enhance our existing offerings and introduce new offerings to address our customers' changing demands. If we are unable to meet future challenges from competing technologies on a timely basis or at an acceptable cost, we could lose customers to our competitors. We may not be able to accurately predict technological trends or the success of new services in the market. In addition, there could be legal or regulatory restraints on our introduction of new services. If our services fail to gain acceptance in the marketplace, or if costs associated with the implementation and introduction of these services materially increase, our ability to retain and attract customers could be adversely affected.

In addition to introducing new technologies and offerings, we must phase out outdated and unprofitable technologies and services. If we are unable to do so on a cost-effective basis, we could experience reduced profits. In addition, there could be legal or regulatory restraints on our ability to phase out current services.

We depend on key suppliers and vendors to provide equipment that we need to operate our business.

We depend on various key suppliers and vendors to provide us, directly or through other suppliers, with equipment and services, such as fiber, switch and network equipment, smartphones and other wireless devices that we need in order to operate our business and provide products to our customers. For example, our smartphone and other device suppliers often rely on one vendor for the manufacture and supply of critical components, such as chipsets, used in their devices. If these suppliers or vendors fail to provide equipment or service on a timely basis or fail to meet our performance expectations, we may be unable to provide products and services as and when requested by our customers. We also may be unable to continue to maintain or upgrade our networks. Because of the cost and time lag that can be associated with transitioning from one supplier to another, our business could be substantially disrupted if we were required to, or chose to, replace the products or services of one or more major suppliers with products or services from another source, especially if the replacement became necessary on short notice. Any such disruption could increase our costs, decrease our operating efficiencies and have a material adverse effect on our business, results of operations and financial condition.

The suppliers and vendors on which we rely may also be subject to litigation with respect to technology on which we depend, including litigation involving claims of patent infringement. Such claims are frequently made in the communications industry. We are unable to predict whether our business will be affected by any such litigation. We expect our dependence on key suppliers to continue as we develop and introduce more advanced generations of technology.

Changes in the regulatory framework under which we operate could adversely affect our business prospects or results of operations.

Our domestic operations are subject to regulation by the FCC and other federal, state and local agencies, and our international operations are regulated by various foreign governments and international bodies. These regulatory regimes frequently restrict or impose conditions on our ability to operate in designated areas and provide specified products or services. We are frequently required to maintain licenses for our operations and conduct our operations in accordance with prescribed standards. We are often involved in regulatory and other governmental proceedings or inquiries related to the application of these requirements. It is impossible to predict with any certainty the outcome of pending federal and state regulatory proceedings relating to our operations, or the reviews by federal or state courts of regulatory rulings. Without relief, existing laws and regulations may inhibit our ability to expand our business and introduce new products and services. Similarly, we cannot guarantee that we will be successful in obtaining the licenses needed to carry out our business plan or in maintaining our existing licenses. For example, the FCC grants wireless licenses for terms generally lasting 10 years, subject to renewal. The loss of, or a material limitation on, certain of our licenses could have a material adverse effect on our business, results of operations and financial condition.

New laws or regulations or changes to the existing regulatory framework at the federal, state and local, or international level could restrict the ways in which we manage our wireline and wireless networks and operate our Media and Telematics businesses, impose additional costs, impair revenue opportunities and potentially impede our ability to provide services in a manner that would be attractive to us and our customers. For example, we are subject to federal, state and international laws related to privacy and data protection. A new data protection regulation will go into effect in Europe in May 2018 that includes significant penalties for non-compliance. In an order adopted by the FCC in December 2017, the FCC repealed its 2015 Title II Order that had nullified its longstanding "light touch" approach to regulating broadband Internet access services and "reclassified" these services as telecommunications services subject to utilities-style common carriage regulation. The December 2017 order could be appealed or otherwise challenged. The outcome and timing of any such appeal or challenge remains uncertain. In addition, we hold certain wireless licenses that require us to comply with so-called "open access" FCC regulations, which generally require licensees of particular spectrum to allow customers to use devices and applications of their choice. Moreover, certain services could be subject to conflicting regulation by the FCC and/or various state and local authorities, which could significantly increase the cost of implementing and introducing new services. The further regulation of broadband, wireless and our other activities and any related court decisions could restrict our ability to compete in the marketplace and limit the return we can expect to achieve on past and future investments in our networks.

Cyber attacks impacting our networks or systems could have an adverse effect on our business.

Cyber attacks, including through the use of malware, computer viruses, dedicated denial of services attacks, credential harvesting, social engineering and other means for obtaining unauthorized access to or disrupting the operation of our networks and systems and those of our suppliers, vendors and other service providers, could have an adverse effect on our business. Cyber attacks may cause equipment failures, loss of information, including sensitive personal information of customers or employees or valuable technical and marketing information, as well as disruptions to our or our customers’ operations. Cyber attacks against companies, including Verizon, have increased in frequency, scope and potential harm in recent years. Further, the perpetrators of cyber attacks are not restricted to particular groups or persons. These attacks may be committed by company employees or external actors operating in any geography, including jurisdictions where law enforcement measures to address such attacks are unavailable or ineffective, and may even be launched by or at the behest of nation states. Cyber attacks may occur alone or in conjunction with physical attacks, especially where disruption of service is an objective of the attacker. While, to date, we have not been subject to cyber attacks which, individually or in the aggregate, have been material to Verizon's operations or financial condition, the preventive actions we take to reduce the risks associated with cyber attacks, including protection of our systems and networks, may be insufficient to repel or mitigate the effects of a major cyber attack in the future.

The inability to operate or use our networks and systems or those of our suppliers, vendors and other service providers as a result of cyber attacks, even for a limited period of time, may result in significant expenses to Verizon and/or a loss of market share to other communications providers. The costs associated with a major cyber attack on Verizon could include expensive incentives offered to existing customers and business partners to retain their business, increased expenditures on cybersecurity measures and the use of alternate resources, lost revenues from business interruption and litigation. The potential costs associated with these attacks could exceed the insurance coverage we maintain. Further, certain of Verizon’s businesses, such as those offering security solutions and infrastructure and cloud services to business customers, could be negatively affected if our ability to protect our own networks and systems is called into question as a result of a cyber attack. Moreover, our increasing presence in the IoT industry with offerings of telematics products and services, including vehicle telematics, could also increase our exposure to potential costs and expenses and reputational harm in the event of cyber attacks impacting these products or services. In addition, a compromise of security or a theft or other compromise of valuable information, such as financial data and sensitive or private personal information, could result in lawsuits and government claims, investigations or proceedings. Any of these occurrences could damage our reputation, adversely impact customer and investor confidence, and could further result in a material adverse effect on Verizon’s results of operation or financial condition.

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 upon which our business operations rely, resulting in degradation or disruption of service to our customers. While we maintain insurance coverage for some of these events, 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 the suppliers that provide us with the equipment and services that 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.

Verizon has significant debt, which could increase further if Verizon incurs additional debt in the future and does not retire existing debt.

As of December 31, 2017, Verizon had approximately $108.2 billion of outstanding unsecured indebtedness, as well as approximately $8.9 billion of unused borrowing capacity under its existing credit facility. Verizon's debt level and related debt service obligations could have negative consequences, including:

- requiring Verizon to dedicate significant cash flow from operations to the payment of principal, interest and other amounts payable on its debt and the preferred stock issued by an entity acquired in a transaction with Vodafone, which would reduce the funds Verizon has available for other purposes, such as working capital, capital expenditures and acquisitions;

- making it more difficult or expensive for Verizon to obtain any necessary future financing for working capital, capital expenditures, debt service requirements, debt refinancing, acquisitions or other purposes;

- reducing Verizon's flexibility in planning for or reacting to changes in its industry and market conditions;

- making Verizon more vulnerable in the event of a downturn in its business; and

- exposing Verizon to increased interest rate risk to the extent that its debt obligations are at variable interest rates.

Adverse changes in the credit markets could increase our borrowing costs and the availability of financing.

We require a significant amount of capital to operate and grow our business. We fund our capital needs in part through borrowings in the public and private credit markets. Adverse changes in the credit markets, including increases in interest rates, could increase our cost of borrowing and/or make it more difficult for us to obtain financing for our operations or refinance existing indebtedness. In addition, our borrowing costs can be affected by short- and long-term debt ratings assigned by independent rating agencies, which are based, in significant part, on our performance as measured by customary credit metrics. A decrease in these ratings would likely increase our cost of borrowing and/or make it more difficult for us to obtain financing. A severe disruption in the global financial markets could impact some of the financial institutions with which we do business, and such instability could also affect our access to financing.

Increases in costs for pension benefits and active and retiree healthcare benefits may reduce our profitability and increase our funding commitments.

With approximately 155,400 employees and approximately 197,000 retirees as of December 31, 2017 eligible to participate in Verizon's benefit plans, the costs of pension benefits and active and retiree healthcare benefits have a significant impact on our profitability. Our costs of maintaining these plans, and the future funding requirements for these plans, are affected by several factors, including the legislative and regulatory uncertainty regarding the potential repeal and replacement or modification of the Patient Protection and Affordable Care Act, increases in healthcare costs, decreases in investment returns on funds held by our pension and other benefit plan trusts and changes in the discount rate and mortality assumptions used to calculate pension and other postretirement expenses. If we are unable to limit future increases in the costs of our benefit plans, those costs could reduce our profitability and increase our funding commitments.

A significant portion of our workforce is represented by labor unions, and we could incur additional costs or experience work stoppages as a result of the renegotiation of our labor contracts.

As of December 31, 2017, approximately 23% of our workforce was represented by labor unions. While we have labor contracts in place with these unions, with subsequent negotiations we could incur additional costs and/or experience work stoppages, which could adversely affect our business operations. In addition, while less than 1% of the workforce of our wireless and other businesses outside of wireline is represented by unions, we cannot predict what level of success unions may have in further organizing this workforce or the potentially negative impact it would have on our operations.

We are subject to a significant amount of litigation, which could require us to pay significant damages or settlements.

We are subject to a substantial amount of litigation, including, from time to time, shareholder derivative suits, patent infringement lawsuits, antitrust class actions, wage and hour class actions, personal injury claims and lawsuits relating to our advertising, sales, billing and collection practices. In addition, our wireless business also faces personal injury and wrongful death lawsuits relating to alleged health effects of wireless phones or radio frequency transmitters. We may incur significant expenses in defending these lawsuits. In addition, we may be required to pay significant awards or settlements.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our principal properties do not lend themselves to simple description by character and location. Our total gross investment in property, plant and equipment was approximately $246 billion at December 31, 2017 and $232 billion at December 31, 2016, including the effect of retirements, but before deducting accumulated depreciation. Our gross investment in property, plant and equipment consisted of the following:

At December 31,	**2017**	2016
Network equipment	**78.3%**	78.5%
Land, buildings and building equipment	**12.1%**	12.0%
Furniture and other	**9.6%**	9.5%
	100.0%	100.0%

Our properties as a percentage of total properties are as follows:

At December 31,	**2017**	2016
Wireline	**50.7%**	51.7%
Wireless	**47.1%**	46.8%
Other	**2.2%**	1.5%
	100.0%	100.0%

Network equipment consists primarily of cable (aerial, buried, underground or undersea) and the related support structures of poles and conduit, wireless plant, switching equipment, network software, transmission equipment and related facilities. Land, buildings and building equipment consists of land and land improvements, central office buildings or any other buildings that house network equipment, and buildings that are used for administrative and other purposes. Substantially all the switching centers are located on land and in buildings we own due to their critical role in the network and high set-up relocation costs. We also maintain facilities throughout the U.S. comprised of administrative and sales offices, customer care centers, retail sales locations, garage work centers, switching centers, cell sites and data centers. Furniture and other consists of telephone equipment, furniture, data processing equipment, office equipment, motor vehicles, plant under construction and leasehold improvements.

Item 3. Legal Proceedings

In October 2013, the California Attorney General's Office notified certain Verizon companies of potential violations of California state hazardous waste statutes primarily arising from the disposal of electronic components, batteries and aerosol cans at certain California facilities. We are cooperating with this investigation and continue to review our operations relating to the management of hazardous waste. While penalties relating to the alleged violations could exceed $100,000, we do not expect that any penalties ultimately incurred will be material.

Item 4. Mine Safety Disclosures

None.

PART II

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

The principal market for trading in the common stock of Verizon is the New York Stock Exchange. As of December 31, 2017, there were 659,979 shareowners of record.

High and low stock prices, as reported on the New York Stock Exchange composite tape of transactions, and dividend data are as follows:

		Market Price		Cash Dividend
		High	**Low**	**Declared**
2017	**Fourth Quarter**	**$ 53.69**	**$ 43.97**	**$ .5900**
	Third Quarter	**50.32**	**42.80**	**.5900**
	Second Quarter	**49.55**	**44.36**	**.5775**
	First Quarter	**54.83**	**47.80**	**.5775**
2016	Fourth Quarter	$ 53.90	$ 46.01	$ .5775
	Third Quarter	56.95	51.02	.5775
	Second Quarter	55.92	49.05	.5650
	First Quarter	54.37	43.79	.5650

Stock Repurchases

On March 3, 2017, the Verizon Board of Directors authorized a new share buyback program to repurchase up to 100 million shares of the company's common stock. The new program will terminate when the aggregate number of shares purchased reaches 100 million, or at the close of business on February 28, 2020, whichever is sooner. Under the program, shares may be repurchased in privately negotiated transactions and on the open market, including through plans complying with Rule 10b5-1(c) under the Exchange Act. The timing and number of shares purchased under the program, if any, will depend on market conditions and the Company's capital allocation priorities.

During the years ended December 31, 2017 and 2016, Verizon did not repurchase any shares of Verizon's common stock under our authorized share buyback programs. At December 31, 2017, the maximum number of shares that could be purchased by or on behalf of Verizon under our share buyback program was 100 million.

For other information required by this item, see the section entitled "Stock Performance Graph" in the 2017 Verizon Annual Report to Shareowners, which is incorporated herein by reference.

Item 6. Selected Financial Data

Information required by this item is included in the 2017 Verizon Annual Report to Shareowners under the heading "Selected Financial Data", which is incorporated herein by reference.

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

Information required by this item is included in the 2017 Verizon Annual Report to Shareowners under the heading "Management's Discussion and Analysis of Financial Condition and Results of Operations", which is incorporated herein by reference.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Information required by this item is included in the 2017 Verizon Annual Report to Shareowners under the heading "Management's Discussion and Analysis of Financial Condition and Results of Operations - Market Risk", which is incorporated herein by reference.

Item 8. Financial Statements and Supplementary Data

Information required by this item is included in the consolidated financial statements and related notes of Verizon Communications Inc. and Subsidiaries in the 2017 Verizon Annual Report to Shareowners, which is incorporated herein by reference.

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

None.

Item 9A. Controls and Procedures

Our chief executive officer and chief financial officer have evaluated the effectiveness of the registrant's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934), as of the end of the period covered by this Annual Report, that ensure that information relating to the registrant which is required to be disclosed in this report is recorded, processed, summarized and reported within required time periods using the criteria for effective internal control established in Internal Control–Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission in 2013. Based on this evaluation, our chief executive officer and chief financial officer have concluded that the registrant's disclosure controls and procedures were effective as of December 31, 2017.

In the ordinary course of business, we routinely review our system of internal control over financial reporting and make changes to our systems and processes that are intended to ensure an effective internal control environment. There were no changes in the Company's internal control over financial reporting during the fourth quarter of 2017 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Management's report on internal control over financial reporting and the attestation report of Verizon's independent registered public accounting firm are included in the 2017 Verizon Annual Report to Shareowners and are incorporated herein by reference.

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

Set forth below is information with respect to our executive officers.

Name	Age	Office	Held Since
Lowell C. McAdam	63	Chairman and Chief Executive Officer	2011
Timothy M. Armstrong	47	Executive Vice President and President and CEO - Oath	2018
Matthew D. Ellis	46	Executive Vice President and Chief Financial Officer	2016
Rima Qureshi	53	Executive Vice President and Chief Strategy Officer	2017
Marc C. Reed	59	Executive Vice President and Chief Administrative Officer	2012
Craig L. Silliman	50	Executive Vice President of Public Policy and General Counsel	2015
Anthony T. Skiadas	49	Senior Vice President and Controller	2013
John G. Stratton	56	Executive Vice President and President - Global Operations	2015
Hans E. Vestberg	52	Executive Vice President, President - Global Networks and Chief Technology Officer	2017

Prior to serving as an executive officer, each of the above officers has held high-level managerial positions with the Company or one of its subsidiaries for at least five years, with the exception of Timothy Armstrong, who has been with the Company since 2015, Matthew Ellis, who has been with the Company since 2013, Rima Qureshi, who has been with the Company since 2017, and Hans Vestberg, who has been with the Company since 2017. Officers are not elected for a fixed term of office and may be removed from office at any time at the discretion of the Board of Directors.

Timothy M. Armstrong is the Executive Vice President and President and CEO - Oath. Mr. Armstrong joined the Company in 2015 in connection with the acquisition of AOL Inc. Until the appointment to his current role in January 2018, Mr. Armstrong served as Chief Executive Officer of AOL, now known as Oath. Prior to joining Verizon, Mr. Armstrong served as Chief Executive Officer of AOL Inc. from 2009 to 2015.

Matthew D. Ellis is the Executive Vice President and Chief Financial Officer for Verizon. Mr. Ellis served as Senior Vice President and CFO of Operations - Finance from February 2015 until the appointment to his current role in November 2016 and as Senior Vice President and Treasurer from the time he joined the Company in 2013 until February 2015. Prior to joining Verizon, Mr. Ellis served in leadership positions at Tyson Foods, Inc. for 15 years, most recently as Vice President and Treasurer responsible for financing, cash management, insurance and credit.

Rima Qureshi is Executive Vice President and Chief Strategy Officer for Verizon. Ms. Qureshi joined the Company in November 2017. Prior to joining Verizon, Ms. Qureshi served as President and Chief Executive Officer of Ericsson North America from 2016 to 2017 and as Senior Vice President and Chief Strategy Officer and head of mergers and acquisitions from 2014 to 2016. Ms. Qureshi also served as Vice President of Ericsson's CDMA Mobile Systems Group, Senior Vice President of Strategic Projects, Chairman of Ericsson's Northern Europe, Russia and Central Asia Group and Chairman of Ericsson's Modem division before becoming Chief Strategy Officer.

Hans Vestberg is Executive Vice President, President - Global Networks and Chief Technology Officer for Verizon. Mr. Vestberg joined the Company in April 2017. Prior to joining Verizon, Mr. Vestberg served as President and Chief Executive Officer of Ericsson from 2010 to 2016. Mr. Vestberg also served as Chief Financial Officer of Ericsson from 2007 to 2009.

For other information required by this item, see the sections entitled "Governance — Where to find more information on governance at Verizon and — Business conduct and ethics," "Item 1: Election of Directors — Nominees for election," "Board and Committees — Board committees — Audit Committee " and "Stock Ownership — Section 16(a) Beneficial Ownership Reporting Compliance" in our definitive Proxy Statement to be filed with the Securities and Exchange Commission and delivered to shareholders in connection with our 2018 Annual Meeting of Shareholders, which are incorporated herein by reference.

Item 11. Executive Compensation

For information with respect to executive compensation, see the sections entitled "Director Compensation" and "Executive Compensation — Compensation Discussion and Analysis, — Compensation Committee Report and — Compensation Tables" in our definitive Proxy Statement to be filed with the Securities and Exchange Commission and delivered to shareholders in connection with our 2018 Annual Meeting of Shareholders, which is incorporated by reference. There were no relationships to be disclosed under paragraph (e)(4) of Item 407 of Regulation S-K.

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

For information with respect to the security ownership of the Directors and Executive Officers, see the section entitled "Security Ownership of Certain Beneficial Owners and Management" in our definitive Proxy Statement to be filed with the SEC and delivered to shareholders in connection with our 2018 Annual Meeting of Shareholders, which is incorporated herein by reference. In addition, the following table provides other equity compensation plan information:

The following table provides information as of December 31, 2017 for (i) all equity compensation plans previously approved by the Company's shareholders, and (ii) all equity compensation plans not previously approved by the Company's shareholders. From May 9, 2009 until May 4, 2017, the Company only issued awards under the 2009 Verizon Communications Inc. Long-Term Incentive Plan (2009 LTIP) and, after May 4, 2017, the Company only issued awards under the 2017 Verizon Communications. Inc. Long-Term Incentive Plan (2017 LTIP). Each of these plans provides for awards of stock options, restricted stock, restricted stock units, performance stock units and other equity-based hypothetical stock units to employees of Verizon and its subsidiaries. No new awards are permitted to be issued under any equity compensation plan other than the 2017 LTIP. In accordance with SEC rules, the table does not include outstanding awards that are payable solely in cash by the terms of the award, and such awards do not reduce the number of shares remaining for issuance under the 2017 LTIP.

Plan Category	**Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)**	**Weighted-average exercise price of outstanding options, warrants and rights (b)**	**Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)**
Equity compensation plans approved by security holders	12,612,515 (1)	$ — (2)	90,595,679 (3)
Equity compensation plans not approved by security holders	163,484 (4)	—	—
Total	**12,775,999**	**$ —**	**90,595,679**

(1) This amount includes: 12,608,707 shares of common stock subject to outstanding restricted stock units and performance stock units, and 3,808 shares subject to outstanding deferred stock units, in each case including dividend equivalents accrued on such awards through December 31, 2017. This does not include performance stock units, deferred stock units and deferred share equivalents payable solely in cash.

(2) Verizon's outstanding restricted stock units, performance stock units and deferred stock units do not have exercise prices associated with the settlement of these awards.

(3) This number reflects the number of shares of common stock that remained available for future issuance under the 2017 LTIP.

(4) This number reflects shares subject to deferred stock units credited to the Verizon Income Deferral Plan, which were awarded in 2002 under the Verizon Communications Broad-Based Incentive Plan. No new awards are permitted to be issued under this plan.

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

For information with respect to certain relationships and related transactions and Director independence, see the sections entitled "Governance — Related person transactions" and "Item 1: Election of Directors — Independence" in our definitive Proxy Statement to be filed with the Securities and Exchange Commission and delivered to shareholders in connection with our 2018 Annual Meeting of Shareholders, which are incorporated by reference.

Item 14. Principal Accounting Fees and Services

For information with respect to principal accounting fees and services, see the section entitled "Audit Matters — Item 2: Ratification of Appointment of Independent Registered Public Accounting Firm" in our definitive Proxy Statement to be filed with the Securities and Exchange Commission and delivered to shareholders in connection with our 2018 Annual Meeting of Shareholders, which are incorporated by reference.

PART IV

Item 15. Exhibits, Financial Statement Schedules

(a) Documents filed as part of this report:

* Incorporated herein by reference to the appropriate portions of the registrant's Annual Report to Shareowners for the fiscal year ended December 31, 2017. (See Part II.)

Exhibits identified in parentheses below, on file with the SEC, are incorporated herein by reference as exhibits hereto. Unless otherwise indicated, all exhibits so incorporated are from File No. 1-8606.

Exhibit Number	Description
3a	Restated Certificate of Incorporation of Verizon Communications Inc. (Verizon) (filed as Exhibit 3a to Form 10-Q for the period ended June 30, 2014 and incorporated herein by reference).
3b	Bylaws of Verizon, as amended and restated, effective as of November 3, 2016 (filed as Exhibit 3b to Form 8-K filed on November 4, 2016 and incorporated herein by reference).
4a	Indenture between Verizon, both individually and as successor in interest to Verizon Global Funding Corp., and U.S. Bank National Association, as successor trustee to Wachovia Bank, National Association, formerly known as First Union National Bank, as Trustee, dated as of December 1, 2000 (incorporated by reference to Verizon Global Funding Corp.'s Registration Statement on Form S-4, Registration No. 333-64792, Exhibit 4.1).
4b	First Supplemental Indenture between Verizon, both individually and as successor in interest to Verizon Global Funding Corp., and U.S. Bank National Association, as successor trustee to Wachovia Bank, National Association, formerly known as First Union National Bank, as Trustee, dated as of May 15, 2001 (incorporated by reference to Verizon Global Funding Corp.'s Registration Statement on Form S-3, Registration No. 333-67412, Exhibit 4.2).
4c	Second Supplemental Indenture between Verizon, both individually and as successor in interest to Verizon Global Funding Corp., and U.S. Bank National Association, as successor trustee to Wachovia Bank, National Association, formerly known as First Union National Bank, as Trustee, dated as of September 29, 2004 (incorporated by reference to Form 8-K filed on February 9, 2006, Exhibit 4.1).
4d	Third Supplemental Indenture between Verizon, both individually and as successor in interest to Verizon Global Funding Corp., and U.S. Bank National Association, as successor trustee to Wachovia Bank, National Association, formerly known as First Union National Bank, as Trustee, dated as of February 1, 2006 (incorporated by reference to Form 8-K filed on February 9, 2006, Exhibit 4.2).
4e	Fourth Supplemental Indenture between Verizon, both individually and as successor in interest to Verizon Global Funding Corp., and U.S. Bank National Association, as successor trustee to Wachovia Bank, National Association, formerly known as First Union National Bank, as Trustee, dated as of April 4, 2016 (incorporated by reference to Verizon Communications Inc.'s Registration Statement on Form S-4, Registration No. 333-212307, Exhibit 4.5).
	Except for Exhibits 4a – 4e above, no other instrument which defines the rights of holders of long-term debt of Verizon and its consolidated subsidiaries is filed herewith pursuant to Regulation S-K, Item 601(b)(4)(iii)(A). Pursuant to this regulation, Verizon hereby agrees to furnish a copy of any such instrument to the SEC upon request.
10a	NYNEX Directors' Charitable Award Program (filed as Exhibit 10i to Form 10-K for the year ended December 31, 2000 and incorporated herein by reference).**
10b	2009 Verizon Long-Term Incentive Plan, As Amended and Restated (incorporated by reference to Appendix D of the Registrant's Proxy Statement included in Schedule 14A filed on March 18, 2013).**
10b(i)	Performance Stock Unit Agreement 2015-2017 Award Cycle (filed as Exhibit 10a to Form 10-Q for the period ended March 31, 2015 and incorporated herein by reference).**
10b(ii)	Restricted Stock Unit Agreement 2015-2017 Award Cycle (filed as Exhibit 10b to Form 10-Q for the period ended March 31, 2015 and incorporated herein by reference).**
10b(iii)	Performance Stock Unit Agreement 2016-2018 Award Cycle (filed as Exhibit 10a to Form 10-Q for the period ended March 31, 2016 and incorporated herein by reference).**
10b(iv)	Restricted Stock Unit Agreement 2016-2018 Award Cycle (filed as Exhibit 10b to Form 10-Q for the period ended March 31, 2016 and incorporated herein by reference).**
10b(v)	Form of 2017 Performance Stock Unit Agreement pursuant to the 2009 Verizon Communications Inc. Long-Term Incentive Plan. (filed as Exhibit 10a to Form 10-Q for the period ended March 31, 2017 and incorporated herein by reference).**
10b(vi)	Form of 2017 Restricted Stock Unit Agreement pursuant to the 2009 Verizon Communications Inc. Long-Term Incentive Plan (filed as Exhibit 10b to Form 10-Q for the period ended March 31, 2017 and incorporated herein by reference).**
10b(vii)	2017 Special Performance Stock Unit Agreement pursuant to the 2009 Verizon Communications Inc. Long-Term Incentive Plan for J. Stratton (filed as Exhibit 10c to Form 10-Q for the period ended March 31, 2017 and incorporated herein by reference).**
10c	2017 Verizon Communications Inc. Long-Term Incentive Plan (incorporated by reference to Appendix B of the Registrant's Proxy Statement included in Schedule 14A filed on March 20, 2017).**
10c(i)	Form of 2017 Performance Stock Unit Agreement pursuant to the 2017 Verizon Communications Inc. Long-Term Incentive Plan. (filed as Exhibit 10a to Form 10-Q for the period ended June 30, 2017 and incorporated herein by reference).**

	10c(ii)	Form of 2017 Restricted Stock Unit Agreement pursuant to the 2017 Verizon Communications Inc. Long-Term Incentive Plan (filed as Exhibit 10b to Form 10-Q for the period ended June 30, 2017 and incorporated herein by reference).**
	10c(iii)	2017 Special Restricted Stock Unit Agreement pursuant to the 2017 Verizon Communications Inc. Long-Term Incentive Plan (filed as Exhibit 10c to Form 10-Q for the period ended June 30, 2017 and incorporated herein by reference).**
	10c(iv)	Form of 2017 Restricted Stock Unit Agreement (cash-settled) pursuant to the 2017 Verizon Communications Inc. Long-Term Incentive Plan, filed herewith.
10d	Verizon Short-Term Incentive Plan, As Amended and Restated (incorporated by reference to Appendix C of the Registrant's Proxy Statement included in Schedule 14A filed on March 23, 2009).**	
10e	Verizon Executive Deferral Plan, filed herewith.**	
10f	Verizon Income Deferral Plan (filed as Exhibit 10f to Form 10-Q for the period ended June 30, 2002 and incorporated herein by reference).**	
	10f(i)	Description of Amendment to Plan (filed as Exhibit 10o(i) to Form 10-K for the year ended December 31, 2004 and incorporated herein by reference).**
10g	Verizon Excess Pension Plan (filed as Exhibit 10p to Form 10-K for the year ended December 31, 2004 and incorporated herein by reference).**	
	10g(i)	Description of Amendment to Plan (filed as Exhibit 10p(i) to Form 10-K for the year ended December 31, 2004 and incorporated herein by reference).**
10h	GTE's Executive Salary Deferral Plan, as amended (filed as Exhibit 10.10 to GTE's Form 10-K for the year ended December 31, 1998, File No. 1-2755 and incorporated herein by reference).**	
10i	Bell Atlantic Senior Management Long-Term Disability and Survivor Protection Plan, as amended (filed as Exhibit 10h to Form SE filed on March 27, 1986 and Exhibit 10b(ii) to Form 10-K for the year ended December 31, 1997 and incorporated herein by reference).**	
10j	fGTE Executive Retiree Life Insurance Plan (filed as Exhibit 10q to Form 10-K for the year ended December 31, 2010 and incorporated herein by reference).**	
10k	Verizon Executive Life Insurance Plan, As Amended and Restated September 2009 (filed as Exhibit 10s to Form 10-K for the year ended December 31, 2010 and incorporated herein by reference).**	
10l	Form of Aircraft Time Sharing Agreement, filed herewith.**	
10m	NYNEX Deferred Compensation Plan for Non-Employee Directors (filed as Exhibit 10iii 5a to NYNEX's Quarterly Report on Form 10-Q for the period ended June 30, 1996, File No. 1-8608 and incorporated herein by reference).**	
10n	Verizon Senior Manager Severance Plan (filed as Exhibit 10d to Form 10-Q for the period ended March 31, 2010 and incorporated herein by reference).**	
12	Computation of Ratio of Earnings to Fixed Charges filed herewith.	
13	Portions of Verizon's Annual Report to Shareowners for the fiscal year ended December 31, 2017, filed herewith. Only the information incorporated by reference into this Form 10-K is included in the exhibit.	
21	List of principal subsidiaries of Verizon, filed herewith.	
23	Consent of Ernst & Young LLP, filed herewith.	
24	Powers of Attorney, filed herewith.	
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, filed herewith.	
31.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, filed herewith.	
32.1	Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, filed herewith.	

32.2	Certification of Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, filed herewith.
101.INS	XBRL Instance Document.
101.SCH	XBRL Taxonomy Extension Schema Document.
101.PRE	XBRL Taxonomy Presentation Linkbase Document.
101.CAL	XBRL Taxonomy Calculation Linkbase Document.
101.LAB	XBRL Taxonomy Label Linkbase Document.
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.
**	Indicates management contract or compensatory plan or arrangement.

Schedule II - Valuation and Qualifying Accounts

Verizon Communications Inc. and Subsidiaries

For the Years Ended December 31, 2017, 2016 and 2015

(dollars in millions)

Description	Balance at Beginning of Period	Additions: Charged to Expenses	Additions: Charged to Other Accounts Note (a)	Deductions Note (b)	Balance at End of Period (c)
Allowance for Uncollectible Accounts Receivable:					
Year 2017	**$ 1,146**	**$ 1,167**	**$ 205**	**$ 1,319**	**$ 1,199**
Year 2016	1,037	1,420	150	1,461	1,146
Year 2015	739	1,610	146	1,458	1,037

Description	Balance at Beginning of Period	Additions: Charged to Expenses	Additions: Charged to Other Accounts Note (d)	Deductions Note (e)	Balance at End of Period
Valuation Allowance for Deferred Tax Assets:					
Year 2017	**$ 2,473**	**$ 765**	**$ 273**	**$ 218**	**$ 3,293**
Year 2016	3,414	146	47	1,134	2,473
Year 2015	1,841	237	1,701	365	3,414

(a) Allowance for Uncollectible Accounts Receivable primarily includes amounts previously written off which were credited directly to this account when recovered.

(b) Amounts written off as uncollectible or transferred to other accounts or utilized.

(c) Allowance for Uncollectible Accounts Receivable includes approximately $260 million, $301 million and $155 million at December 31, 2017, 2016, and 2015, respectively, related to long-term device payment plan receivables.

(d) Valuation Allowance for Deferred Tax Assets includes an increase to the valuation allowance as a result of the acquisition of AOL in 2015 and amounts charged to equity and reclassifications from other balance sheet accounts.

(e) Reductions to valuation allowances related to deferred tax assets.

Signatures

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

VERIZON COMMUNICATIONS INC.

By:	/s/ Anthony T. Skiadas	Date: February 23, 2018
	Anthony T. Skiadas Senior Vice President and Controller	

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

Principal Executive Officer:

/s/ Lowell C. McAdam Lowell C. McAdam	Chairman and Chief Executive Officer	February 23, 2018

Principal Financial Officer:

/s/ Matthew D. Ellis Matthew D. Ellis	Executive Vice President and Chief Financial Officer	February 23, 2018

Principal Accounting Officer:

/s/ Anthony T. Skiadas Anthony T. Skiadas	Senior Vice President and Controller	February 23, 2018

/s/ Lowell C. McAdam Lowell C. McAdam	Director	February 23, 2018
* Shellye L. Archambeau	Director	February 23, 2018
* Mark T. Bertolini	Director	February 23, 2018
* Richard L. Carrión	Director	February 23, 2018
* Melanie L. Healey	Director	February 23, 2018
* M. Frances Keeth	Director	February 23, 2018
* Karl-Ludwig Kley	Director	February 23, 2018
* Clarence Otis, Jr.	Director	February 23, 2018
* Rodney E. Slater	Director	February 23, 2018
* Kathryn A. Tesija	Director	February 23, 2018
* Gregory D. Wasson	Director	February 23, 2018
* Gregory G. Weaver	Director	February 23, 2018

* By: /s/ Anthony T. Skiadas
Anthony T. Skiadas
(as attorney-in-fact)

VERIZON COMMUNICATIONS INC. LONG-TERM INCENTIVE PLAN
2017 RESTRICTED STOCK UNIT AGREEMENT

AGREEMENT between Verizon Communications Inc. ("Verizon" or the "Company") and you (the "Participant") and your heirs and beneficiaries.

1. Purpose of Agreement. The purpose of this Agreement is to provide a grant of restricted stock units ("RSUs") to the Participant.

2. Agreement. This Agreement is entered into pursuant to the 2017 Verizon Communications Inc. Long- Term Incentive Plan (the "Plan"), and evidences the grant of a restricted stock unit award in the form of RSUs pursuant to the Plan. In consideration of the benefits described in this Agreement, which Participant acknowledges are good, valuable and sufficient consideration, the Participant agrees to comply with the terms and conditions of this Agreement, including the Participant's obligations and restrictions set forth in Exhibit A to this Agreement and the Participant's non-competition, non- solicitation, confidentiality and other obligations and restrictions set forth in Exhibit B to this Agreement, both of which are incorporated into and are a part of the Agreement. The RSUs and this Agreement are subject to the terms and provisions of the Plan. By executing this Agreement, the Participant agrees to be bound by the terms and provisions of the Plan and this Agreement, including but not limited to the Participant's obligations and restrictions set forth in Exhibits A and B to this Agreement. In addition, the Participant agrees to be bound by the actions of the Human Resources Committee of Verizon's Board of Directors or any successor thereto (the "Committee"), and any designee of the Committee (to the extent that such actions are exercised in accordance with the terms of the Plan and this Agreement). If there is a conflict between the terms of the Plan and the terms of this Agreement, the terms of this Agreement shall control.

3. Contingency. The grant of RSUs is contingent on the Participant's timely acceptance of this Agreement and satisfaction of the other conditions contained in it. Acceptance shall be through execution of the Agreement as set forth in paragraph 21. If the Participant does not accept this Agreement by the close of business on January 5, 2018, the Participant shall not be entitled to this grant of RSUs regardless of the extent to which the requirements in paragraph 5 ("Vesting") are satisfied. In addition, to the extent a Participant is on a Company approved leave of absence, including but not limited to short-term disability leave, he or she will not be entitled to this grant of RSUs until such time as he or she returns to active employment with Verizon or a Related Company (as defined in paragraph 13) and accepts this Agreement within the time period established by the Company.

4. Number of Units. The Participant is granted the number of RSUs as specified in the Participant's account under the 2017 RSU grant, administered by Fidelity Investments or any successor thereto ("Fidelity"). A RSU is a hypothetical share of Verizon's common stock. The value of a RSU on any given date shall be equal to the closing price of Verizon's common stock on the New York Stock Exchange ("NYSE") as of such date. A Dividend Equivalent Unit ("DEU") or fraction thereof shall be added to each RSU each time that a dividend is paid on Verizon's common stock. The amount of each DEU shall be equal to the corresponding dividend paid on a share of Verizon's common stock. The DEU shall be converted into RSUs or fractions thereof based upon the closing price of Verizon's common stock traded on the NYSE on the dividend payment date of each declared dividend on Verizon's common stock, and such RSUs or fractions thereof shall be added to the Participant's RSU balance. To the extent that Fidelity or the Company makes an error, including but not limited to an administrative error with respect to the number or value of the RSUs granted to the Participant under this Agreement, the DEUs credited to the Participant's account or the amount of the final award payment, the Company or Fidelity specifically reserves the right to correct such error at any time and the Participant agrees that he or she shall be legally bound by any corrective action taken by the Company or Fidelity.

5. Vesting.

(a) General. The Participant shall vest in the RSUs as follows: one-third of the total number of RSUs subject to this grant (including DEUs credited with respect to such RSUs) shall vest on November 6, 2018, one-third of the total number of RSUs subject to this grant (including DEUs credited with respect to such RSUs) shall vest on November 6, 2019, and the remaining number of RSUs subject to this grant (including DEUs credited with respect to such RSUs) shall vest on November 6, 2020. The Participant must be continuously employed by the Company or a Related Company (as defined in paragraph 13) from the date the RSUs are granted through each of the applicable vesting dates specified in this paragraph 5(a) as a condition to the vesting of the applicable installment of the RSUs, except as otherwise provided in paragraph 7 ("Early Cancellation/Accelerated Vesting of RSUs") or as otherwise provided by the Committee.

(b) Transfer. Transfer of employment from Verizon to a Related Company, from a Related Company to Verizon, or from one Related Company to another Related Company shall not constitute a separation from employment hereunder, and service with a Related Company shall be treated as service with the Company for purposes of the continuous employment requirement in paragraph 5(a).

6. Payment. All payments under this Agreement shall be made in cash. Subject to paragraph 7(a), as soon as practicable after the vesting date of the applicable installment of the RSUs specified in Section 5(a) (but in no event later than thirty (30) days after the applicable vesting date), the value of shares that vested on the applicable vesting date (minus any withholding for taxes) shall be paid to the Participant. The amount of cash that shall be paid (plus withholding for taxes) shall equal the number of RSUs that vested on the applicable vesting date times the closing price of Verizon's common stock on the NYSE as of the applicable vesting date (or if the common stock is not traded on such vesting date, last trading date that immediately precedes the applicable vesting date). If the Participant dies before any payment due hereunder is made, such payment shall be made to the Participant's beneficiary, as designated under paragraph 11. Once a payment has been made with respect to a RSU, the RSU shall be cancelled; however, all other terms of the Agreement, including but not limited to the Participant's obligations and restrictions set forth in Exhibits A and B to this Agreement, shall remain in effect.

7. Early Cancellation/Accelerated Vesting of RSUs. Notwithstanding the provisions of paragraph 5, RSUs may vest or be forfeited before the applicable vesting and payment dates set forth above as follows:

(a) Termination for Cause. If the Participant's employment by the Company or a Related Company is terminated by the Company or a Related Company for Cause (as defined below) at any time prior to the date that the RSUs are paid pursuant to paragraph 6, the RSUs (whether vested or not) shall automatically terminate and be cancelled as of the applicable termination date without payment of any consideration by the Company and without any other action by the Participant.

(b) Voluntary Separation On or Before November 6, 2020, or Other Separation Not Described in Paragraph 7(c). If the Participant (i) voluntarily separates from employment on or before November 6, 2020 for any reason, or (ii) otherwise separates from employment on or before November 6, 2020 under circumstances not described in paragraph 7(c), all then-unvested RSUs shall automatically terminate and be cancelled as of the applicable termination date without payment of any consideration by the Company and without any other action by the Participant.

(c) Involuntary Termination Without Cause On or Before November 6, 2020, Termination Due to Death or Disability On or Before November 6, 2020.

(1) This paragraph 7(c) shall apply if the Participant separates from employment by reason of an involuntary termination without Cause (as determined by the Executive Vice President and Chief Administrative Officer of Verizon (or his or her designee)), death, or Disability (as defined below) on or before November 6, 2020.

(2) If the Participant separates from employment on or before November 6, 2020 under circumstances described in paragraph 7(c)(1), the Participant's then-unvested RSUs shall vest (without prorating the award) without regard to the continuous employment requirement set forth in paragraph 5(a), provided that the Participant has not and does not commit a breach of any of the Participant's obligations and restrictions set forth in Exhibits A and B to this Agreement and provided that the Participant executes, within the time prescribed by Verizon, a release satisfactory to Verizon waiving any claims he or she may have against Verizon and any Related Company (otherwise, paragraph 7(b) shall apply).

(3) Any RSUs that vest pursuant to paragraph 7(c)(2) shall be payable as soon as practicable after the vesting date of the applicable installment of the RSUs specified in Section 5(a) that would have applied had such RSUs not vested earlier under paragraph 7(c)(2) (but in no event later than two and one-half months after the applicable vesting date).

(4) Defined Terms. For purposes of this Agreement, the following definitions shall apply:

(i) "Cause" means (i) incompetence or negligence in the discharge of, or inattention to or neglect of or failure to perform, the duties and responsibilities assigned to the Participant; fraud, misappropriation or embezzlement; or a material breach of the Verizon Code of Conduct (as in effect at the relevant time) or any of the Participant's obligations and restrictions set forth in Exhibits A and B to this Agreement, all as determined by the Executive Vice President and Chief Administrative Officer of Verizon (or his or her designee) in his or her discretion, or (ii) commission of any felony of which the Participant is finally adjudged guilty by a court of competent jurisdiction.

(ii) "Disability" shall mean the total and permanent disability of the Participant as defined by, or determined under, the Company's long-term disability benefit plan.

(d) Change in Control. If a Participant is involuntarily terminated without Cause within twelve (12) months following the occurrence of a Change in Control of Verizon (as defined in the Plan), all then- unvested RSUs shall vest and become payable (without prorating the award) and the continuous employment requirement in paragraph 5(a) shall be deemed satisfied in full as if the Participant's employment with the Company or a Related Company had continued through the applicable vesting date; provided, however, that all other terms of the Agreement, including but not limited to the Participant's obligations and restrictions set forth in Exhibits A and B to this Agreement, shall remain in effect. A Change in Control or an involuntary termination without Cause that occurs after the applicable vesting date of the RSUs set forth in paragraph 5(a) shall have no effect on whether any RSUs vest or become payable under this paragraph 7(d). If both paragraph 7(c) and this paragraph 7(d) would otherwise apply in the circumstances, this paragraph 7(d) shall control. All payments provided in this paragraph 7(d) shall be made at their regularly scheduled time as specified in paragraph 6.

(e) Vesting Schedule. Except and to the extent provided in paragraphs 7(c) and (d), nothing in this paragraph 7 shall alter the vesting schedule prescribed by paragraph 5.

8. Shareholder Rights. The Participant shall have no rights as a shareholder with respect to the RSUs. Except as provided in the Plan or in this Agreement, no adjustment shall be made for dividends or other rights for which the record date occurs while the RSUs are outstanding.

9. Amendment of Agreement. Except to the extent required by law or specifically contemplated under this Agreement, neither the Committee nor the Executive Vice President and Chief Administrative Officer of Verizon (or his or her designee) may, without the written consent of the Participant, change any term, condition or provision affecting the RSUs if the change would have a material adverse effect upon the RSUs or the Participant's rights thereto. Nothing in the preceding sentence shall preclude the Committee or the Executive Vice President and Chief Administrative Officer of Verizon (or his or her designee) from exercising administrative discretion with respect to the Plan or this Agreement, and the exercise of such discretion shall be final, conclusive and binding. This discretion includes, but is not limited to, corrections of any errors, including but not limited to any administrative errors, and determining whether the Participant has been discharged for Cause, has a Disability, has breached any of the Participant's obligations or restrictions set forth in Exhibits A and B to this Agreement or has satisfied the requirements for vesting and payment under paragraphs 5 and 7 of this Agreement.

10. Assignment. The RSUs shall not be assigned, pledged or transferred except by will or by the laws of descent and distribution.

11. Beneficiary. The Participant shall designate a beneficiary in writing and in such manner as is acceptable to the Executive Vice President and Chief Administrative Officer of Verizon (or his or her designee). Each such designation shall revoke all prior designations by the Participant with respect to the Participant's benefits under the Plan and shall be effective only when filed by the Participant with the Company during the Participant's lifetime. If the Participant fails to so designate a beneficiary, or if no such designated beneficiary survives the Participant, the Participant's beneficiary shall be the Participant's estate.

12. Other Plans and Agreements. Any payment received by the Participant pursuant to this Agreement shall not be taken into account as compensation in the determination of the Participant's benefits under any pension, savings, life insurance, severance or other benefit plan maintained by Verizon or a Related Company. The Participant acknowledges that this Agreement or any prior RSU agreement shall not entitle the Participant to any other benefits under the Plan or any other plans maintained by the Company or a Related Company.

13. Company and Related Company. For purposes of this Agreement, "Company" means Verizon Communications Inc. "Related Company" means (a) any corporation, partnership, joint venture, or other entity in which Verizon Communications Inc. holds a direct or indirect ownership or proprietary interest of 50 percent or more at any time during the term of this Agreement, or (b) any corporation, partnership, joint venture, or other entity in which Verizon Communications Inc. holds a direct or indirect ownership or other proprietary interest of less than 50 percent at any time during the term of this Agreement but which, in the discretion of the Committee, is treated as a Related Company for purposes of this Agreement.

14. Employment Status. The grant of the RSUs shall not be deemed to constitute a contract of employment for a particular term between the Company or a Related Company and the Participant, nor shall it constitute a right to remain in the employ of any such Company or Related Company.

15. Withholding. The Participant acknowledges that he or she shall be responsible for any taxes that arise in connection with this grant of RSUs, and the Company shall make such arrangements as it deems necessary for withholding of any taxes it determines are required to be withheld pursuant to any applicable law or regulation.

16. Securities Laws. The Company shall not be required to make payment with respect to any shares of common stock prior to the admission of such shares to listing on any stock exchange on which the stock may then be listed and the completion of any registration or qualification of such shares under any federal or state law or rulings or regulations of any government body that the Company, in its discretion, determines to be necessary or advisable.

17. Committee Authority. The Committee shall have complete discretion in the exercise of its rights, powers, and duties under this Agreement. Any interpretation or construction of any provision of, and the determination of any question arising under, this Agreement shall be made by the Committee in its discretion, as described in paragraph 9. The Committee and the Audit Committee may designate any individual or individuals to perform any of its functions hereunder and utilize experts to assist in carrying out their duties hereunder.

18. Successors. This Agreement shall be binding upon, and inure to the benefit of, any successor or successors of the Company and the person or entity to whom the RSUs may have been transferred by will, the laws of descent and distribution, or beneficiary designation. All terms and conditions of this Agreement imposed upon the Participant shall, unless the context clearly indicates otherwise, be deemed, in the event of the Participant's death, to refer to and be binding upon the Participant's heirs and beneficiaries.

19. Construction. In the event that any provision of this Agreement is held invalid or unenforceable, such provision shall be considered separate and apart from the remainder of this Agreement, which shall remain in full force and effect. In the event that any provision, including any of the Participant's obligations or restrictions set forth in Exhibits A and B to this Agreement, is held to be unenforceable for being unduly broad as written, such provision shall be deemed amended to narrow its application to the extent necessary to make the provision enforceable according to applicable law and shall be enforced as amended. The RSUs are intended not to be subject to any tax, interest or penalty under Section 409A of the Code, and this Agreement shall be construed and interpreted consistent with such intent.

20. Defined Terms. Except where the context clearly indicates otherwise, all capitalized terms used herein shall have the definitions ascribed to them by the Plan, and the terms of the Plan shall apply where appropriate.

21. Execution of Agreement. The Participant shall indicate his or her consent and acknowledgment to the terms of this Agreement (including the Participant's obligations and restrictions set forth in Exhibits A and B to this Agreement) and the Plan by executing this Agreement pursuant to the instructions provided and otherwise shall comply with the requirements of paragraph 3. In addition, by consenting to the terms of this Agreement and the Participant's obligations and restrictions set forth in Exhibits A and B to this Agreement, the Participant expressly agrees and acknowledges that Fidelity may deliver all documents, statements and notices associated with the Plan and this Agreement to the Participant in electronic form. The Participant and Verizon hereby expressly agree that the use of electronic media to indicate confirmation, consent, signature, acceptance, agreement and delivery shall be legally valid and have the same legal force and effect as if the Participant and Verizon executed this Agreement (including the Participant's obligations and restrictions set forth in Exhibits A and B to this Agreement) in paper form.

22. Confidentiality. Except to the extent otherwise required by law, the Participant shall not disclose, in whole or in part, any of the terms of this Agreement. This paragraph 22 does not prevent the Participant from disclosing the terms of this Agreement to the Participant's spouse or beneficiary or to the Participant's legal, tax, or financial adviser, provided that the Participant take all reasonable measures to assure that the individual to whom disclosure is made does not disclose the terms of this Agreement to a third party except as otherwise required by law.

23. Applicable Law. Except as expressly provided in Exhibit B, the validity, construction, interpretation and effect of this Agreement shall be governed by and construed in accordance with the laws of the State of Delaware, without giving effect to the conflicts of laws provisions thereof.

24. Notice. Any notice to the Company provided for in this Agreement shall be addressed to the Company in care of the Executive Vice President and Chief Administrative Officer of Verizon at 1095 Avenue of the Americas, New York, New York 10036 and any notice to the Participant shall be addressed to the Participant at the current address shown on the payroll of the Company, or to such other address as the Participant may designate to the Company in writing. Any notice shall be delivered by hand, sent by telecopy, sent by overnight carrier, or enclosed in a properly sealed envelope as stated above, registered and deposited, postage prepaid, in a post office regularly maintained by the United States Postal Service.

25. Dispute Resolution.

(a) General. Except as otherwise provided in paragraph 26 below, all disputes arising under or related to the Plan or this Agreement and all claims in which a Participant seeks damages or other relief that relate in any way to RSUs or other benefits of the Plan are subject to the dispute resolution procedure described below in this paragraph 25.

(i) For purposes of this Agreement, the term "Units Award Dispute" shall mean any claim against the Company or a Related Company, other than Units Damages Disputes described in paragraph (a)(ii) below, regarding (A) the interpretation of the Plan or this Agreement, (B) any of the terms or conditions of the RSUs issued under this Agreement, or (C) allegations of entitlement to RSUs or additional RSUs, or any other benefits, under the Plan or this Agreement; provided, however, that any dispute relating to the Participant's obligations and restrictions set forth in Exhibits A and B to this Agreement or to the forfeiture of an award as a result of a breach of any of the Participant's obligations and restrictions set forth in Exhibits A and B to this Agreement shall not be subject to the dispute resolution procedures provided for in this paragraph 25.

(ii) For purposes of this Agreement, the term "Units Damages Dispute" shall mean any claims between the Participant and the Company or a Related Company (or against the past or present directors, officers, employees, representatives, or agents of the Company or a Related Company, whether acting in their capacity as such or otherwise), that are related in any way to the Participant's employment or former employment, including claims of alleged employment discrimination, wrongful termination, or violations of Title VII of the Civil Rights Act of 1964, the Americans with Disabilities Act, the Age Discrimination in Employment Act, 42 U.S.C. § 1981, the Fair Labor Standards Act, the Family Medical Leave Act, the Sarbanes-Oxley Act, or any other U.S. federal, state or local law, statute, regulation, or ordinance relating to employment or any common law theories of recovery relating to employment, such as breach of contract, tort, or public policy claims, in which the damages or other relief sought relate in any way to RSUs or other benefits of the Plan or this Agreement.

(b) Internal Dispute Resolution Procedure. All Units Award Disputes, and all Units Damages Dispute alleging breach of contract, tort, or public policy claims with respect to the Plan or this Agreement (collectively, "Plan Disputes"), shall be referred in the first instance to the Verizon Employee Benefits Committee ("EB Committee") for resolution internally within Verizon. Except where otherwise prohibited by law, all Plan Disputes must be filed in writing with the EB Committee no later than one year from the date that the dispute accrues. Consistent with paragraph 25(c)(i) of this Agreement, all decisions relating to the enforceability of the limitations period contained herein shall be made by the arbitrator. To the fullest extent permitted by law, the EB Committee shall have full power, discretion, and authority to interpret the Plan and this Agreement and to decide all Plan Disputes brought under this Plan and Agreement. Determinations made by the EB Committee shall be final, conclusive and binding, subject only to review by arbitration pursuant to paragraph (c) below under the arbitrary and capricious standard of review. A Participant's failure to refer a Plan Dispute to the EB Committee for resolution will in no way impair the Company's right to compel arbitration or the enforceability of the waiver in paragraph 25(c)(ii).

(c) Arbitration. All appeals from determinations by the EB Committee as described in paragraph (b) above, and any Units Damages Dispute, shall be fully and finally settled by arbitration administered by the American Arbitration Association ("AAA") on an individual basis (and not on a collective or class action basis) before a single arbitrator pursuant to the AAA's Commercial Arbitration Rules in effect at the time any such arbitration is initiated. Any such arbitration must be initiated in writing pursuant to the aforesaid rules of the AAA no later than one year from the date that the claim accrues, except where a longer limitations period is required by applicable law. However, a Participant's failure to initiate arbitration within one year will in no way impair the Company's right, exercised at its discretion, to compel arbitration or the enforceability of the waiver in paragraph 25(c)(ii). Decisions about the applicability of the limitations period contained herein shall be made by the arbitrator. A copy of the AAA's Commercial Arbitration Rules may be obtained from Human Resources. The Participant agrees that the arbitration shall be held at the office of the AAA nearest the place of the Participant's most recent employment by the Company or a Related Company, unless the parties agree in writing to a different location. All claims by the Company or a Related Company against the Participant, except for breaches of any of the Participant's obligations and restrictions set forth in Exhibits A and B to this Agreement, may also be raised in such arbitration proceedings.

(i) The arbitrator shall have the authority to determine whether any dispute submitted for arbitration hereunder is arbitrable. The arbitrator shall decide all issues submitted for arbitration according to the terms of the Plan, this Agreement (except for breaches of any of the Participant's obligations and restrictions set forth in Exhibits A and B to this Agreement), existing Company policy, and applicable substantive Delaware State and U.S. federal law and shall have the authority to award any remedy or relief permitted by such laws. The final decision of the EB Committee with respect to a Plan Dispute shall be upheld unless such decision was arbitrary or capricious. The decision of the arbitrator shall be final, conclusive, not subject to appeal, and binding and enforceable in any applicable court.

(ii) The Participant understands and agrees that, pursuant to this Agreement, both the Participant and the Company or a Related Company waive any right to sue each other in a court of law or equity, to have a trial by jury, or to resolve disputes on a collective, or class, basis (except for breaches of any of the Participant's obligations and restrictions set forth in Exhibits A and B to this Agreement), and that the sole forum available for the resolution of Units Award Disputes and Units Damages Disputes is arbitration as provided in this paragraph 25. If an arbitrator or court finds that the arbitration provisions of this Agreement are not enforceable, both Participant and the Company or a Related Company understand and agree to waive their right to trial by jury of any Units Award Dispute or Units Damages Dispute. This dispute resolution procedure shall not prevent either the Participant or the Company or a Related Company from commencing an action in any court of competent jurisdiction for the purpose of obtaining injunctive relief to prevent irreparable harm pending and in aid of arbitration hereunder; in such event, both the Participant and the Company or a Related Company agree that the party who commences the action may proceed without necessity of posting a bond.

(iii) In consideration of the Participant's agreement in paragraph (ii) above, the Company or a Related Company will pay all filing, administrative and arbitrator's fees incurred in connection with the arbitration proceedings. If the AAA requires the Participant to pay the initial filing fee, the Company or a Related Company will reimburse the Participant for that fee. All other fees incurred in connection with the arbitration proceedings, including but not limited to each party's attorney's fees, will be the responsibility of such party.

(iv) The parties intend that the arbitration procedure to which they hereby agree shall be the exclusive means for resolving all Units Award Disputes and Units Damages Disputes (subject to the mandatory EB Committee procedure provided for in paragraph 25(b) above). Their agreement in this regard shall be interpreted as broadly and inclusively as reason permits to realize that intent.

(v) The Federal Arbitration Act ("FAA") shall govern the enforceability of this paragraph 25. If for any reason the FAA is held not to apply, or if application of the FAA requires consideration of state law in any dispute arising under this Agreement or subject to this dispute resolution provision, the laws of the State of Delaware shall apply without giving effect to the conflicts of laws provisions thereof.

(vi) To the extent an arbitrator determines that the Participant was not terminated for Cause and is entitled to the RSUs or any other benefits under the Plan pursuant to the provisions applicable to an involuntary termination without Cause, the Participant's obligation to execute a release satisfactory to Verizon as provided under paragraph 7(c)(2) shall remain applicable in order to receive the benefit of any RSUs pursuant to this Agreement.

26. Additional Remedies. Notwithstanding the dispute resolution procedures, including arbitration, of paragraph 25 of this Agreement, and in addition to any other rights or remedies, whether legal, equitable, or otherwise, that each of the parties to this Agreement may have (including the right of the Company to terminate the Participant for Cause or to involuntarily terminate the Participant without Cause), the Participant acknowledges that—

(a) The Participant's obligations and restrictions set forth in Exhibits A and B to this Agreement are essential to the continued goodwill and profitability of the Company and any Related Company;

(b) The Participant has broad-based skills that will serve as the basis for other employment opportunities that are not prohibited by the Participant's obligations and restrictions set forth in Exhibits A and B to this Agreement;

(c) When the Participant's employment with the Company or any Related Company terminates, the Participant shall be able to earn a livelihood without violating any of the Participant's obligations and restrictions set forth in Exhibits A and B to this Agreement;

(d) Irreparable damage to the Company or any Related Company shall result in the event that the Participant's obligations and restrictions set forth in Exhibits A and B to this Agreement are not specifically enforced and that monetary damages will not adequately protect the Company and any Related Company from a breach of any of such Participant obligations and restrictions;

(e) If any dispute arises concerning the violation or anticipated or threatened violation by the Participant of any of the Participant's obligations and restrictions set forth in Exhibits A or B, an injunction may be issued restraining such violation pending the determination of such controversy, and no bond or other security shall be required in connection therewith;

(f) The Participant's obligations and restrictions set forth in Exhibits A and B to this Agreement shall continue to apply after any expiration, termination, or cancellation of this Agreement;

(g) The Participant's breach of any of the Participant's obligations and restrictions set forth in Exhibits A and B to this Agreement, including, for example, any breach of the Participant's non- competition, non-solicitation or confidentiality restrictions, shall result in the Participant's immediate forfeiture of all rights and benefits, including all RSUs and DEUs, under this Agreement; and

(h) All disputes relating to the Participant's obligations and restrictions set forth in Exhibits A and B to this Agreement, including their interpretation and enforceability and any damages (including but not limited to damages resulting in the forfeiture of an award or benefits under this Agreement) that may result from the breach of such Participant obligations and restrictions shall not be subject to the dispute resolution procedures, including arbitration, of paragraph 25 of this Agreement, but shall instead be determined in a court of competent jurisdiction.

Exhibit A – Participant’s Obligations

As part of the Agreement to which this Exhibit A is attached, you, the Participant, agree to the following obligations:

1. Effect of a Material Restatement of Financial Results; Recoupment; Company Policies Regarding Securities Transactions.

(a) General. Notwithstanding anything in this Agreement to the contrary, you agree that, with respect to all RSUs granted to you on or after January 1, 2007 and all short-term incentive awards made to you on or after January 1, 2007, to the extent the Company or any Related Company is required to materially restate any financial results based upon your willful misconduct or gross negligence while employed by the Company or any Related Company (and where such restatement would have resulted in a lower payment being made to you), you will be required to repay all previously paid or deferred (i) RSUs and (ii) short-term incentive awards that were provided to you during the performance periods that are the subject of the restated financial results, plus a reasonable rate of interest. For purposes of this paragraph, “willful misconduct” and “gross negligence” shall be as determined by the Committee. The Audit Committee of the Verizon Board of Directors shall determine whether a material restatement of financial results has occurred. If you do not repay the entire amount required under this paragraph, the Company may, to the extent permitted by applicable law, offset your obligation to repay against any source of income available to it, including but not limited to any money you may have in your nonqualified deferral accounts.

(b) Requirements of Recoupment Policy or Applicable Law. The repayment rights contained in paragraph 1(a) of Exhibit A shall be in addition to, and shall not limit, any other rights or remedies that the Company may have under law or in equity, including, without limitation, (i) any right that the Company may have under any Company recoupment policy that may apply to you, or (ii) any right or obligation that the Company may have regarding the clawback of “incentive-based compensation” under Section 10D of the Securities Exchange Act of 1934, as amended (as determined by the applicable rules and regulations promulgated thereunder from time to time by the U.S. Securities and Exchange Commission) or under any other applicable law. By accepting this award of RSUs, you agree and consent to the Company’s application, implementation and enforcement of any such Company recoupment policy (as it may be in effect from time to time) that may apply to you and any provision of applicable law relating to cancellation, rescission, payback or recoupment of compensation and expressly agree that the Company may take such actions as are permitted under any such policy (as applicable to you) or applicable law, such as the cancellation of RSUs and repayment of amounts previously paid or deferred with respect to any previously granted RSUs or short-term incentive awards, without further consent or action being required by you.

(c) Company Policies Regarding Securities Transactions. By accepting this award of RSUs, you agree to comply with all Company policies regarding trading in securities or derivative securities (including, without limitation, the Company’s policies prohibiting trading on material inside information regarding the Company or any business with which the Company does business, the Company’s policies prohibiting engaging in financial transactions that would allow you to benefit from a devaluation of the Company’s securities, and any additional policy that the Company may adopt prohibiting you from hedging your economic exposure to the Company’s securities), as such policies are in effect from time to time and for as long as such policies are applicable to you.

2. Definitions. Except where clearly provided to the contrary or as otherwise defined in this Exhibit A, all capitalized terms used in this Exhibit A shall have the definitions given to those terms in the Agreement to which this Exhibit A is attached.

3. Agreement to Participant’s Obligations. You shall indicate your agreement to the obligations and restrictions set forth in this Exhibit A in accordance with the instructions provided in the Agreement, and your acceptance of the Agreement shall include your acceptance of such obligations and restrictions. As stated in paragraph 21 of the Agreement, you and Verizon hereby expressly agree that the use of electronic media to indicate confirmation, consent, signature, acceptance, agreement and delivery shall be legally valid and have the same legal force and effect as if you and Verizon executed this Exhibit A in paper form.

Exhibit B – Non-Competition, Non-Solicitation, Confidentiality and Other Obligations

As part of the Agreement to which this Exhibit B is attached, you (the Participant) and the Company or any Related Company which employs or employed you, agree to the following obligations:

1. Non-competition.

(a) Prohibited Conduct. During the period of your employment with the Company or any Related Company, and for a period ending twelve (12) months following a termination of your employment for any reason with the Company or any Related Company, you shall not, without the prior written consent of the Executive Vice President and Chief Administrative Officer of Verizon (or his or her designee):

(1) personally engage in Competitive Activities (as defined below); or

(2) work for, own, manage, operate, control, or participate in the ownership, management, operation, or control of, or provide consulting or advisory services to, any person, partnership, firm, corporation, institution or other entity engaged in Competitive Activities, or any company or person affiliated with such person, partnership, firm, corporation, institution or other entity engaged in Competitive Activities; provided that your purchase or holding, for investment purposes, of securities of a publicly traded company shall not constitute "ownership" or "participation in the ownership" for purposes of this paragraph so long as your equity interest in any such company is less than a controlling interest;

provided that this paragraph (a) shall not prohibit you from (i) being employed by, or providing services to, a consulting firm, provided that you do not personally engage in Competitive Activities or provide consulting or advisory services to any person, partnership, firm, corporation, institution or other entity engaged in Competitive Activities, or any person or entity affiliated with such person, partnership, firm, corporation, institution or other entity engaged in Competitive Activities, or (ii) engaging in the practice of law as an in-house counsel, sole practitioner or as a partner in (or as an employee of or counsel to) a corporation or law firm in accordance with applicable legal and professional standards. Exception (ii), however, does not apply to any Participant that may be engaging in Competitive Activities or providing services to any person, partnership, firm, corporation, institution or other entity engaged in Competitive Activities, wherein such engagement or services being provided are not primarily the practice of law.

(b) Competitive Activities. For purposes of the Agreement, to which this Exhibit B is attached, "Competitive Activities" means any activities relating to products or services of the same or similar type as the products or services (1) which were or are sold (or, pursuant to an existing business plan, will be sold) to paying customers of the Company or any Related Company, and (2) for which you have any direct or indirect responsibility or any involvement to plan, develop, manage, market, sell, oversee, support, implement or perform, or had any such responsibility or involvement within your most recent 24 months of employment with the Company or any Related Company. Notwithstanding the previous sentence, an activity shall not be treated as a Competitive Activity if the geographic marketing area of such same or similar products or services does not overlap with the geographic marketing area for the applicable products and services of the Company or any Related Company.

2. Interference With Business Relations. During the period of your employment with the Company or any Related Company, and for a period ending twelve (12) months following a termination of your employment for any reason with the Company or any Related Company, you shall not, without the prior written consent of the Executive Vice President and Chief Administrative Officer of Verizon (or his or her designee):

(a) recruit, induce or solicit, directly or indirectly, any employee of the Company or Related Company who was employed by the Company or any Related Company prior to or as of your termination date and whom you worked with or had contact with, or had confidential information about, while employed by the Company or any Related Company for employment or for retention as a consultant or service provider to any person or entity;

(b) hire or participate (with another person or entity) in the process of recruiting, soliciting or hiring, directly or indirectly, (other than for the Company or any Related Company) any person who is then an employee of the Company or any Related Company whom you worked with or had contact with, or had confidential information about, while employed by the Company or any Related Company, or provide, directly or indirectly, names or other information about any employees of the Company or Related Company whom you worked with or had contact with, or had confidential information about, while employed by the Company or any Related Company to any person or entity (other than to the Company or any Related Company) under circumstances that could lead to the use of any such information for purposes of recruiting, soliciting or hiring any such employee for any person or entity;

(c) interfere, or attempt to interfere, directly or indirectly, with any relationship of the Company or any Related Company with any of its employees, agents, or representatives;

(d) solicit or induce, or in any manner attempt to solicit or induce, directly or indirectly, any client, customer, or Prospect (defined below) of the Company or any Related Company (1) to cease being, or not to become, a customer of the Company or any Related Company, or (2) to divert any business of such customer or Prospect from the Company or any Related Company; or

(e) otherwise interfere with, disrupt, or attempt to interfere with or disrupt, directly or indirectly, the relationship, contractual or otherwise, between the Company or any Related Company and any of its customers, clients, Prospects, suppliers, vendors, service providers, developers, joint ventures, equity investments or partners, inventors, consultants, employees, agents, or representatives.

For purposes of this paragraph 2, “Prospect” shall mean any person or entity from whom or which any business was being solicited by Verizon or any Related Company within the most recent 12 month period of your employment.

3. Proprietary And Confidential Information. You shall at all times, including after any termination of your employment with the Company or any Related Company, preserve the confidentiality of all Proprietary Information (defined below) and trade secrets of the Company or any Related Company, and you shall not use for the benefit of yourself or any person, other than the Company or a Related Company, or disclose to any person, except and to the extent that disclosure of such information is authorized under applicable laws or regulations (e.g., “whistleblower” laws such as 18 USC 1833(b) described below), any Proprietary Information or trade secrets of the Company or any Related Company. “Proprietary Information” means any information or data related to the Company or any Related Company, including information entrusted to the Company or a Related Company by others, which has not been fully disclosed to the public by the Company or a Related Company, which is treated as confidential or otherwise protected within the Company or any Related Company or is of value to competitors, such as strategic or tactical business plans; undisclosed business, operational or financial data; ideas, processes, methods, techniques, systems, models, devices, programs, computer software, or related information; documents relating to regulatory matters or correspondence with governmental entities; information concerning any past, pending, or threatened legal dispute; pricing or cost data; the identity, reports or analyses of business prospects; business transactions (including those that are contemplated or planned); research data; personnel information or data; identities of suppliers to the Company or any Related Company or users or purchasers of the Company’s or Related Company’s products or services; the Agreement to which this Exhibit B is attached; and any other non-public information pertaining to or known by the Company or a Related Company, including confidential or non-public information of a third party that you know or should know the Company or a Related Company is obligated to protect. Section 18 USC 1833(b) provides that “An individual shall not be held criminally or civilly liable under any Federal or State trade secret law for the disclosure of a trade secret that—(A) is made—(i) in confidence to a Federal, State, or local government official, either directly or indirectly, or to an attorney; and (ii) solely for the purpose of reporting or investigating a suspected violation of law; or (B) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal.” Nothing in this Agreement is intended to conflict with 18 U.S.C. § 1833(b) or create liability for disclosures of trade secrets that are expressly allowed by 18 U.S.C. § 1833(b).

4. Return Of Company Property; Ownership of Intellectual Property Rights. You agree that on or before termination of your employment for any reason with the Company or any Related Company, you shall return to the Company all property owned by the Company or any Related Company or in which the Company or any Related Company has an interest or to which the Company or any Related Company has any obligation, including any and all files, documents, data, records and any other non-public information (whether on paper or in tapes, disks, memory devices, or other machine-readable form), office equipment, credit cards, and employee identification cards. You acknowledge that the Company (or, as applicable, a Related Company) is the rightful owner of, and you hereby do grant and assign, all right, title and interest in and to any programs; ideas, inventions and discoveries (patentable or unpatentable); works of authorship, data, information, and other copyrightable material; and trademarks that you may have originated, created or developed, or assisted or participated in originating, creating or developing, during your period of employment with the Company or a Related Company, including all intellectual property rights in or based on the foregoing, where any such origination, creation or development (a) involved any use of Company or Related Company time, information or resources, (b) was made in the exercise of any of your duties or responsibilities for or on behalf of the Company or a Related Company, or (c) was related to (i) the Company’s or a Related Company’s past, present or future business, or (ii) the Company’s or a Related Company’s actual or demonstrably anticipated research, development or procurement activities. You shall at all times, both before and after termination of your employment, cooperate with the Company (or, as applicable, any Related Company) and its representatives in executing and delivering documents requested by the Company or a Related Company, and taking any other actions, that are necessary or requested by the Company or a Related Company to assist the Company or any Related Company in patenting, copyrighting, protecting, registering, or enforcing any programs; ideas, inventions and discoveries (patentable or unpatentable); works of authorship, data, information, and other copyrightable material; trademarks; or other intellectual property rights, and to vest title thereto solely in the Company (or, as applicable, a Related Company).

5. Definitions. Except where clearly provided to the contrary or as otherwise defined in this Exhibit B, all capitalized terms used in this Exhibit B shall have the definitions given to those terms in the Agreement to which this Exhibit B is attached.

6. Agreement to Non-Competition, Non-Solicitation, Confidentiality and Other Obligations.

(a) You acknowledge that the geographic boundaries, scope of prohibited activities, and time duration of the restrictions set forth in paragraphs 1 and 2 above are reasonable in nature and are no broader than are necessary to maintain the confidential information, trade secrets and the goodwill of the Company and its Related Companies and to protect the other legitimate business interests of the Company and its Related Companies and are not unduly restrictive on you. In addition, you and the Company agree and intend that the covenants contained in paragraphs 1 and 2 shall be deemed to be a series of separate covenants and agreements, one for each and every county or political subdivision of each applicable state of the United States and each country of the world. It is the desire and intent of the parties hereto that the provisions of this Exhibit B be enforced to the fullest extent permissible under the governing laws and public policies of the State of New Jersey, and to the extent applicable, each jurisdiction in which enforcement is sought. Accordingly, if any provision in this Exhibit A or deemed to be included in this Exhibit A shall be adjudicated to be invalid or unenforceable, such provision, without any action on the part of the parties hereto, shall be deemed amended to delete or to modify (including, without limitation, a reduction in duration, geographical area or prohibited business activities) the portion adjudicated to be invalid or unenforceable, such deletion or modification to apply only with respect to the operation of such provision in the particular jurisdiction in which such adjudication is made, and such deletion or modification to be made only to the extent necessary to cause the provision as amended to be valid and enforceable.

(b) You shall indicate your agreement to the obligations and restrictions set forth in this Exhibit B in accordance with the instructions provided in the Agreement, and your acceptance of the Agreement shall include your acceptance of such obligations and restrictions. As stated in paragraph 21 of the Agreement, you and Verizon hereby expressly agree that the use of electronic media to indicate confirmation, consent, signature, acceptance, agreement and delivery shall be legally valid and have the same legal force and effect as if you and Verizon executed this Exhibit B in paper form.

7. Governing Law and Non-exclusive Forum. The parties expressly agree: (a) that, because the Plan is centrally administered in the State of New Jersey by employees of a Verizon Communications Inc. affiliate, the subject matter of this Exhibit B bears a reasonable relationship to the State of New Jersey; (b) that this Exhibit B is made under, shall be construed in accordance with, and governed in all respects by the laws of the State of New Jersey without giving effect to that jurisdiction's choice of law rules; and (c) the parties consent to the non-exclusive jurisdiction and venue of the courts of the State of New Jersey, and the federal courts of the United States of America located in the State of New Jersey, over any action, claim, controversy or proceeding arising under this Exhibit B, and irrevocably waive any objection they may now or hereafter have to the non-exclusive jurisdiction and venue of such courts.

Verizon

Executive Deferral Plan

Table of Contents

Introduction

The Verizon Executive Deferral Plan (the "Plan" or "EDP") provides an easy way for you to set aside for the future a portion of your annual base salary, as well as all or a portion of your short-term incentive award in order to defer current Federal, State and Local income taxes (where applicable) and to receive valuable matching credits and profit sharing credits from Verizon Communications Inc. and its participating subsidiaries (the "Company"). It reaches beyond the limits of a traditional 401(k) plan to provide additional wealth accumulation opportunity. For non-employee directors, it allows for the deferral of your annual cash retainer and associated meeting fees and equity compensation.

- The EDP allows you to defer a portion of your annual base salary and short-term incentive award or non-employee director annual retainer and associated meeting fees; and
- The EDP also allows you to receive a Company match on the amounts you defer up to 6% of your eligible base salary and short-term incentive award, without any limitations imposed by the Internal Revenue Code. However, non-employee members of the board of directors are not eligible for a Company match.

References to "short-term incentive award" in the Plan include short term incentive awards paid by Verizon under the Verizon Short-Term Incentive Plan and annual cash bonuses paid by Oath Inc. and its participating subsidiaries ("Oath") under the applicable Oath annual bonus program.

For years prior to 2018, certain long-term incentive awards could be deferred under the Plan by certain Eligible Participants (those deferrals were not eligible for Company match). Deferrals from long-term incentive awards are no longer permitted after 2017. Long-term incentive awards deferred prior to 2018 remain subject to the terms of the award and the applicable deferral election.

Because the EDP is an account-based plan, your benefit will equal the balance in a bookkeeping account kept for you under the Plan. In addition, the EDP offers a broad variety of hypothetical investment options and your account balance will increase or decrease depending on the performance of the investment options you choose. Therefore, you should exercise care when choosing among the hypothetical investment options available under the EDP.

The savings opportunities offered by the EDP allow you to set aside more money for your future than you could if you were able to make deferrals only under the Verizon Savings Plan for Management Employees (the "Savings Plan").

Effective as of April 11, 2014, the Verizon Wireless Executive Deferral Plan (the "Wireless EDP") was merged into the EDP. The terms of the EDP now govern amounts that were previously deferred under the Wireless EDP.

Effective as of January 1, 2018, employees of Oath (including employees of the former Yahoo business) who are Eligible Participants may participate in the Plan by making deferral elections during the annual enrollment period for 2018. Eligible Participants of the former AOL business became eligible to participate in the Plan effective January 1, 2016.

The Plan succeeds the Verizon Income Deferral Plan (the "IDP"), the Verizon Deferred Compensation Plan for Non-Employee Directors (the "Directors' Plan"), and the Verizon Wireless Executive Savings Plan (the "ESP") which were frozen as of December 31, 2004. If you were a participant in the IDP, the Directors' Plan or the ESP, vested amounts in your account in those plans as of December 31, 2004, remain in those plans and are subject to the rules that govern those plans. However, in order to comply with changes in the law that were effective January 1, 2005, amounts credited to your IDP account that were not vested as of December 31, 2004, were transferred to the EDP and are now subject to the rules that govern EDP accounts generally.

This booklet sets forth the terms of the EDP, as they are in effect on the date of this booklet. If you have any questions about your EDP benefits, please contact the Total Rewards department at 1-888-560-3669.

Plan Highlights

Nature of Plan and Benefit	Your Plan benefit is based on an account balance and will equal the vested value of that account balance when you receive payments from the Plan. The value of your account balance will increase or decrease based upon the performance of the hypothetical investment options you elect. The Plan is an unfunded, nonqualified benefit plan.
Deferrals for Active Participants	• You can defer up to 100% of the portion of your base salary that exceeds the limit that the Internal Revenue Code imposes on funded, tax-qualified plans ($275,000 in 2018) (your "eligible base salary"). • You can defer up to 100% of your short-term incentive award or directors' cash retainer and associated meeting fees ("directors' fees").Generally, deferral elections for your eligible base salary, short-term incentive award (or annual cash bonus), and directors' fees for a year must be submitted during an enrollment period in November or December of the preceding year and cannot be changed after December 31 of that preceding year (or the last business day in December if earlier than the 31st). • If you were not eligible to participate in the EDP and are promoted or hired into an eligible position, you will generally be provided a 30-day window in which to submit your salary and/or incentive deferral elections, if appropriate. A similar rule applies to newly-appointed non-employee members of the board of directors.

Company Match and Profit Sharing	• The Company will add a "Matching Credit" to your account if you defer eligible base salary and short-term incentive under the Plan and if, in the case of deferrals of short-term incentive, you are employed by the Company on the date the short-term incentive awards for the applicable year are paid to employees generally.
	    • You will receive a matching credit of $1.00 for every $1.00 of the first 6% of your eligible base salary and short-term incentive that you defer.
	    • Matching Credits for base salary deferrals are made with each applicable pay period. Matching Credits for short-term incentive deferrals are credited to your account on the date that short-term incentive awards for the applicable year are paid to employees generally.
	• The Company may, in its sole discretion, decide to make a Profit Sharing contribution ("Profit Sharing Credit") to your EDP account if you would be eligible for such a contribution under the Savings Plan.
	• All Matching Credits and Profit Sharing Credits are allocated to the Verizon Stock Fund, a hypothetical unitized investment option in which the values of units of the Verizon Stock Fund are based primarily on the price of Verizon common stock, but a small portion is invested in cash or cash equivalents and other short-term investments.
	• No Matching Credits will be allocated to the Profit Sharing Credits.
	• Non-employee members of the board of directors are not eligible for any Company Matching Credits or Profit Sharing Credits.

Account Options	• You can generally elect to have your Personal Deferral Credits treated as if they were invested in any of the hypothetical investment options that mirror the performance of the Savings Plan investment options or in a hypothetical option that provides a return that mirrors the yield on certain corporate bonds. • Company Matching Credits and Profit Sharing Credits are invested in the hypothetical Verizon Stock Fund and you may elect to diversify those amounts into other available hypothetical investment options only after certain requirements are satisfied.
Distributions from the Plan of Your Personal Deferrals	• At the time you make your deferral election, you must also elect when and how you would like to have your benefit distributed. You may elect one of the following distribution forms: – One lump sum payment; or – Annual installments (between 2 and 20 years). • Distributions can generally begin at separation from service (subject to a six-month delay for specified employees) or on a specified date either before or after your separation from service. Special rules apply to long-term incentive awards that were deferred prior to 2018 and that are paid after the year you separate from service. • If you elect to receive a lump sum or to begin receiving installments on a specified date, the earliest you can receive a distribution is 2 full years following the year in which the amount that you elected to defer is credited to your account. • If you elect to receive a lump sum or to begin receiving installments at separation from service, your distribution election is irrevocable. • If you elect to receive a distribution based on a specific date, you can change your distribution elections provided that (1) you make the election change at least 12 months prior to the originally scheduled distribution date, (2) you delay the date you would have otherwise received each distribution by at least 5 years, and (3) you do not receive your distribution sooner or over a shorter period of time.
Distributions from the Plan of Company Matching Credits and Profit Sharing Credits	• All Company Matching Credits and Profit Sharing Credits in your EDP account will be distributed in a lump sum payment following your separation from service (or six months after your separation from service if you are a specified employee).
Vesting	• Your personal deferrals under the Plan are vested immediately. • Your Company Matching Credits and Profit Sharing Credits vest at the same time you vest in the employer contributions under the Savings Plan. • Your Company Matching Credits and Profit Sharing Credits will also vest if (1) your employment is involuntarily terminated without cause, (2) you become disabled, (3) you die, or (4) there is a change in control of Verizon Communications Inc. • Any other Company credits transferred to the EDP from another plan (including Retirement Credits transferred from the IDP) will vest according to the vesting schedule in place under the other plan at the time of the transfer. Because the Wireless EDP was merged into the EDP, any Company credits originally credited under the Wireless EDP will vest according to the vesting schedule in place under the EDP (which is the same schedule as under the Wireless EDP).

* This Table is a brief summary of the terms of the EDP, which are set forth in the remainder of this booklet.

Participating in the Plan

You can participate in the Plan on either an "active" or an "inactive" basis. The principal difference between the two is that, as an "active" participant, you can make deferrals into your EDP account and you are eligible to receive Matching Credits and Profit Sharing Credits. As either an "active" or "inactive" participant, you can invest your EDP account in the hypothetical investment options available under the Plan and elect when you will receive distributions of the balance in your Plan account.

ACTIVE PARTICIPATION

You are an "Eligible Participant" for purposes of the Plan if you are a U.S.-based (domestic) director level employee or above at Verizon or Verizon Wireless; or, effective January 1, 2018, a domestic VP level or above employee at Oath ("Eligible Participant"). If you are a domestic director level employee at Verizon or Verizon Wireless and you transfer to Oath you will remain an "Eligible Participant" for purposes of the Plan, unless otherwise determined by the Company. If you were an Eligible Participant of Verizon or Verizon Wireless or a non-employee member of the Company's Board of Directors (the "Board") on January 1, 2005, you automatically became an active participant in the Plan on that date if you were deferring compensation at that time. If you were not an Eligible Participant on January 1, 2005 and were hired or promoted to an Eligible Participant position or became an Eligible Participant or a non-employee member of the Company's Board of Directors after January 1, 2005, you will automatically become an active participant in the Plan on the date you become an Eligible Participant or a non-employee member of the Board. Once you become an active participant, you will remain an active participant eligible for the Plan provisions applicable to Eligible Participants for as long as you are an Eligible Participant or a non-employee member of the Board.

INACTIVE PARTICIPATION

You will become an inactive participant if your employment with the Company ends, if you are demoted below the status of director or VP (as applicable) or any equivalent level, if you cease to be a non-employee member of the Board or a domestic employee or if you die. Once you become an inactive participant, you will remain an inactive participant as long as you have a positive balance in your EDP account or until you become an active participant again.

Your Account Balance

YOUR BEGINNING BALANCE

Depending on the circumstances under which you became an active participant, you might have a beginning balance in your EDP account.

Effective as of April 11, 2014, the Verizon Wireless Executive Deferral Plan ("Wireless EDP") was merged into the EDP. The terms of the EDP now govern amounts that were previously deferred under the Wireless EDP.

If you participated in the Verizon Income Deferral Plan ("IDP"), the Verizon Deferred Compensation Plan for Non-Employee Directors ("Directors' Plan") prior to January 1, 2005, any unvested benefit under those plans was transferred to the EDP and credited to your EDP account as a beginning balance. (As noted in "Effect on Other Benefit Plans" beginning on page 17, you will no longer be eligible under the transferor plan for a benefit based on the amounts transferred to the EDP.) Any amounts that were transferred from another plan to the beginning balance in your EDP account will be characterized as "Personal Deferral Credits," "Company Matching Credits," or "Retirement Credits" (as defined below) by the Plan administrator depending on the nature of those credits under the plan from which the amounts were transferred.

Amounts transferred to the Plan may be subject to various restrictions in addition to those described here. The Plan administrator will advise you if any such restrictions apply to any part of your EDP account.

ADDING TO YOUR BALANCE

The balance in your EDP account can increase while you are an active participant through your deferral of compensation into your EDP account and through Company Matching Credits and Profit Sharing Credits that are added to your EDP account. As previously noted, the value of your account may also increase or decrease due to the performance of the hypothetical investments to which your account balances are allocated.

Your Deferral of Compensation

Personal Deferral Credits

The Internal Revenue Code limits the amount of your pay that can be treated as "compensation" under the Company's "qualified" savings plan and "qualified" pension plan. This limit (also referred to as the Code Section 401(a) (17) limit) in 2018 is $275,000 and is subject to adjustment in future years. Any base salary you earn over this limit (as adjusted) is referred to under the Plan as "eligible base salary." For purposes of the Plan, "base salary" means the annual base rate of cash compensation payable by the Company to an Eligible Participant during a calendar year, excluding incentive compensation, bonuses, special/overtime pay bonuses, severance payments, and other irregular compensation and payments.

As an active participant, you can elect to defer receipt of all or part of your eligible base salary if you are an Eligible Participant, or your annual retainer and associated meeting fees ("directors' fees") if you are a non-employee member of the Board, into your EDP account. In addition, if you are an Eligible Participant, you may defer all or part of your short-term incentive into your EDP account. For purposes of the Plan, "short-term incentives" include short term incentive awards paid by Verizon under the Verizon Short-Term Incentive Plan and annual cash bonuses paid by Oath under the applicable Oath annual bonus program, but do not include any payment that is made in connection with your separation from service prior to the date that the short-term incentive awards for the year are payable to employees generally.

If you elect to defer compensation under the Plan, you waive your right to receive the amount deferred at the time it would otherwise be paid and agree instead to receive the deferred amount under the terms of the Plan.

Your deferrals of eligible base salary, short-term incentive, long-term incentives deferred prior to 2018, and/or directors' fees are your "Personal Deferral Credits" under the EDP and the portion of your EDP account balance attributable to your Personal Deferral Credits, as adjusted to reflect investment performance, is your "Employee Balance" under the Plan.

Election to Defer Compensation

If you want to elect to defer all or part of your eligible base salary, short-term incentive, directors' fees, or other eligible compensation, your election must be made in accordance with the terms of the Plan and any terms and conditions the Plan administrator may impose.

Eligible Base Salary and Directors' Fees. To defer all or a part of your eligible base salary or directors' fees, you must submit your election to the Plan administrator during the annual enrollment period. The annual enrollment period occurs before the first day of the calendar year to which the election applies (generally in November/December of the year prior to the year in which the salary or fee is earned).

Your election will apply only to eligible base salary or directors' fees earned in the year after the year in which you make the election and your election will not be renewed automatically for the following year. For example, your election during the 2017 enrollment period will apply only to eligible base salary or directors' fees earned in 2018. In addition, you cannot change or revoke your election after December 31st (or after the last business day of December, if earlier than the 31st) of the year in which you make the election.

Short-Term Incentive Awards. To defer all or part of your short-term incentive, you must submit your election to the Plan administrator during the annual enrollment period. The annual enrollment period occurs before the first day of the calendar year to which the election applies (generally in November/December of the year prior to the year in which the award is earned).

Your election will apply only to any short-term incentive award for the year for which the election applies and your election will not be automatically renewed and will not apply to any award earned in any other year. For example, your election during the 2017 enrollment period will apply only to your short-term incentive earned in 2018 (and payable in 2019). In addition, you cannot change or revoke your election after December 31st (or after the last business day of December, if earlier than the 31st) of the year in which you make the election.

For purposes of the Plan, "short-term incentives" do not include any payment that is made in connection with your separation from service prior to the date that the short-term incentive awards for the year are payable to employees generally. In addition, if you receive a short-term incentive award on the date that the short-term incentive awards for the year are payable to employees generally, but have previously separated from service, your short-term incentive deferral election will remain in effect, however, as noted on page 10, you will not receive a Matching Credit on your deferred award.

Long-Term Incentive Awards. Deferrals from long-term incentive awards are no longer permitted for awards granted after 2017. Long-term incentive awards deferred prior to 2018 (deferred during the 2016 or any prior annual enrollment period) remain subject to the terms of the award and the applicable deferral election.

Newly Eligible Participants. If you are not eligible to participate in the EDP and are promoted or hired into an eligible position, you will be provided a 30-day window beginning on the date you become an Eligible Participant to make a deferral election with respect to eligible base salary earned after you make your election. During this 30-day period, you may also be permitted to make a deferral election with respect to any short-term incentive award earned during the year in which you become an Eligible Participant, but your election will apply only to a pro-rated portion of the award (based on the performance period remaining at the time of your election relative to the total performance period). You will be treated just like all other participants for each subsequent year.

A newly eligible employee who does not submit a deferral election within 30 days of the effective date of hire or promotion will be considered to have elected not to defer any salary or incentive compensation for the year in which he or she was hired or promoted. This is true with respect to incentive awards even if you are hired or promoted before the applicable enrollment period. If you were previously eligible to participate in the EDP or in another deferred compensation plan of a Company affiliate that is required to be aggregated with the EDP under section 409A of the Internal Revenue Code (“Section 409A”) and you subsequently become eligible to participate in the EDP, special rules apply to determine whether you are considered to be newly eligible for the EDP. These rules will be applied in accordance with Section 409A and Treasury Regulation section 1.409A-2(a) (7). For example, this special rule could apply if you were eligible to participate in the EDP (or Wireless EDP) when your employment with the Company terminated and you are rehired 24 months after your employment terminated.

If you were eligible to participate in the Wireless EDP before it was merged into the EDP, or if you become an Eligible Participant after transferring from a Company affiliate for which you were already eligible to defer any compensation under a nonqualified deferred compensation plan of the Company affiliate that is merged into the Plan, the initial eligibility rules described above will not apply to you. Instead, the deferral elections (or non-elections) you made with the Company affiliate under the Company affiliate’s plan (including the Wireless EDP) will carry over. Those elections will continue to apply to your eligible compensation for the year in which you become an Eligible Participant (including, to the extent applicable, bonuses and awards based in whole or in part on service for that year). You will be treated just like all other Eligible Participants for subsequent deferral elections.

Duration and Cancellation of Deferral Elections. A deferral election shall remain in effect only for the year or performance period to which it relates. The Company may, in its sole discretion, cancel a deferral election after it has become irrevocable for a deferral year only in the case of the "disability" or "unforeseeable emergency" of the Eligible Participant or to comply with the requirements for receiving a hardship distribution from a qualified plan maintained by the Company. These rules will be applied in accordance with Section 409A and Treasury Regulation sections 1.409A-3(j)(4)(xii) and (viii).

Company Provided Credits

Matching Credits

If you elect to defer all or part of your eligible base salary and/or short-term incentive, you may receive additional credits in your EDP account. These credits are known under the Plan as “Matching Credits.” Matching Credits for base salary deferrals are credited to your EDP account with each applicable pay period. Matching Credits for short-term incentive deferrals are credited to your EDP account on the date that short-term incentive awards for the applicable year are paid to employees generally. To receive Matching Credits on deferrals from your short-term incentive, you must be employed by the Company on the date that short-term incentive awards for the applicable year are paid to employees generally. The balance of your EDP account attributable to Matching Credits, together with any Profit Sharing Credits described below, including any investment earnings (or minus any investment losses) on these credits, are referred to as your “Employer Balance.” Non-employee Directors are not eligible for Matching Credits.

For each Plan year, your Matching Credits will be determined as follows:

The Company will add a “Matching Credit” to your account if you defer eligible base salary and/or short-term incentive under the Plan and if, in the case of deferrals from the short-term incentive, you are employed by the Company on the date the short-term incentive awards for the applicable year are paid to employees generally. You will automatically receive $1.00 for every $1.00 of the first 6% of your eligible base salary and short-term incentive that you defer.

EXAMPLE - You have $50,000 in eligible base salary and receive a $100,000 short-term incentive in 2018. You defer 100% of your eligible base salary and 75% of your short-term incentive into your EDP account. You remain an employee of the Company through the date the short-term incentive is paid (in February of 2018). For the year, you will have $134,000 credited to your EDP account (before crediting earnings and losses), calculated as follows:

Personal Deferral Credits: $125,000 (100% of $50,000 plus 75% of $100,000); and

Matching Credits: $9,000 (Because you have deferred 6% of your total eligible base salary plus short-term incentive into your EDP account).

Profit Sharing Credits

The Company may, in its sole discretion, make a Profit Sharing contribution to your EDP account if you are eligible for a profit sharing contribution under the Savings Plan.

If the Company decides to make a Profit Sharing contribution for a plan year, your EDP account will be credited with an amount, if any, equal to the Profit Sharing contribution you would have received under the Savings Plan, if not for the limits imposed by the IRS, less any Profit Sharing contributions you actually received under the Savings Plan. The Profit Sharing contribution, if any, would be made to your EDP account at the same time that the Profit Sharing contribution is made to your account under the Savings Plan.

INVESTING YOUR ACCOUNT

Investment Options

You will be able to allocate your EDP account among the Plan's hypothetical investment options as long as you are either an active or an inactive participant in the Plan. The hypothetical investment options available under the Plan generally mirror those available under the Savings Plan and are subject to any restrictions imposed by the Savings Plan. In addition, you can allocate your EDP account to a hypothetical "Moody's" investment fund that provides a return that mirrors the yield on certain long-term, high-grade corporate bonds.

Allocating Your Account Balance Among the Investment Options

When you first become a participant in the Plan, your initial EDP account balance (if you have one as discussed under "Your Beginning Balance" on page 6) will be allocated in the same manner the credits were allocated in the IDP or the Directors' Plan. Similarly, if you were eligible to participate in the Wireless EDP before it was merged into the EDP, your Wireless EDP account balance allocations will continue to apply. Thereafter, you may elect (or change an existing election) at any time to allocate all or any part of your existing or new base salary and/or short-term incentive Personal Deferral Credits to any of the hypothetical investment options available under the Plan. Any long-term incentive award Personal Deferral Credits attributable to awards granted before 2018 (which include those attributable to both Performance Stock Units (PSUs) and Restricted Stock Units (RSUs)) will initially be deposited into the hypothetical "Moody's" investment fund, and you will be eligible to transfer those amounts to any of the other hypothetical investment funds available under the Plan at any time thereafter.

However, as noted above and under "Your Beginning Balance" on page 6, special rules apply with respect to certain restricted amounts in your EDP account. If you do not make an investment election with respect to Personal Deferral Credits, those credits will be invested in the hypothetical "Moody's" investment fund until you make a valid investment option election.

All of your Company Matching and Profit Sharing Credits will be allocated to the hypothetical Verizon Stock Fund, in which the values of units of the Verizon Stock Fund are based primarily on the price of Verizon common stock, but a small portion is invested in cash or cash equivalents and other short-term investments.

If you have at least one year of service with the Company, you may qualify for the following diversification rule associated with the Matching and Profit Sharing Credits: beginning at age 50 you may elect to transfer up to 100% of your Matching and Profit Sharing Credits out of the Verizon Stock Fund to any of the other hypothetical investment funds offered under the Plan.

Exchange Restrictions on Funds

The exchange restrictions that apply to the hypothetical investment funds in the EDP are the same as the exchange restrictions provided for in the Savings Plan.

Distributions from the Plan

MAKING AN ELECTION

At the time that you elect to defer your eligible base salary, short-term incentive award, or directors' fees, as applicable, you must also elect how and when you would like these deferred amounts to be paid – this is called class year accounting. These rules also apply to deferrals from eligible long-term incentive awards granted prior to 2018.

How You Receive Your Payment. You may elect one of the following distribution forms with respect to each class year of deferrals:

- One lump sum payment;
- Annual installments (between 2 and 20 years).

If you elect to receive annual installments, the amount of each installment payment will be equal to a fraction of your account balance on the evaluation date (as determined by the Plan administrator) immediately preceding the date of distribution, the numerator of which is one and the denominator of which is the number of installment payments remaining (including the installment payment in question). The final installment will be the remaining balance in your account. For example, if you choose to have your deferral of eligible base salary for 2018 distributed in three annual installments beginning in 2022, the installments will be paid as follows:

- 2022: ⅓ of your account balance associated with the 2018 base salary deferral
- 2023: ½ of your remaining account balance associated with the 2018 base salary deferral
- 2024: The remainder of your account associated with the 2018 base salary deferral.

When You Receive Payment. You can elect to receive your benefit

- At your "separation from service" within the meaning of Section 409A (subject to a six-month delay if you are a specified employee) or
- On a specified date.

If you elect to receive your distribution upon your separation from service, the lump sum payment or first annual installment, as applicable, will be paid within 60 days following separation from service, unless you are a specified employee on the date of your separation from service. If you are a specified employee, the lump sum payment (or first annual installment, as applicable) will be paid on the date that is six months from the date of your separation from service.

A special rule applies to deferrals of eligible long-term incentive awards granted prior to 2018 by Eligible Participants who were eligible to defer such awards. For those deferrals, an election to receive your benefit upon separation from service (including a default election under the rules described below) is considered an election to receive the lump sum payment (or first annual installment, as applicable) in the year immediately following the end of the long-term incentive award cycle if you separate from service in an earlier year. For example, if you elected to defer your long-term incentive award granted in 2016 until separation from service and then retire in 2017, your deferral election will remain in effect, and the deferred award, to the extent vested, will be paid in 2019, after the end of the three-year award cycle. A payment made in the year following the end of the award cycle (when that year is later than the year you separate from service) is considered to be made on a specified date and is not subject to the six-month wait for specified employees. However, you cannot elect to subsequently change such a deferral election under the "Changing an Election" rules described below.

If you elect to receive a distribution based on a specified date, you may not elect a distribution date that is earlier than 2 full years following the year the deferral was credited to your account. For example, if you elect to defer 75% of your short-term incentive for 2018 (paid in 2019) into your EDP account, the earliest date you may specify to receive the 2018 short-term incentive class year deferral is January 1, 2022.

If you elect to receive annual installments based on a specified date, the date you specify will be the date when the first installment is paid.

If you elect annual installments, each subsequent installment will be paid on the anniversary of the first installment payment.

CHANGING AN ELECTION

If you elect to receive a distribution based on a specified date, you can subsequently elect to change your prior election with respect to a class year of deferrals, provided that (1) you make the change at least 12 months prior to the originally scheduled distribution date (the date of the first payment in the case of installments), (2) you delay the date you would have otherwise received each distribution by at least 5 years, and (3) you do not elect to receive your distribution sooner or over a shorter period of time than was specified by your prior election.

If you have elected to receive a distribution as of a specific date, you cannot change that election to receive payment at separation from service. In addition, you may not subsequently change the time or form of payment of an amount that you designate to have paid to you on your separation from service. Please keep these rules in mind when you are making your initial elections.

EXAMPLE - You have elected to receive your eligible base salary deferred in 2018 in two annual installments beginning on January 1, 2021. On December 1, 2020, you submit a new election to receive your eligible base salary deferred in 2018 in a lump sum on January 1, 2022. Because you did not submit this new election at least 12 months prior to the date the distributions were scheduled to begin and because you have attempted to change from installments to a lump sum, your new election is invalid, and you will receive your first installment in January 2021. You will receive your second installment in January 2022 because you cannot change your distribution election once your benefit is in pay status and because you cannot change from installments to a lump sum.

If you attempt to modify your election and all or any part of your new election is invalid, any valid election in effect immediately before you submitted the modification will continue to remain in effect. If there is no valid election in effect, the default rules discussed below under "Default Form and Timing of Payments" will apply.

DEFAULT FORM AND TIMING OF PAYMENTS

If you do not make a valid election to receive payments of all or any part of your vested EDP account, you will receive payments of your vested EDP account balance (or the part of your EDP account for which no valid election has been made) in a lump sum within 60 days after the date on which you separate from service with the Company (or on the date that is six months after the date you separate from service if you are a specified employee).

PAYMENT OF COMPANY MATCHING AND PROFIT SHARING CREDITS

All vested Company Matching and Profit Sharing Credits will be distributed in a lump sum within 60 days after the date you separate from service (or six months after the date you separate from service if you are a specified employee). You may not change the payment schedule of these deferrals and you may not elect to receive them on a specified date.

SPECIAL RULES

Twenty-Year Limit on Initial Payment Dates

Your vested Plan benefits must begin to be paid no later than 20 years after your employment with the Company (and its affiliates) ends. This could affect your benefit payments in the following ways:

- If you elect to receive all or part of your Plan benefit in a single lump sum on a specific date and the date you elect is more than 20 years after the date your employment with the Company (and its affiliates) ends, you will be deemed to have elected to receive the lump sum 20 years from the date your employment ends;

- If you elect to receive all or part of your Plan benefit in annual installments and the date you elect to commence installments is more than 20 years after the date your employment with the Company (and its affiliates) ends, you will be deemed to have elected to commence installments 20 years from the date your employment ends.

Special Rule for Distributions Upon Separation From Service

If you elect to commence payments upon separation from service (or are subject to the default rule regarding the form and timing of payments) and you separate from service during the first 12 months after you submit your election, you will receive a lump sum distribution (or the first annual installment, as applicable) on the later of (1) the date such distribution or installment would be paid under the rules described above and (2) the date that is 12 months from the date your submit your election.

Any payment that is to be made on account of your separation from service cannot be made until you separate from service with the Company and its affiliates. If you transfer from the Company to an affiliate, you will generally not be considered to have separated from service.

Specified Employees

The Plan administrator will determine whether you are a specified employee for purposes of the EDP.

Special Rules that Apply at Disability

If you become disabled before your employment with the Company (or an affiliate) ends, you will receive your Plan benefit according to the terms of any valid election made in accordance with the general terms of the Plan then in effect or, if applicable, under the rules discussed in “Default Form and Timing of Payments” on page 14.

If you become disabled after your employment with the Company (or an affiliate) ends, you may change your election regarding the form and timing of your Plan payments only in accordance with the otherwise applicable terms of the Plan and Section 409A.

Special Rules that Apply at Death

At time of death, your beneficiary will receive a lump sum payout of any unpaid portion of your account within 60 days after the supporting documentation is received by the Plan administrator.

Your beneficiary or beneficiaries will not be permitted to name their own beneficiaries or to change the form or timing of the benefit payments that they will receive.

Hardship Payments

You may at any time request payment of all or part of your Personal Deferral Credits if you can demonstrate to the Plan administrator that you have incurred unusual, extraordinary expenses as the result of hardship. The maximum amount that you can withdraw under these circumstances is the amount necessary to relieve the hardship or financial emergency on which the request is based, which may include amounts necessary to pay any Federal, State, local, or foreign income taxes or penalties reasonably anticipated to result from the distribution.

The Plan administrator is required by law to impose significant limitations on the circumstances that qualify as a hardship or financial emergency under the Plan. Generally speaking, to qualify for a distribution of your Personal Deferral Credits, you must demonstrate to the Plan administrator that you have incurred a severe financial hardship resulting from an illness or accident of you, your spouse, beneficiary, or dependent; loss of your property due to casualty (including the need to rebuild a home following damage to a home not otherwise covered by insurance, for example, not as a result of a natural disaster); or other similar extraordinary and unforeseeable circumstances arising as a result of events beyond the control of the service provider.

The Plan administrator will determine in its sole discretion whether you are eligible to receive a distribution, and the amount you are eligible to withdraw. A distribution may not be made to the extent that the hardship is or may be relieved through reimbursement or compensation from insurance or otherwise, by liquidation of the your assets, to the extent the liquidation of such assets would not cause severe financial hardship, or by cessation of deferrals under the plan, and the hardship must constitute an “unforeseeable emergency” as determined under section 409A(a)(2)(A) of the Internal Revenue Code.

Vesting and Other Issues

VESTING

“Vesting” refers to your right to the balance in all or part of your EDP account.

Your Employee Balance

You are always 100% vested in your Personal Deferral Credits, unless you and the Company have a written agreement providing that part of your Personal Deferral Credits will vest on a different schedule.

Your Employer Balance

You will be fully vested in your Company Matching and Profit Sharing Credits upon the *earliest* to occur of the following:

Your account in the Savings Plan becomes fully vested, which usually occurs after three years of service with the Company (or an affiliate);

Your employment with the Company or its affiliates is involuntarily terminated without cause;

You become disabled or die while employed with the Company or its affiliates; or

There is a change in control of Verizon Communications Inc., as determined by the Plan administrator under the terms of the Plan while you are employed by the Company and its affiliates.

You will vest in any employer credits transferred to the EDP under the terms of the plan from which those amounts were transferred (although you will vest in any employer credits under the Wireless EDP in accordance with the EDP terms described above). Note: If you are retirement eligible or become retirement eligible under the terms of the Verizon Management Pension Plan, all Retirement Credits will be fully vested on such date.

FORFEITURE

You can never forfeit your Personal Deferral Credits or your vested Company Matching and Profit Sharing Credits. However, if you resign from the Company and its affiliates or if you are terminated for cause, you will forfeit any unvested credits in your account. Notwithstanding anything in this Plan to the contrary, and to the extent permitted by governing law, the Plan administrator may offset amounts contained in your account in order to satisfy any unpaid obligation or debt you have to the Company or to satisfy any liabilities that occur with respect to the Company's restatement of financial results based upon your willful misconduct or gross negligence.

Miscellaneous Matters

PLAN ADMINISTRATION

The Plan administrator is the most senior Human Resources officer of the Company, which will generally be the Executive Vice President and Chief Administrative Officer of the Company. However, if you are an "insider" for purposes of certain securities laws, the Plan administrator is the Human Resources Committee of the Company's Board of Directors. The Plan administrator has full discretionary authority and responsibility to administer and interpret the Plan, and has the discretion to charge participants for reasonable Plan administration expenses. All decisions of the Plan administrator are final and controlling for purposes of the Plan.

AMENDMENT AND TERMINATION

The Company intends to operate the Plan indefinitely. However, the Company has the right to amend or terminate the Plan at any time as long as (except with respect to certain changes in the law) no amendment or termination adversely affects the present dollar value of the vested balance in your EDP account at the time the amendment is adopted or the Plan is terminated. In addition, for five years following a change in control of Verizon Communications Inc., no amendment may adversely affect your rights under the Plan other than your right to future Matching Credits or Profit Sharing Credits.

EFFECT ON OTHER BENEFIT PLANS

By participating in the Plan, you agree that the Plan will provide all of your Company-sponsored non-qualified deferred compensation benefits earned or vested since January 1, 2005. You are no longer eligible to make personal contributions or receive company contributions under the IDP, the Directors' Plan, or the Verizon Wireless Executive Savings Plan ("ESP").

However, amounts you deferred into the IDP, Directors' Plan, or ESP that were vested on or before December 31, 2004, and were not transferred to the EDP will remain in those plans and are subject to the applicable provisions of those plans as they may be amended from time to time. Amounts you deferred into the IDP or Directors' Plan that were *not* vested on or before December 31, 2004 and that were transferred to the EDP as of January 1, 2005, will be subject to the terms of the EDP and *not* subject to the terms of the IDP or Directors' Plan after December 31, 2004.

If you cease to be an Eligible Participant during a calendar year, your deferral elections for that year (if any) will apply for the remainder of that year to (1) your eligible base salary and (2) any short-term incentive awards for which you become eligible upon ceasing to be an Eligible Participant and which the Plan administrator determines must be subject to your deferral election in order to comply with Section 409A.

PLAN ACCOUNTS AND HYPOTHETICAL INVESTMENTS

Your EDP account is a bookkeeping account. That is, your Employee Balance and your Employer Balance are maintained for bookkeeping purposes only. The Plan does not have any funds or assets.

Similarly, the investments referred to in the Plan are hypothetical in nature. Because your EDP account is only hypothetical, the Plan administrator will not necessarily make any actual investments in accordance with the Plan or your instructions. Nonetheless, the Plan administrator will track the performance of the investments that correspond to the hypothetical investments in your EDP account, and the value of your EDP account will be adjusted to reflect the gains (and losses) of the investments corresponding to the hypothetical investments in your account.

NO PLAN ASSETS OR TRUST

Unlike the Savings Plan and the Verizon Management Pension Plan, the EDP is not funded and has no trust or assets to secure your benefits. (If the EDP were funded by a trust, you would be subject to immediate income tax on your vested Plan benefits, even though you would not receive your vested Plan benefits until some future date— possibly many years in the future.) Consequently, in the event that the Company becomes bankrupt, you will only be a general, unsecured creditor of the Company with respect to the balance in your EDP account, and you may not receive all of your EDP benefits.

ASSIGNMENT AND ALIENATION

In general, your rights under the Plan may not be assigned or pledged. However, the Plan will recognize and abide by the terms of certain domestic relations orders. In addition, notwithstanding anything in this Plan to the contrary, and to the extent permitted by governing law, the Plan administrator may offset amounts contained in your account in order to satisfy any unpaid obligation or debt you have to the Company or to satisfy any liabilities that occur with respect to the Company's restatement of financial results based upon your willful misconduct or gross negligence.

WITHHOLDING AND OTHER TAX CONSEQUENCES

Your employer has full authority to withhold any taxes (including employment taxes) applicable to amounts deferred from your compensation, credits made to your EDP account, or payments of your Plan benefit. All personal deferrals and Matching Credits and Profit Sharing Credits to the EDP are subject to FICA taxes (Medicare and Social Security up to annual limits).

CONTINUED EMPLOYMENT

Nothing in the Plan confers on you the right to continue in the employment or service of the Company or to receive an annual base salary of any particular amount.

COMPLIANCE WITH LAW

The Plan is intended (1) to comply with Section 409A, as amended and official guidance issued thereunder, and (2) to be “a plan which is unfunded and is maintained by an employer primarily for the purpose of providing deferred compensation for a select group of management or highly compensated employees” within the meaning of sections 201(2), 301(a)(3) and 401(a)(1) of the Employee Retirement Income Security Act of 1974. Notwithstanding any other provision of this Plan, this Plan shall be interpreted, operated, construed and administered in a manner consistent with these intentions.

The Company, in its reasonable discretion, may amend the Plan (including retroactively) in any manner to conform with Section 409A as amended and official guidance issued thereunder. Despite the foregoing, the Company will not guarantee any particular tax effect to any person of participation in the Plan. In any event, and except for tax withholding obligations, the Company will have no obligation relating to any tax or penalty applicable to any person as a result of participation in the Plan.

For purposes of this Plan, the terms “separation from service” or “separates from service” or “separating from service” means a “separation from service” within the meaning of Section 409A.

CLAIMS

The Company shall provide to Eligible Participants upon request, a copy of the claims procedure that shall apply in handling claims and appeals under the Plan, which shall comply with the requirement of ERISA Section 503.

If you believe you are entitled to have received benefits but you have not received them, you must accept any payment made under the Plan and make prompt and reasonable, good faith efforts to collect the remaining portion of the payment, as determined under Treasury Regulation section 1.409A-3(g). For this purpose (and as determined under such regulation), efforts to collect the payment will be presumed not to be prompt, reasonable, good faith efforts, unless you provide notice to the Plan administrator within 90 days of the latest date upon which the payment could have been timely made in accordance with the terms of the Plan and the regulations under Section 409A, and unless, if not paid, you take further enforcement measures within 180 days after such latest date.

AIRCRAFT TIME SHARING AGREEMENT

This AIRCRAFT TIME SHARING AGREEMENT (the "*Agreement*") is entered into by and between VERIZON CORPORATE SERVICES GROUP INC., a New York corporation, having an office at One Verizon Way, Basking Ridge, New Jersey 07920 (the "*Lessor*"), and________________, an individual with an address at 1095 Avenue of the Americas, New York, New York 10036 (the "*Lessee*") and shall become effective on and as of the date of execution by the last signing party (the "*Effective Date*").

RECITALS

WHEREAS, Lessor rightfully possesses and has operational control of the aircraft listed on Schedule A hereto (the "*Aircraft*"); and

WHEREAS, Lessor employs a fully qualified flight crew to operate the Aircraft;

WHEREAS, Lessor and Lessee desire to lease said Aircraft on a non-exclusive time-sharing basis as defined in Section 91.501(c)(1) of the Federal Aviation Regulations ("*FAR*") under such terms and conditions that are mutually satisfactory to both parties; and

WHEREAS, the use of the Aircraft will at all times be pursuant to, and in full compliance with, the requirements of FAR Part 91, particularly Sections 91.501(b)(6), 91.501(c)(1) and 91.501(d).

NOW, THEREFORE, the parties agree as follows:

LEASE OF AIRCRAFT

Lessor agrees to lease the Aircraft to Lessee pursuant to the provisions of FAR Sections 91.501(b)(6), 91.501(c)(1) and 91.501(d) from time to time on a non-exclusive basis and on an "as needed and as available basis" and to provide a fully-qualified flight crew for all operations pursuant to this Agreement.

TERM

This Agreement shall commence on the Effective Date, and continue until such time as Lessor or Lessee terminates this Agreement. Either party may at any time terminate this Agreement upon thirty (30) days written notice to the other party.

REIMBURSEMENT FOR USE OF AIRCRAFT

For each flight undertaken pursuant to this Agreement, Lessee shall pay Lessor an amount determined by Lessor which shall not exceed the direct operating costs of the Aircraft as authorized by FAR Section 91.501(d). As of the Effective Date, those direct operating costs are limited to the following actual expenses for each use of the Aircraft:

1) fuel, oil, lubricants and other additives;
2) travel expenses of the crew, including food, lodging and ground transportation;
3) hangar and tie down costs away from the Aircraft's base of operation;
4) insurance obtained for the specific flight;
5) landing fees, airport taxes and similar assessments;
6) customs, foreign permit, and similar fees directly related to the flight;
7) in-flight food and beverages;
8) passenger ground transportation;
9) flight planning and weather contract services; and
10) an additional charge equal to one hundred percent (100%) of the expenses listed in item 1) above.

Lessor shall pay all expenses related to the operation of the Aircraft and will provide an invoice and bill to Lessee for the expenses enumerated above within thirty (30) days after the end of the month in which any flight or flights for the account of the Lessee occur for domestic flights and within sixty (60) days after the end of the month in which any flight or flights for the account of the Lessee occur for international flights. Lessee shall pay Lessor for said expenses within fifteen (15) days of receipt of the invoice and bill.

TAXES

In addition to the amounts set forth above, Lessee shall pay to Lessor the amount of the Federal Excise Tax imposed on the amounts paid for taxable transportation of persons (within the meaning of Section 4261 -4263 of the Internal Revenue Code of 1986, as amended, and any applicable successor provision) for flights conducted under this Agreement. Lessor agrees to collect and remit to the appropriate governmental agency for the benefit of Lessee all such federal excise taxes. Amounts due for such taxes shall be included on the monthly invoices and bills submitted to Lessee.

PILOTS

Lessor shall employ, pay for and provide a qualified flight crew for each flight undertaken under this Agreement.

SCHEDULING

Lessee shall provide Lessor with requests for lease of the Aircraft pursuant to this Agreement and proposed flight schedules as far in advance of any given flight as possible, and in any case, at least 24 hours prior to Lessee's desired departure. Requests for flight time shall be in a form, whether oral or written, mutually convenient, and agreed, to by the parties. Lessee shall provide at least the following information for each proposed flight prior to scheduled departure:

a) proposed departure point;
b) destination;
c) date and time of flight;
d) names of all passengers;
e) nature and extent of luggage;
f) date and time of a return flight, if any; and
g) any other information concerning the proposed flight that may be pertinent or required by Lessor or Lessor’s flight crew.

Lessor shall have final authority over the scheduling of the Aircraft; provided, however, that Lessor will use its best efforts to resolve any conflicts in scheduling in a fair and equitable manner. The pilot-in-command of the Aircraft shall have final and complete authority to cancel any flight for any reason or condition that in his or her judgment would compromise the safety of the flight.

MAINTENANCE

Lessor shall be solely responsible for securing maintenance, preventative maintenance and required or otherwise necessary inspections on the Aircraft. The Aircraft shall be inspected, and maintained in an airworthy condition, in accordance with applicable rules and regulations of 14 C.F.R. Part 91 during the term of this Agreement. No period of maintenance, preventative maintenance or inspection shall be delayed or postponed for the purpose of scheduling the Aircraft for Lessee.

OPERATIONAL CONTROL

At any time during which a flight is made by or on behalf of Lessee under this Agreement, Lessor shall have possession, command and control of the Aircraft. Lessor shall have complete and exclusive responsibility for: (i) scheduling, dispatching and flight of the Aircraft on all flights conducted pursuant to this Agreement; (ii) the physical and technical operation of the Aircraft; and (iii) the safe performance of all flights. Lessor shall have operational control of the Aircraft for all purposes of the Federal Aviation Regulations (found at 14 C.F.R., Parts 1-199, as amended from time to time). In accordance with applicable FAR, the qualified flight crew provided by Lessor will exercise all required and/or appropriate duties and responsibilities in regard to the safety of each flight conducted under this Agreement. The pilot-in-command of each flight shall have the final authority with respect to: (a) the initiation or termination of any flight; (b) selection of the routing of any flight; (c) determination of the load to be carried; and (d) all decisions relating to the safety of any flight. No such action of the pilot-in-command shall create or support any liability to Lessee or any other person for loss, injury, damages or delay. The parties further agree that Lessor shall not be liable for delay or failure to furnish the Aircraft and crew pursuant to this Agreement for any reason.

NEITHER LESSOR NOR ITS OFFICERS, EMPLOYEES, AFFLIATES OR AGENTS MAKES, HAS MADE OR SHALL BE DEEMED TO MAKE OR HAVE MADE NO WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE SERVICES TO BE PERFORMED UNDER THIS AGREEMENT OR WITH RESPECT TO THE AIRCRAFT TO BE USE UNDER THIS AGREEMENT OR ANY ENGINE OR COMPONENT, INCLUDING, WITHOUT LIMITATION, ANY WARRANTY AS TO DESIGN, COMPLIANCE WITH SPECIFICATIONS, QUALITY OF MATERIAL OR WORKMANSHIP, MERCHANTABILITY, FITNESS FOR ANY PURPOSE, USE OR OPERATION, OR AIRWORTHINESS. LESSOR SHALL NOT BE LIABLE TO LESSEE OR HIS EMPLOYEES, AGENTS, REPRESENTATIVES, GUESTS, OR INVITEES FOR ANY SPECIAL, INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR FOR LOST PROFITS OR REVENUES IN CONNECTION WITH THE FURNISHING OR PERFORMANCE OF THE SERVICES TO BE PERFORMED UNDER THIS AGREEMENT OR USE OF THE AIRCRAFT, IN THE ABSENCE OF GROSS NEGLIGENCE OR WILLFUL MISCONDUCT ON ITS PART OR THAT OF ITS OFFICERS, EMPLOYEES, AFFILIATES OR AGENTS. LESSOR SHALL NOT BE LIABLE FOR ANY ACT OR OMISSION OCCURING IN THE COURSE OF OR IN CONNECTION WITH THE USE OF THE AIRCRAFT BY LESSEE OR THE PERFORMANCE OF THE SERVICES UNDER THIS AGREEMENT BY LESSOR OR ITS OFFICERS, EMPLOYEES, AFFILIATES OR AGENTS OR FOR ANY LOSS OR DAMAGE WHICH LESSEE MAY SUSTAIN OR SUFFER AS THE RESULT, OR IN THE COURSE OF, THE DISCHARGE BY LESSOR OF ITS DUTIES UNDER THIS AGREEMENT IN THE ABSENCE OF GROSS NEGLIGENCE OR WILLFUL MISCONDUCT ON ITS PART OR THAT OF ITS OFFICERS, EMPLOYEES, AFFILIATES OR AGENTS.

INSURANCE

Lessor shall, at its own expense, maintain in effect, during the term of this Agreement, insurance covering the Aircraft with respect to such risks and in such amounts and with such deductibles and other terms as determined by Lessor in its sole discretion. In addition, Lessor shall maintain comprehensive public liability and property damage insurance with respect to such risks and in such amounts and with such deductibles and other terms as determined by Lessor in its sole discretion. Lessor shall not cancel or alter said insurance without at least 30 calendar days' written notice to Lessee. Lessee or Lessee's agents shall not take any action that might invalidate or suspend such insurance. Said insurance shall be primary as to Lessor with Lessee being an additional insured (as evidenced by a certificate of insurance) and shall waive all right of subrogation as to Lessee. Notwithstanding the foregoing, and subject to the limitations of FAR Section 91 .501(d), Lessee shall, at Lessor's request, reimburse Lessor for the cost and expense of any additional insurance obtained for any specific flight.

LESSEE'S USE OF AIRCRAFT

Use of Aircraft by Lessee shall be for Lessee's own account, and by his designated invitees and guests, and shall be subject to the use limitations set forth in FAR Section 91.501. Lessee is hereby expressly prohibited from using the Aircraft for the transportation of passengers or cargo for compensation or hire. Lessee shall not accept any compensation whatsoever for any flight conducted under this Agreement.

Lessee shall not incur any mechanics or other lien in connection with the use, inspection, preventative maintenance, maintenance or storage of the Aircraft, nor shall Lessee attempt to convey, mortgage, assign, lease or in any way alienate the Aircraft or create any kind of security interest involving the Aircraft or do anything or take any action that might mature into such a lien.

During the term of this Agreement, Lessee will abide by and conform to all applicable laws, governmental and airport orders, rules and regulations.

GENERAL PROVISIONS

A. This Agreement and all the rights of the parties shall be construed and enforced in accordance with the laws of the State of New York, without giving effect to its conflicts of laws principles.

B. This Agreement supersedes all prior written agreements and understandings between the parties with respect to the subject matter hereof, and no modification, termination or attempted waiver shall be valid unless in writing and signed by both parties.

C. The Aircraft is and at all times shall remain the property of the Lessor, and Lessee shall have no right, title or interest therein or in the proceeds thereof except as expressly permitted under this Agreement.

D. If action is instituted to enforce any of the terms and conditions of this Agreement, the prevailing party shall be entitled to recovery of its reasonable attorney's fees and costs incurred in such action.

E. If any clause or provision in this Agreement shall be adjudged to be invalid or unenforceable by a court of competent jurisdiction or by operation of any applicable law, such adjudication shall not affect the validity of any other clause or provision, which shall remain in full force and effect.

F. All notices, requests, demands and other communications required or desired to be given under this Agreement shall be in writing and shall be deemed to be given: (i) if personally delivered, upon such delivery; or (ii) if sent by regularly scheduled overnight delivery carrier upon the earlier to occur of actual receipt or the next business day after being sent by such delivery:

If to Lessor:

VERIZON CORPORATE SERVICES GROUP INC.
One Verizon Way
Basking Ridge, New Jersey 07920
Attention: Director, Aviation
Telephone:
Fax:
E-Mail:

If to Lessee:

Telephone:
Fax:
E-Mail:

G. Notices given by other means shall be deemed to be given only upon actual receipt. Addresses may be changed by written notice given as provided in this Agreement and signed by the party giving the notice.

H. Neither this Agreement nor Lessee's interest herein shall be assignable by Lessee to any other person or entity whatsoever. This Agreement shall inure to the benefit of and be binding upon the parties, their heirs, representatives and successors.

I. If any provision of this Agreement is held to be invalid, illegal, or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired.

J. The failure of a party to require performance of any provision of this Agreement shall in no way affect that party's right thereafter to enforce such a provision nor shall the waiver by a party of any breach of any provision of this Agreement be taken or held to be a waiver of any further breach of the same provision or any other provision.

[Truth-in-Leasing Statement and Signature Page Follows]

TRUTH IN LEASING STATEMENT

THE AIRCRAFT HAVE BEEN MAINTAINED AND INSPECTED UNDER FAR PART 91 DURING THE 12 MONTH PERIOD PRECEDING THE DATE OF THIS AGREEMENT (OR PORTION THEREOF SINCE THE AIRCRAFT RECEIVED ITS FAA AIRWORTHINESS CERTIFICATE). THE AIRCRAFT WILL BE MAINTAINED AND INSPECTED UNDER FAR PART 91 FOR OPERATIONS TO BE CONDUCTED UNDER THIS AGREEEMENT.

DURING THE DURATION OF THIS AGREEMENT, VERIZON CORPORATE SERVICES GROUP INC., A NEW YORK CORPORATION HAVING AN OFFICE AT ONE VERIZON WAY, BASKING RIDGE, NEW JERSEY 07920, SHALL BE CONSIDERED TO BE, AND SHALL IN FACT BE THE RESPONSIBLE PARTY FOR HE OPERATIONAL CONTRAOL OF THE AIRCRAFT.

AN EXPLANATION OF FACTORS BEARING ON OPERATIONAL CONTROL AND PERTINENT FEDERAL AVIATION REGULATIONS CAN BE OBTAINED FROM THE NEAREST FAA FLIGHT STANDARDS DISTRICT OFFICE. THE “INSTRUCTIONS FOR COMPLIANCE WITH TRUTH IN LEASING REQUIREMENTS” ATTACHED THERETO ARE INCORPORATED HEREIN BY REFERENCE.

THE UNDERSIGNED HEREBY CERTIFIES THAT VERIZON CORPORATE SERVICES GROUP INC. IS RESPONSIBLE FOR OPERATIONAL CONTROL OF THE AIRCRAFT AND UNDERSTANDS ITS RESPONSIBILITIES FOR COMPLIANCE WITH APPLICABLE FEDERAL AVIATION REGULATIONS.

VERIZON CORPORATE SERVICES GROUP INC. (Lessor)

By: ___________________________________ ____________________________
Date and time of execution

(Lessee)

By: ___________________________________ ____________________________
Individually
Date and time of execution

INSTRUCTIONS FOR COMPLIANCE WITH
TRUTH IN LEASING REQUIREMENTS

1) Mail a copy of this Agreement to the following address via certified mail, return receipt requested, immediately upon execution of the Agreement. (14 C.F.R. § 91.23 requires that the copy be sent within twenty-four hours after it is signed):

Federal Aviation Administration
Aircraft Registration Branch
ATTN: Technical Section
POB 25724
Oklahoma City, Oklahoma 73125

2) Telephone or send a facsimile message to the nearest Flight Standards District Office at least forty-eight hours prior to first flight under this Agreement and inform them of the following:

a.) location of the airport of departure;
b.) departure time; and
c.) registration number of the aircraft involved.

3) Carry a copy of this Agreement in the Aircraft at all times.

SCHEDULE A

Operator	Manufacturer/Model	Serial No.	Tail No.

EXHIBIT 12

Computation of Ratio of Earnings to Fixed Charges
Verizon Communications Inc. and Subsidiaries

(dollars in millions)

Years Ended December 31,	**2017**	2016	2015	2014	2013
Earnings:					
Income before income taxes	**$ 20,594**	$ 20,986	$ 28,240	$ 15,270	$ 29,277
Equity in losses (earnings) of unconsolidated businesses	**77**	98	86	(1,780)	(142)
Dividends from unconsolidated businesses	**40**	40	41	37	40
Interest expense [1]	**4,733**	4,376	4,920	4,915	2,667
Portion of rent expense representing interest	**1,250**	1,201	1,051	912	851
Amortization of capitalized interest	**187**	187	191	191	177
Earnings, as adjusted	**$ 26,881**	$ 26,888	$ 34,529	$ 19,545	$ 32,870
Fixed Charges:					
Interest expense [1]	**$ 4,733**	$ 4,376	$ 4,920	$ 4,915	$ 2,667
Portion of rent expense representing interest	**1,250**	1,201	1,051	912	851
Capitalized interest	**678**	704	584	376	754
Fixed charges	**$ 6,661**	$ 6,281	$ 6,555	$ 6,203	$ 4,272
Ratio of earnings to fixed charges	**4.04**	4.28	5.27	3.15	7.69

[1] We classify interest expense recognized on uncertain tax positions as income tax expense and therefore such interest expense is not included in the Ratio of Earnings to Fixed Charges.

Selected Financial Data Verizon Communications Inc. and Subsidiaries

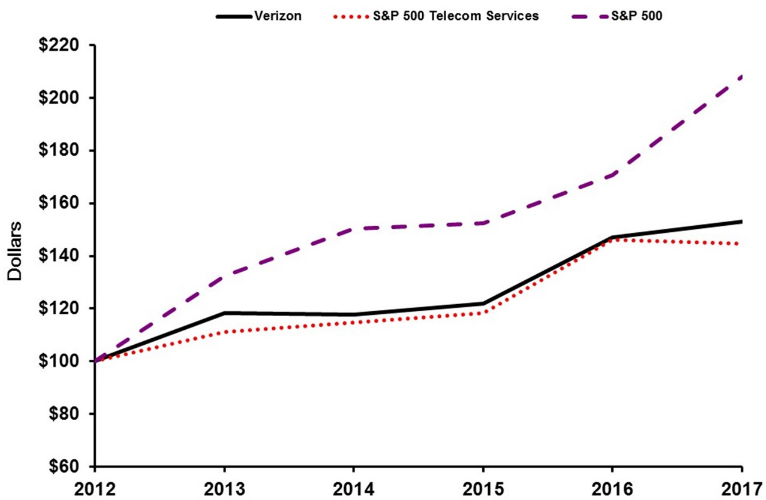
(dollars in millions, except per share amounts)

	2017	2016	2015	2014	2013
Results of Operations					
Operating revenues	**$ 126,034**	$ 125,980	$ 131,620	$ 127,079	$ 120,550
Operating income	**27,414**	27,059	33,060	19,599	31,968
Net income attributable to Verizon	**30,101**	13,127	17,879	9,625	11,497
Per common share – basic	**7.37**	3.22	4.38	2.42	4.01
Per common share – diluted	**7.36**	3.21	4.37	2.42	4.00
Cash dividends declared per common share	**2.335**	2.285	2.230	2.160	2.090
Net income attributable to noncontrolling interests	**449**	481	496	2,331	12,050
Financial Position					
Total assets	**$ 257,143**	$ 244,180	$ 244,175	$ 232,109	$ 273,184
Debt maturing within one year	**3,453**	2,645	6,489	2,735	3,933
Long-term debt	**113,642**	105,433	103,240	110,029	89,188
Employee benefit obligations	**22,112**	26,166	29,957	33,280	27,682
Noncontrolling interests	**1,591**	1,508	1,414	1,378	56,580
Equity attributable to Verizon	**43,096**	22,524	16,428	12,298	38,836

- Significant events affecting our historical earnings trends in 2015 through 2017 are described in "Special Items" in the "Management’s Discussion and Analysis of Financial Condition and Results of Operations" section.
- 2014 data includes severance, pension and benefit charges, early debt redemption and other costs, gain on spectrum license transactions and wireless transaction costs. 2013 data includes severance, pension and benefit credits, gain on spectrum license transactions and wireless transaction costs.

Stock Performance Graph

Comparison of Five-Year Total Return Among Verizon, S&P 500 Telecommunications Services Index and S&P 500 Stock Index



Data Points in Dollars	At December 31, 2012	2013	2014	2015	2016	**2017**
Verizon	100.0	118.4	117.8	121.9	147.2	**153.2**
S&P 500 Telecom Services	100.0	111.3	114.7	118.5	146.3	**144.5**
S&P 500	100.0	132.4	150.4	152.5	170.7	**207.9**

The graph compares the cumulative total returns of Verizon, the S&P 500 Telecommunications Services Index, and the S&P 500 Stock Index over a five-year period. It assumes $100 was invested on December 31, 2012 with dividends being reinvested.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Overview

Verizon Communications Inc. (Verizon or the Company) is a holding company that, acting through its subsidiaries, is one of the world's leading providers of communications, information and entertainment products and services to consumers, businesses and governmental agencies. With a presence around the world, we offer voice, data and video services and solutions on our wireless and wireline networks that are designed to meet customers' demand for mobility, reliable network connectivity, security and control. We have a highly skilled, diverse and dedicated workforce of approximately 155,400 employees as of December 31, 2017.

To compete effectively in today's dynamic marketplace, we are focused on transforming around the capabilities of our high-performing networks with a goal of future growth based on delivering what customers want and need in the new digital world. During 2017, we focused on leveraging our network leadership, retaining and growing our high-quality customer base while balancing profitability, enhancing ecosystems in media and telematics, and driving monetization of our networks and solutions. Our strategy required significant capital investments primarily to acquire wireless spectrum, put the spectrum into service, provide additional capacity for growth in our networks, invest in the fiber-optic network that supports our businesses, maintain our networks and develop and maintain significant advanced information technology systems and data system capabilities. We believe that steady and consistent investments in our networks and platforms will drive innovative products and services and fuel our growth. We are consistently deploying new network architecture and technologies to extend our leadership in both fourth-generation (4G) and fifth-generation (5G) wireless networks. In addition, protecting the privacy of our customers' information and the security of our systems and networks will continue to be a priority at Verizon. Our network leadership will continue to be the hallmark of our brand, and provide the fundamental strength at the connectivity, platform and solutions layers upon which we build our competitive advantage.

Highlights of our 2017 financial results include:

- Full year earnings of $7.37 per share on a United States (U.S.) generally accepted accounting principles (GAAP) basis.
- Total operating revenue for the year was $126.0 billion.
- Total operating income for the year was $27.4 billion, with an operating margin of 21.8%.
- Net income for the year was $30.6 billion.
- In 2017, cash flow from operations totaled $25.3 billion.
- Capital expenditures for the year were $17.2 billion.

Business Overview

We have two reportable segments, Wireless and Wireline, which we operate and manage as strategic business units and organize by products and services, and customer groups, respectively.

- Total Wireless segment operating revenues for the year ended December 31, 2017 totaled $87.5 billion, a decline of 1.9%.
- Total Wireline segment operating revenues for the year ended December 31, 2017 totaled $30.7 billion, an increase of 0.6%.
- Our Media business, branded Oath, had an increase in operating revenues of 89.7% to $6.0 billion during the year ended December 31, 2017 primarily due to the acquisition of Yahoo! Inc.'s (Yahoo) operating business in June of 2017.

Wireless

Our Wireless segment, doing business as Verizon Wireless, provides wireless communications products and services across one of the most extensive wireless networks in the U.S. We provide these services and equipment sales to consumer, business and government customers across the U.S. on a postpaid and prepaid basis. A retail postpaid connection represents an individual line of service for a wireless device for which a customer is billed one month in advance a monthly access charge in return for access to and usage of network service. Our prepaid service enables individuals to obtain wireless services without credit verification by paying for all services in advance.

We are focusing our wireless capital spending on adding capacity and density to our 4G Long-Term Evolution (LTE) network. Approximately 98.5% of our total data traffic during 2017 was carried on our 4G LTE network. We are investing in the densification of our network by utilizing small cell technology, in-building solutions and distributed antenna systems. Densification enables us to add capacity to manage mobile video consumption and demand for the Internet of Things (IoT), and also positions us for the deployment of 5G technology. Over the past several years, we have been leading the development of 5G wireless technology industry standards and the ecosystems for fixed and mobile 5G wireless services. We continue to work with key partners on innovation, standards development and requirements for this next generation of wireless technology. During 2017, we deployed the largest 5G trial network in the U.S. with active customers. In November 2017, we announced that we will commercially launch 5G wireless residential broadband services in three to five U.S. markets in 2018.

Wireline

Our Wireline segment provides voice, data and video communications products and enhanced services, including broadband video and data services, corporate networking solutions, security and managed network services and local and long distance voice services. We provide these products and services to consumers in the U.S., as well as to carriers, businesses and government customers both in the U.S. and around the world.

In our Wireline business, to compensate for the shrinking market for traditional voice service, we continue to build our Wireline segment around data, video and advanced business services - areas where demand for reliable high-speed connections is growing. We expect our One Fiber initiative will aid in the densification of our 4G LTE wireless network and position us for the deployment of 5G technology. The expansion of our multi-use fiber footprint also creates opportunities to generate revenue from fiber-based services in our Wireline business. We continue to seek ways to increase revenue and further realize operating and capital efficiencies as well as maximize profitability for our Fios services.

Corporate and Other

Corporate and other includes the results of our Media business, branded Oath, our telematics and other businesses, investments in unconsolidated businesses, unallocated corporate expenses, pension and other employee benefit related costs and lease financing. Corporate and other also includes the historical results of divested businesses and other adjustments and gains and losses that are not allocated in assessing segment performance due to their nature. Although such transactions are excluded from the business segment results, they are included in reported consolidated earnings. Gains and losses that are not individually significant are included in all segment results as these items are included in the chief operating decision maker’s assessment of segment performance.

Oath, our organization that combines Yahoo’s operating business with our existing Media business, includes diverse media and technology brands that engage approximately a billion people around the world. We believe that Oath, with its technology, content and data, will help us expand the global scale of our digital media business and build brands for the future. See Note 2 to the consolidated financial statements for additional information.

In addition, Corporate and other includes the results of our telematics businesses for all periods presented, which were reclassified from our Wireline segment effective April 1, 2016. The impact of this reclassification was insignificant to our consolidated financial statements and our segment results of operations.

We are also building our growth capabilities in the emerging IoT market by developing business models to monetize usage on our network at the connectivity and platform layers. During the years ended December 31, 2017 and 2016, we recognized IoT revenues (including telematics) of $1.5 billion and $1.0 billion, a 52% and 40% increase, respectively, compared to the prior year. This increase was attributable primarily to our acquisitions of Fleetmatics Group PLC (Fleetmatics) and Telogis, Inc. (Telogis) in the second half of 2016, which enable us to provide a comprehensive suite of services and solutions in the Telematics market.

Capital Expenditures and Investments

We continue to invest in our wireless network, high-speed fiber and other advanced technologies to position ourselves at the center of growth trends for the future. During the year ended December 31, 2017, these investments included $17.2 billion for capital expenditures. See "Cash Flows Used in Investing Activities" and "Operating Environment and Trends" for additional information. We believe that our investments aimed at expanding our portfolio of products and services will provide our customers with an efficient, reliable infrastructure for competing in the information economy.

Consolidated Results of Operations

In this section, we discuss our overall results of operations and highlight special items that are not included in our segment results. In "Segment Results of Operations," we review the performance of our two reportable segments in more detail.

Consolidated Revenues

				(dollars in millions)		
				(Decrease)/Increase			
Years Ended December 31,	**2017**	2016	2015	**2017 vs. 2016**		2016 vs. 2015	
Wireless	**$ 87,511**	$ 89,186	$ 91,680	**$ (1,675)**	**(1.9)%**	$ (2,494)	(2.7)%
Wireline	**30,680**	30,510	31,150	**170**	**0.6**	(640)	(2.1)
Corporate and other	**9,387**	7,778	9,962	**1,609**	**20.7**	(2,184)	(21.9)
Eliminations	**(1,544)**	(1,494)	(1,172)	**(50)**	**(3.3)**	(322)	(27.5)
Consolidated Revenues	**$ 126,034**	$ 125,980	$ 131,620	**$ 54**	**—**	$ (5,640)	(4.3)

2017 Compared to 2016

Consolidated revenues remained consistent during 2017 compared to 2016 primarily due to a decline in revenues at our Wireless segment, offset by an increase in revenues within Corporate and other.

Revenues for our segments are discussed separately below under the heading "Segment Results of Operations".

Corporate and other revenues increased $1.6 billion, or 20.7%, during 2017 compared to 2016 primarily due to an increase in revenue as a result of the acquisition of Yahoo's operating business on June 13, 2017, as well as fleet service revenue growth in our telematics business. These increases were partially offset by the sale (Access Line Sale) of our local exchange business and related landline activities in California, Florida and Texas, including Fios Internet and video customers, switched and special access lines and high-speed Internet service (HSI) and long distance voice accounts in these three states, to Frontier Communications Corporation (Frontier) on April 1, 2016 and the sale of 23 customer-facing data center sites in the U.S. and Latin America (Data Center Sale) on May 1, 2017, and other insignificant transactions (see "Operating Results From Divested Businesses" below). During 2017, our Media business, branded Oath, generated $6.0 billion in revenues which represented approximately 64% of revenues in Corporate and Other.

2016 Compared to 2015

The decrease in consolidated revenues during 2016 compared to 2015 was primarily due to a decline in revenues at our segments, Wireless and Wireline, as well as a decline in revenues within Corporate and other.

Revenues for our segments are discussed separately below under the heading "Segment Results of Operations".

Corporate and other revenues decreased $2.2 billion, or 21.9%, during 2016 compared to 2015 as a result of the Access Line Sale that was completed on April 1, 2016. The results of operations related to these divestitures included within Corporate and other are discussed separately below under the heading "Operating Results From Divested Businesses". During 2016, our Media business represented approximately 46% of revenues in Corporate and other, comprised primarily of revenues from AOL Inc. (AOL), which we acquired on June 23, 2015. Corporate and other also includes revenues from new businesses acquired during 2016 of approximately $0.1 billion.

Consolidated Operating Expenses

(dollars in millions)

				Increase/(Decrease)			
Years Ended December 31,	**2017**	2016	2015	**2017 vs. 2016**		2016 vs. 2015	
Cost of services	**$ 29,409**	$ 29,186	$ 29,438	**$ 223**	**0.8 %**	$ (252)	(0.9)%
Wireless cost of equipment	**22,147**	22,238	23,119	**(91)**	**(0.4)**	(881)	(3.8)
Selling, general and administrative expense	**30,110**	31,569	29,986	**(1,459)**	**(4.6)**	1,583	5.3
Depreciation and amortization expense	**16,954**	15,928	16,017	**1,026**	**6.4**	(89)	(0.6)
Consolidated Operating Expenses	**$ 98,620**	$ 98,921	$ 98,560	**$ (301)**	**(0.3)**	$ 361	0.4

Operating expenses for our segments are discussed separately below under the heading "Segment Results of Operations".

2017 Compared to 2016

Cost of Services

Cost of services includes the following costs directly attributable to a service: salaries and wages, benefits, materials and supplies, content costs, contracted services, network access and transport costs, customer provisioning costs, computer systems support, and costs to support our outsourcing contracts and technical facilities. Aggregate customer care costs, which include billing and service provisioning, are allocated between Cost of services and Selling, general and administrative expense.

Cost of services increased during 2017 primarily due to an increase in expenses as a result of the acquisition of Yahoo's operating business, an increase in content costs associated with continued programming license fee increases and an increase in access costs as a result of the acquisition of XO Holdings' wireline business (XO) at our Wireline segment. These increases were partially offset by the completion of the Access Line Sale on April 1, 2016, the Data Center Sale on May 1, 2017 and other insignificant transactions (see "Operating Results From Divested Businesses"), the fact that we did not incur incremental costs in 2017 as a result of the union work stoppage that commenced on April 13, 2016 and ended on June 1, 2016 (2016 Work Stoppage), and by a decline in net pension and postretirement benefit costs at our Wireline segment primarily driven by collective bargaining agreements ratified in June 2016.

Wireless Cost of Equipment

Wireless cost of equipment slightly decreased during 2017, primarily as a result of a decline in the number of smartphone and internet units sold, substantially offset by a shift to higher priced units in the mix of devices sold.

Selling, General and Administrative Expense

Selling, general and administrative expense includes: salaries and wages and benefits not directly attributable to a service or product, bad debt charges, taxes other than income taxes, advertising and sales commission costs, customer billing, call center and information technology costs, regulatory fees, professional service fees, and rent and utilities for administrative space. Also included is a portion of the aggregate customer care costs as discussed in "Cost of Services" above.

Selling, general and administrative expense decreased during 2017 primarily due to a decrease in severance, pension and benefit charges, an increase in the net gain on sale of divested businesses (see "Special Items"), a decline at our Wireless segment in sales commission expense, employee related costs, bad debt expense, non-income taxes and advertising expense, and a decrease due to the Access Line Sale on April 1, 2016 and the Data Center Sale on May 1, 2017, and other insignificant transactions (see "Operating Results From Divested Businesses"). These decreases were partially offset by an increase in expenses as a result of the acquisition of Yahoo's operating business on June 13, 2017, acquisition and integration charges primarily in connection with the acquisition of Yahoo's operating business, product realignment charges (see "Special Items") and an increase in expenses as a result of the acquisition of XO.

Depreciation and Amortization Expense

Depreciation and amortization expense increased during 2017 primarily due to the acquisitions of Yahoo's operating business and XO.

2016 Compared to 2015

Cost of Services

Cost of services decreased during 2016 primarily due to the completion of the Access Line Sale on April 1, 2016 (see "Operating Results from Divested Businesses"), as well as a decline in net pension and postretirement benefit cost in our Wireline segment. Partially offsetting this decrease was an increase in costs as a result of the acquisition of AOL on June 23, 2015, the launch of our mobile video application in the third quarter of 2015 and incremental costs incurred as a result of the 2016 Work Stoppage.

Wireless Cost of Equipment

Wireless cost of equipment decreased during 2016 primarily as a result of a 4.6% decline in the number of smartphone units sold, partially offset by an increase in the average cost per unit for smartphones.

Selling, General and Administrative Expense

Selling, general and administrative expense increased during 2016 primarily due to severance, pension and benefit charges recorded in 2016 as compared to severance, pension and benefit credits recorded in 2015 (see "Special Items"), an increase in costs as a result of the acquisition of AOL on June 23, 2015, and the launch of our mobile video application in the third quarter of 2015. These increases were partially offset by a gain on the Access Line Sale (see "Special Items"), a decline in costs as a result of the completion of the Access Line Sale on April 1, 2016 (see "Operating Results from Divested Businesses"), as well as declines in sales commission expense at our Wireless segment and declines in employee costs at our Wireline segment.

Special Items

Special items included in operating expenses (see "Special Items") were as follows:

(dollars in millions)

Years Ended December 31,	**2017**	2016	2015
Severance, Pension and Benefit Charges (Credits)			
Selling, general and administrative expense	**$ 1,391**	$ 2,923	$ (2,256)
Acquisition and Integration Related Charges			
Selling, general and administrative expense	**879**	—	—
Depreciation and amortization	**5**	—	—
Product Realignment			
Cost of services and sales	**171**	—	—
Selling, general and administrative expense	**292**	—	—
Depreciation and amortization	**219**	—	—
Net Gain on Sale of Divested Businesses			
Selling, general and administrative expense	**(1,774)**	(1,007)	—
Gain on Spectrum License Transactions			
Selling, general and administrative expense	**(270)**	(142)	(254)
Total Special Items	**$ 913**	$ 1,774	$ (2,510)

See "Special Items" for a description of these items.

Operating Results From Divested Businesses

On April 1, 2016, we completed the Access Line Sale. On May 1, 2017, we completed the Data Center Sale. The results of operations related to these divestitures and other insignificant transactions are included within Corporate and other for all periods presented to reflect comparable segment operating results consistent with the information regularly reviewed by our chief operating decision maker. The results of operations related to these divestitures included within Corporate and other are as follows:

(dollars in millions)

Years Ended December 31,		2017		2016		2015
Operating Results From Divested Businesses						
Operating revenues	**$**	**368**	$	2,115	$	6,224
Cost of services		**129**		747		2,185
Selling, general and administrative expense		**68**		246		638
Depreciation and amortization expense		**22**		127		278

Other Consolidated Results

Other Income (Expense), Net

Additional information relating to Other income (expense), net is as follows:

(dollars in millions)

							Increase/(Decrease)				
Years Ended December 31,		2017		2016		2015		2017 vs. 2016			2016 vs. 2015	
Interest income	**$**	**82**	$	59	$	115	**$**	**23**	**39.0 %**	$	(56)	(48.7)%
Other, net		**(2,092)**		(1,658)		71		**(434)**	**(26.2)**		(1,729)	nm
Total	**$**	**(2,010)**	$	(1,599)	$	186	**$**	**(411)**	**(25.7)**	$	(1,785)	nm

nm - not meaningful

The change in Other income (expense), net during the year ended December 31, 2017, compared to the similar period in 2016, was primarily driven by early debt redemption costs of $2.0 billion, compared to $1.8 billion recorded during 2016 (see "Special Item" below), as well as a net loss on foreign currency translation adjustments compared to a net gain in the 2016 period. The change in Other income (expense), net during the year ended December 31, 2016, compared to the similar period in 2015, was primarily driven by early debt redemption costs of $1.8 billion recorded during the second quarter of 2016.

Special Item

Special item included in Other income (expense), net was as follows:

(dollars in millions)

Years Ended December 31,		2017		2016		2015
Early debt redemption costs	**$**	**1,983**	$	1,822	$	—

Interest Expense

(dollars in millions)

							Increase/(Decrease)				
Years Ended December 31,		2017		2016		2015		2017 vs. 2016			2016 vs. 2015	
Total interest costs on debt balances	**$**	**5,411**	$	5,080	$	5,504	**$**	**331**	**6.5 %**	$	(424)	(7.7)%
Less capitalized interest costs		**678**		704		584		**(26)**	**(3.7)**		120	20.5
Total	**$**	**4,733**	$	4,376	$	4,920	**$**	**357**	**8.2**	$	(544)	(11.1)
Average debt outstanding	**$**	**115,693**	$	106,113	$	112,838						
Effective interest rate		**4.7%**		4.8%		4.9%						

Total interest costs on debt balances increased during 2017 primarily due to higher average debt balances. Total interest costs on debt balances decreased during 2016 primarily due to lower average debt balances and a lower effective interest rate (see "Consolidated Financial Condition").

Capitalized interest costs were higher in 2016 primarily due to an increase in wireless licenses that are currently under development, including those licenses we acquired in the FCC spectrum license auction during 2015. See Note 2 to the consolidated financial statements for additional information.

(Benefit) Provision for Income Taxes

								(dollars in millions)	
								(Decrease)	
Years Ended December 31,	**2017**		2016		2015	**2017 vs. 2016**		2016 vs. 2015	
(Benefit) provision for income taxes	**$**	**(9,956)**	$ 7,378	$	9,865	**$ (17,334)**	**nm**	$ (2,487)	(25.2)%
Effective income tax rate		**(48.3)%**	35.2%		34.9%				

nm - not meaningful

The effective income tax rate is calculated by dividing the (benefit) provision for income taxes by income before income taxes. The effective income tax rate for 2017 was (48.3)% compared to 35.2% for 2016. The decrease in the effective income tax rate and the provision for income taxes was due to a one-time, non-cash income tax benefit recorded in the current period as a result of the enactment of the Tax Cuts and Jobs Act (TCJA) on December 22, 2017. The TCJA significantly revised the U.S. federal corporate income tax by, among other things, lowering the corporate income tax rate to 21% beginning in 2018 and imposing a mandatory repatriation tax on accumulated foreign earnings. U.S. GAAP accounting for income taxes requires that Verizon record the impacts of any tax law change on our deferred income taxes in the quarter that the tax law change is enacted. Due to the complexities involved in accounting for the enactment of the TCJA, SEC Staff Accounting Bulletin (SAB) 118 allows us to provide a provisional estimate of the impacts of the legislation. Verizon has provisionally estimated, based on currently available information, that the enactment of the TCJA results in a one-time reduction in net deferred income tax liabilities of approximately $16.8 billion, primarily due to the re-measurement of U.S. deferred tax liabilities at the lower 21% U.S. federal corporate income tax rate, and no impact from the repatriation tax. This provisional estimate does not reflect the effects of any state tax law changes that may arise as a result of federal tax reform. Verizon will continue to analyze the effects of the TCJA on its financial statements and operations and include any adjustments to tax expense or benefit from continuing operations in the reporting periods that such adjustments are determined, consistent with the one-year measurement period set forth in SAB 118.

The effective income tax rate for 2016 was 35.2% compared to 34.9% for 2015. The increase in the effective income tax rate was primarily due to the impact of $527 million included in the provision for income taxes from goodwill not deductible for tax purposes in connection with the Access Line Sale on April 1, 2016. This increase was partially offset by the impact that lower income before income taxes in the current period has on each of the reconciling items specified in the table included in Note 11 to the consolidated financial statements. The decrease in the provision for income taxes was primarily due to lower income before income taxes due to severance, pension and benefit charges recorded in 2016 compared to severance, pension and benefit credits recorded in 2015.

A reconciliation of the statutory federal income tax rate to the effective income tax rate for each period is included in Note 11 to the consolidated financial statements.

Consolidated Net Income, Operating Income and EBITDA

Consolidated earnings before interest, taxes, depreciation and amortization expenses (Consolidated EBITDA) and Consolidated Adjusted EBITDA, which are presented below, are non-GAAP measures that we believe are useful to management, investors and other users of our financial information in evaluating operating profitability on a more variable cost basis as they exclude the depreciation and amortization expense related primarily to capital expenditures and acquisitions that occurred in prior years, as well as in evaluating operating performance in relation to Verizon’s competitors. Consolidated EBITDA is calculated by adding back interest, taxes, depreciation and amortization expense, equity in losses of unconsolidated businesses and other income (expense), net to net income.

Consolidated Adjusted EBITDA is calculated by excluding the effect of special items from the calculation of Consolidated EBITDA. We believe this measure is useful to management, investors and other users of our financial information in evaluating the effectiveness of our operations and underlying business trends in a manner that is consistent with management’s evaluation of business performance. We believe Consolidated Adjusted EBITDA is widely used by investors to compare a company’s operating performance to its competitors by minimizing impacts caused by differences in capital structure, taxes and depreciation policies. Further, the exclusion of special items enables comparability to prior period performance and trend analysis. See "Special Items" for additional details regarding these special items.

Operating expenses include pension and other postretirement benefit related credits and/or charges based on actuarial assumptions, including projected discount rates and an estimated return on plan assets. Such estimates are updated at least annually at the end of the fiscal year to reflect actual return on plan assets and updated actuarial assumptions or more frequently if significant events arise which require an interim remeasurement. The adjustment has been recognized in the income statement during the fourth quarter or upon a remeasurement event pursuant to our accounting policy for the recognition of actuarial gains/losses. We believe the exclusion of these actuarial gains or losses enables management, investors and other users of our financial information to assess our performance on a more comparable basis and is consistent with management’s own evaluation of performance.

It is management’s intent to provide non-GAAP financial information to enhance the understanding of Verizon’s GAAP financial information, and it should be considered by the reader in addition to, but not instead of, the financial statements prepared in accordance with GAAP. Each non-GAAP financial measure is presented along with the corresponding GAAP measure so as not to imply that more emphasis should be placed on the non-GAAP measure. We believe that non-GAAP measures provide relevant and useful information, which is used by management, investors and other users of our financial information as well as by our management in assessing both consolidated and segment performance. The non-GAAP financial information presented may be determined or calculated differently by other companies.

(dollars in millions)			
Years Ended December 31,	**2017**	2016	2015
Consolidated Net Income	**$ 30,550**	$ 13,608	$ 18,375
Add (Less):			
(Benefit) provision for income taxes	**(9,956)**	7,378	9,865
Interest expense	**4,733**	4,376	4,920
Other expense (income), net	**2,010**	1,599	(186)
Equity in losses of unconsolidated businesses	**77**	98	86
Consolidated Operating Income	**27,414**	27,059	33,060
Add Depreciation and amortization expense	**16,954**	15,928	16,017
Consolidated EBITDA	**44,368**	42,987	49,077
Add (Less):			
Severance, pension and benefit charges (credits)	**1,391**	2,923	(2,256)
Product realignment	**463**	—	—
Gain on spectrum license transactions	**(270)**	(142)	(254)
Net gain on sale of divested businesses	**(1,774)**	(1,007)	—
Acquisition and integration related charges	**879**	—	—
Consolidated Adjusted EBITDA	**$ 45,057**	$ 44,761	$ 46,567

The changes in Consolidated Net Income, Consolidated Operating Income, Consolidated EBITDA and Consolidated Adjusted EBITDA in the table above were primarily a result of the factors described in connection with operating revenues and operating expenses.

Segment Results of Operations

We have two reportable segments, Wireless and Wireline, which we operate and manage as strategic business units and organize by products and services, and customer groups, respectively. We measure and evaluate our reportable segments based on segment operating income. The use of segment operating income is consistent with the chief operating decision maker's assessment of segment performance.

Segment earnings before interest, taxes, depreciation and amortization (Segment EBITDA), which is presented below, is a non-GAAP measure and does not purport to be an alternative to operating income (loss) as a measure of operating performance. We believe this measure is useful to management, investors and other users of our financial information in evaluating operating profitability on a more variable cost basis as it excludes the depreciation and amortization expenses related primarily to capital expenditures and acquisitions that occurred in prior years, as well as in evaluating operating performance in relation to our competitors. Segment EBITDA is calculated by adding back depreciation and amortization expense to segment operating income (loss). Segment EBITDA margin is calculated by dividing Segment EBITDA by total segment operating revenues.

You can find additional information about our segments in Note 12 to the consolidated financial statements.

Wireless

Operating Revenues and Selected Operating Statistics

(dollars in millions, except ARPA and I-ARPA)

Years Ended December 31,	2017	2016	2015	(Decrease)/Increase 2017 vs. 2016		2016 vs. 2015	
Service	$ 63,121	$ 66,580	$ 70,396	$ (3,459)	(5.2)%	$ (3,816)	(5.4)%
Equipment	18,889	17,515	16,924	1,374	7.8	591	3.5
Other	5,501	5,091	4,360	410	8.1	731	16.8
Total Operating Revenues	$ 87,511	$ 89,186	$ 91,680	$ (1,675)	(1.9)	$ (2,494)	(2.7)
Connections ('000):[1]							
Retail connections	116,257	114,243	112,108	2,014	1.8	2,135	1.9
Retail postpaid connections	110,854	108,796	106,528	2,058	1.9	2,268	2.1
Net additions in period ('000):[2]							
Retail connections	2,041	2,155	3,956	(114)	(5.3)	(1,801)	(45.5)
Retail postpaid connections	2,084	2,288	4,507	(204)	(8.9)	(2,219)	(49.2)
Churn Rate:							
Retail connections	1.25%	1.26%	1.24%				
Retail postpaid connections	1.01%	1.01%	0.96%				
Account Statistics:							
Retail postpaid ARPA	$ 135.99	$ 144.32	$ 152.63	$ (8.33)	(5.8)	$ (8.31)	(5.4)
Retail postpaid I-ARPA	$ 166.28	$ 167.70	$ 163.63	$ (1.42)	(0.8)	$ 4.07	2.5
Retail postpaid accounts ('000)[1]	35,404	35,410	35,736	(6)	—	(326)	(0.9)
Retail postpaid connections per account[1]	3.13	3.07	2.98	0.06	2.0	0.09	3.0

(1) As of end of period
(2) Excluding acquisitions and adjustments

2017 Compared to 2016

Wireless' total operating revenues decreased by $1.7 billion, or 1.9%, during 2017 compared to 2016, primarily as a result of a decline in service revenues, partially offset by an increase in equipment revenues.

Accounts and Connections

Retail postpaid accounts primarily represent retail customers with Verizon Wireless that are directly served and managed by Verizon Wireless and use its branded services. Accounts include unlimited plans, shared data plans and corporate accounts, as well as legacy single connection plans and family plans. A single account may include monthly wireless services for a variety of connected devices.

Retail connections represent our retail customer device postpaid and prepaid connections. Churn is the rate at which service to connections is terminated. Retail connections under an account may include those from smartphones and basic phones (collectively, phones) as well as tablets and other devices connected to the Internet, including retail IoT devices. The U.S. wireless market has achieved a high penetration of smartphones, which reduces the opportunity for new phone connection growth for the industry. Retail postpaid connection net additions decreased during 2017 compared to 2016, primarily due to an increase in disconnects of Internet devices, partially offset by a decline in phone disconnects.

Retail Postpaid Connections per Account

Retail postpaid connections per account is calculated by dividing the total number of retail postpaid connections by the number of retail postpaid accounts as of the end of the period. Retail postpaid connections per account increased 2.0% as of December 31, 2017 compared to December 31, 2016. The increase in retail postpaid connections per account is primarily due to an increase in Internet devices, including tablets and other connected devices, which represented 19.0% of our retail postpaid connection base as of December 31, 2017 compared to 18.3% as of December 31, 2016. The increase in Internet devices is primarily driven by other connected devices, primarily wearables, as of December 31, 2017 compared to December 31, 2016.

Service Revenue

Service revenue, which does not include recurring device payment plan billings related to the Verizon device payment program, decreased by $3.5 billion, or 5.2%, during 2017 compared to 2016, primarily due to lower postpaid service revenue, including decreased overage revenue and decreased access revenue. Overage revenue pressure was primarily related to the introduction of unlimited pricing plans in 2017 and the ongoing migration to the pricing plans introduced in 2016 that feature safety mode and carryover data. Service revenue was also negatively impacted as a result of the ongoing customer migration to plans with unsubsidized service pricing. The pace of migration to unsubsidized price plans is approaching steady state, as the majority of customers are on such plans at December 31, 2017.

Customer migration to unsubsidized service pricing was driven in part by an increase in the activation of devices purchased under the Verizon device payment program. For 2017, phone activations under the Verizon device payment program represented approximately 78% of retail postpaid phones activated compared to approximately 77% during 2016. At December 31, 2017, approximately 80% of our retail postpaid phone connections were on unsubsidized service pricing compared to approximately 67% at December 31, 2016. At December 31, 2017, approximately 49% of our retail postpaid phone connections have a current participation in the Verizon device payment program compared to approximately 46% at December 31, 2016.

Service revenue plus recurring device payment plan billings related to the Verizon device payment program, which represents the total value received from our wireless connections, decreased $0.6 billion, or 0.8%, during 2017 compared to 2016.

Retail postpaid ARPA (the average service revenue per account from retail postpaid accounts), which does not include recurring device payment plan billings related to the Verizon device payment program, was negatively impacted during 2017 compared to 2016, as a result of customer migration to plans with unsubsidized service pricing, including our new price plans launched during 2016, which feature safety mode and carryover data, and the introduction of unlimited data plans in 2017. Retail postpaid I-ARPA (the average service revenue per account from retail postpaid accounts plus recurring device payment plan billings), which represents the monthly recurring value received on a per account basis from our retail postpaid accounts, decreased 0.8% during 2017 compared to 2016. The decrease was driven by service revenue decline, partially offset by increasing recurring device payment plan billings.

Equipment Revenue

Equipment revenue increased $1.4 billion, or 7.8%, during 2017 compared to 2016, as a result of an increase in the Verizon device payment program take rate and an increase in the price of devices, partially offset by an overall decline in device sales.

Under the Verizon device payment program, we recognize a higher amount of equipment revenue at the time of sale of devices. For 2017, phone activations under the Verizon device payment program represented approximately 78% of retail postpaid phones activated compared to approximately 77% during 2016.

Other Revenue

Other revenue includes non-service revenues such as regulatory fees, cost recovery surcharges, revenues associated with our device protection package, sublease rentals and financing revenue. Other revenue increased $0.4 billion, or 8.1%, during 2017 compared to 2016, primarily due to a $0.3 billion increase in financing revenues from our device payment program and a $0.2 billion volume-driven increase in revenues related to our device protection package.

2016 Compared to 2015

Wireless' total operating revenues decreased by $2.5 billion, or 2.7%, during 2016 compared to 2015, primarily as a result of a decline in service revenue, partially offset by increases in equipment and other revenues.

Accounts and Connections

Retail postpaid connection net additions decreased during 2016 compared to 2015, primarily due to a decrease in retail postpaid connection gross additions as well as a higher retail postpaid connection churn rate.

Retail Postpaid Connections per Account

Retail postpaid connections per account increased 3.0% as of December 31, 2016 compared to December 31, 2015, primarily due to increases in Internet devices, which represented 18.3% of our retail postpaid connection base as of December 31, 2016 compared to 16.8% as of December 31, 2015.

Service Revenue

Service revenue, which does not include recurring device payment plan billings related to the Verizon device payment program, decreased by $3.8 billion, or 5.4%, during 2016 compared to 2015, primarily driven by lower retail postpaid service revenue. Retail postpaid service revenue was negatively impacted as a result of customer migration to plans with unsubsidized service pricing, including our new price plans launched during 2016 that feature safety mode and carryover data. Customer migration to unsubsidized service pricing was driven in part by an increase in the activation of devices purchased under the Verizon device payment program. For 2016, phone activations under the Verizon device payment program were 77% of retail postpaid phones activated. At December 31, 2016, approximately 67% of our retail postpaid phone connections were on unsubsidized service pricing compared to approximately 42% at December 31, 2015. At December 31, 2016, approximately 46% of our retail postpaid phone connections participated in the Verizon device payment program compared to approximately 29% at December 31, 2015. The decrease in service revenue was partially offset by an increase in retail postpaid connections compared to the prior year. Service revenue plus recurring device payment plan billings related to the Verizon device payment program, which represents the total value received from our wireless connections, increased 2.0% during 2016.

Retail postpaid ARPA, which does not include recurring device payment plan billings related to the Verizon device payment program, was negatively impacted during 2016 as a result of customer migration to plans with unsubsidized service pricing, including our new price plans launched during 2016 that feature safety mode and carryover data. Retail postpaid I-ARPA, which represents the monthly recurring value received on a per account basis from our retail postpaid accounts, increased 2.5% during 2016.

Equipment Revenue

Equipment revenue increased $0.6 billion, or 3.5%, during 2016 compared to 2015, as a result of an increase in device sales, primarily smartphones, under the Verizon device payment program, partially offset by a decline in device sales under the traditional fixed-term service plans, promotional activity and a decline in overall sales volumes.

Under the Verizon device payment program, we recognize a higher amount of equipment revenue at the time of sale of devices. For the year ended December 31, 2016, phone activations under the Verizon device payment program represented approximately 70% of retail postpaid phones activated compared to approximately 54% during 2015.

Other Revenue

Other revenue increased $0.7 billion, or 16.8%, during 2016 compared to 2015, primarily due to financing revenues from our device payment program, cost recovery surcharges and a volume-driven increase in revenues related to our device protection package.

Operating Expenses

(dollars in millions)

				Increase/(Decrease)			
Years Ended December 31,	**2017**	2016	2015	**2017 vs. 2016**		2016 vs. 2015	
Cost of services	**$ 7,990**	$ 7,988	$ 7,803	**$ 2**	**— %**	$ 185	2.4 %
Cost of equipment	**22,147**	22,238	23,119	**(91)**	**(0.4)**	(881)	(3.8)
Selling, general and administrative expense	**18,772**	19,924	21,805	**(1,152)**	**(5.8)**	(1,881)	(8.6)
Depreciation and amortization expense	**9,395**	9,183	8,980	**212**	**2.3**	203	2.3
Total Operating Expenses	**$ 58,304**	$ 59,333	$ 61,707	**$ (1,029)**	**(1.7)**	$ (2,374)	(3.8)

Cost of Services

Cost of services remained consistent during 2017 compared to 2016, primarily due to higher rent expense as a result of an increase in macro and small cell sites supporting network capacity expansion and densification, as well as a volume-driven increase in costs related to the device protection package offered to our customers. Partially offsetting these increases were decreases in costs related to roaming, long distance and cost of data.

Cost of services increased $0.2 billion, or 2.4%, during 2016 compared to 2015, primarily due to higher rent expense as a result of an increase in macro and small cell sites supporting network capacity expansion and densification, as well as a volume-driven increase in costs related to the device protection package offered to our customers. Partially offsetting these increases were decreases in network connection costs and cost of roaming.

Cost of Equipment

Cost of equipment decreased $0.1 billion, or 0.4%, during 2017 compared to 2016, primarily as a result of a decline in the number of smartphone and internet units sold, substantially offset by a shift to higher priced units in the mix of devices sold.

Cost of equipment decreased $0.9 billion, or 3.8%, during 2016 compared to 2015, primarily as a result of a 4.6% decline in the number of smartphone units sold, partially offset by an increase in the average cost per unit for smartphones.

Selling, General and Administrative Expense

Selling, general and administrative expense decreased $1.2 billion, or 5.8%, during 2017 compared to 2016, primarily due to a $0.6 billion decline in sales commission expense as well as a decline of approximately $0.2 billion in employee related costs primarily due to reduced headcount, as well as a decline in bad debt expense, non-income taxes and advertising expense. The decline in sales commission expense was driven by an increase in the proportion of activations under the Verizon device payment program, which has a lower commission per unit than activations under traditional fixed-term service plans, as well as an overall decline in activations.

Selling, general and administrative expense decreased $1.9 billion, or 8.6%, during 2016 compared to 2015, primarily due to a $1.2 billion decline in sales commission expense as well as declines in employee related costs, non-income taxes, bad debt expense and advertising. The decline in sales commission expense was driven by an overall decline in activations as well as an increase in the proportion of activations under the Verizon device payment program, which has a lower commission per unit than activations under traditional fixed-term service plans. The decline in employee related costs was a result of reduced headcount.

Depreciation and Amortization Expense

Depreciation and amortization expense increased during 2017 and 2016 primarily driven by an increase in net depreciable assets.

Segment Operating Income and EBITDA

(dollars in millions)

				(Decrease)/Increase			
Years Ended December 31,	**2017**	2016	2015	**2017 vs. 2016**		2016 vs. 2015	
Segment Operating Income	**$ 29,207**	$ 29,853	$ 29,973	**$ (646)**	**(2.2)%**	$ (120)	(0.4)%
Add Depreciation and amortization expense	**9,395**	9,183	8,980	**212**	**2.3**	203	2.3
Segment EBITDA	**$ 38,602**	$ 39,036	$ 38,953	**$ (434)**	**(1.1)**	$ 83	0.2

Segment operating income margin	**33.4%**	33.5%	32.7%
Segment EBITDA margin	**44.1%**	43.8%	42.5%

The changes in the table above during the periods presented were primarily a result of the factors described in connection with operating revenues and operating expenses.

Wireline

During the first quarter of 2017, Verizon reorganized the customer groups within its Wireline segment. Previously, the customer groups in the Wireline segment consisted of Mass Markets (which included Consumer Retail and Small Business subgroups), Global Enterprise and Global Wholesale. Pursuant to the reorganization, there are now four customer groups within the Wireline segment: Consumer Markets, which includes the customers previously included in Consumer Retail; Enterprise Solutions, which includes the large business customers, including multinational corporations, and federal government customers previously included in Global Enterprise; Partner Solutions, which includes the customers previously included in Global Wholesale; and Business Markets, a new customer group, which includes U.S.-based small business customers previously included in Mass Markets and U.S.-based medium business customers, state and local government customers, and educational institutions previously included in Global Enterprise.

The operating revenues from XO are included in the Wireline segment results as of February 2017, following the completion of the acquisition, and are included with the Enterprise Solutions, Partner Solutions and Business Markets customer groups. Total operating revenues of XO for the year ended December 31, 2017 were $1.1 billion.

The operating results and statistics for all periods presented below exclude the results of the Access Line Sale in 2016, the Data Center Sale in 2017, and other insignificant transactions (see "Operating Results from Divested Businesses"). The results were adjusted to reflect comparable segment operating results consistent with the information regularly reviewed by our chief operating decision maker.

Operating Revenues and Selected Operating Statistics

(dollars in millions)

				Increase/(Decrease)			
Years Ended December 31,	**2017**	2016	2015	**2017 vs. 2016**		2016 vs. 2015	
Consumer Markets	**$ 12,777**	$ 12,751	$ 12,696	**$ 26**	**0.2 %**	$ 55	0.4 %
Enterprise Solutions	**9,167**	9,164	9,378	**3**	**—**	(214)	(2.3)
Partner Solutions	**4,917**	4,927	5,189	**(10)**	**(0.2)**	(262)	(5.0)
Business Markets	**3,585**	3,356	3,553	**229**	**6.8**	(197)	(5.5)
Other	**234**	312	334	**(78)**	**(25.0)**	(22)	(6.6)
Total Operating Revenues	**$ 30,680**	$ 30,510	$ 31,150	**$ 170**	**0.6**	$ (640)	(2.1)
Connections ('000):(1)							
Total voice connections	**12,821**	13,939	15,035	**(1,118)**	**(8.0)**	(1,096)	(7.3)
Total Broadband connections	**6,959**	7,038	7,085	**(79)**	**(1.1)**	(47)	(0.7)
Fios Internet subscribers	**5,850**	5,653	5,418	**197**	**3.5**	235	4.3
Fios video subscribers	**4,619**	4,694	4,635	**(75)**	**(1.6)**	59	1.3

(1) As of end of period

Wireline's revenues increased $0.2 billion, or 0.6%, during 2017 compared to 2016, primarily due to increases in Business Markets, as a result of the acquisition of XO, and Fios revenues. The 2016 Work Stoppage negatively impacted revenue for the year ended December 31, 2016.

Fios revenues were $11.7 billion during 2017 compared to $11.2 billion during 2016. During 2017, our Fios Internet subscriber base grew by 3.5% and our Fios Video subscriber base decreased by 1.6%, compared to 2016, reflecting the ongoing shift from traditional linear video to over the top offerings.

Consumer Markets

Consumer Markets operations provide broadband Internet and video services (including HSI, Fios Internet and Fios video services) and local and long distance voice services to residential subscribers.

2017 Compared to 2016

Consumer Markets revenues increased 0.2% during 2017 compared to 2016, due to increases in Fios revenues as a result of subscriber growth for Fios Internet services fueled by the introduction of gigabit speed data services, as well as higher pay-per-view sales due to marquee events during the third quarter, partially offset by the continued decline of voice service and HSI revenues.

Consumer Fios revenues increased $0.4 billion, or 3.7%, during 2017 compared to 2016. Fios represented approximately 85% of Consumer revenue during 2017 compared to approximately 82% during 2016.

The decline in voice service revenues was primarily due to a 7.5% decline in retail residence voice connections resulting primarily from competition and technology substitution with wireless, competing voice over Internet Protocol (VoIP) and cable telephony services. Total voice connections include traditional switched access lines in service, as well as Fios digital voice connections.

2016 Compared to 2015

Consumer Markets revenues increased $0.1 billion, or 0.4%, during 2016 compared to 2015, due to increases in Fios revenues as a result of subscriber growth for Fios services, partially offset by the continued decline of voice service revenues.

Our Fios connection growth for 2016 was impacted by the 2016 Work Stoppage. Consumer Fios revenues increased $0.4 billion, or 4.3%, during 2016 compared to 2015. Fios represented approximately 82% of Consumer revenue during 2016 compared to approximately 79% during 2015.

The decline of voice service revenues was primarily due to a 7.5% decline in retail residence voice connections resulting primarily from competition and technology substitution with wireless, competing VoIP and cable telephony services. Total voice connections include traditional switched access lines in service as well as Fios digital voice connections.

Enterprise Solutions

Enterprise Solutions helps customers deliver an adaptive enterprise, while mitigating risk and maintaining continuity, to capitalize on the data driven world and create personalized experiences. Enterprise Solutions provides professional and integrated managed services, delivering solutions for large businesses, including multinational corporations, and federal government customers. Enterprise Solutions offers traditional circuit-based network services, and advanced networking solutions including Private Internet Protocol (IP), Ethernet, and Software-Defined Wide Area Network, along with our traditional voice services and advanced workforce productivity and customer contact center solutions. Our Enterprise Solutions include security services to manage, monitor, and mitigate cyber-attacks.

2017 Compared to 2016

Enterprise Solutions revenues remained consistent during 2017 compared to 2016. Increased revenues resulting from the acquisition of XO were fully offset by declines in traditional data and voice communications services as a result of competitive price pressures.

2016 Compared to 2015

Enterprise Solutions revenues decreased $0.2 billion, or 2.3%, during 2016 compared to 2015, due to declines in traditional data and advanced networking solutions and voice communications services. Also contributing to the decrease was the negative impact of foreign exchange rates.

Partner Solutions

Partner Solutions provides communications services, including data, voice and local dial tone and broadband services primarily to local, long distance and other carriers that use our facilities to provide services to their customers.

2017 Compared to 2016

Partner Solutions revenues decreased 0.2% during 2017 compared to 2016, primarily due to declines in traditional voice revenues due to the effect of technology substitution, as well as continuing contraction of market rates due to competition, offset by revenues resulting from the acquisition of XO. As a result of technology substitution and the elimination of affiliate access lines due to the acquisition of XO, the number of core data circuits at December 31, 2017 decreased 26.8% compared to December 31, 2016. The decline in traditional voice revenue was driven by a 10.1% decline in domestic wholesale connections at December 31, 2017, compared to December 31, 2016.

2016 Compared to 2015

Partner Solutions revenues decreased $0.3 billion, or 5.0%, during 2016 compared to 2015, primarily due to declines in data revenues and traditional voice revenues driven by the effect of technology substitution as well as the continuing contraction of market rates due to competition. As a result of technology substitution, the number of core data circuits at December 31, 2016 decreased 16.3% compared to December 31, 2015. The decline in traditional voice revenue was driven by a 5.8% decline in domestic wholesale connections at December 31, 2016, compared to December 31, 2015.

Business Markets

Business Markets offers traditional voice and networking products, Fios services, IP Networking, advanced voice solutions, security, and managed IT services to U.S.-based small and medium businesses, state and local governments, and educational institutions.

2017 Compared to 2016

Business Markets revenues increased $0.2 billion, or 6.8%, during 2017 compared to 2016, primarily due to the acquisition of XO, partially offset by revenue declines related to the loss of voice and HSI connections as a result of competitive price pressures.

2016 Compared to 2015

Business Markets revenues decreased $0.2 billion, or 5.5%, during 2016 compared to 2015, primarily due to revenue declines related to the loss of voice connections as a result of competitive price pressures.

Operating Expenses

(dollars in millions)

				(Decrease)/Increase			
Years Ended December 31,	**2017**	2016	2015	**2017 vs. 2016**		2016 vs. 2015	
Cost of services	**$ 17,922**	$ 18,353	$ 18,483	**$ (431)**	**(2.3)%**	$ (130)	(0.7)%
Selling, general and administrative expense	**6,274**	6,476	7,140	**(202)**	**(3.1)**	(664)	(9.3)
Depreciation and amortization expense	**6,104**	5,975	6,353	**129**	**2.2**	(378)	(5.9)
Total Operating Expenses	**$ 30,300**	$ 30,804	$ 31,976	**$ (504)**	**(1.6)**	$ (1,172)	(3.7)

Cost of Services

Cost of services decreased $0.4 billion, or 2.3%, during 2017 compared to 2016, primarily due to the fact that we did not incur incremental costs in 2017 that were incurred in 2016 as a result of the 2016 Work Stoppage, as well as a decline in net pension and postretirement benefit costs primarily driven by collective bargaining agreements ratified in June 2016. These decreases were partially offset by an increase in content costs associated with continued programming license fee increases as well as an increase in access costs as a result of the acquisition of XO.

Cost of services decreased $0.1 billion, or 0.7%, during 2016 compared to 2015, primarily due to a decline in net pension and postretirement benefit cost, and a decline in access costs driven by declines in overall wholesale long distance volumes and rates. These decreases were partially offset by incremental costs incurred as a result of the 2016 Work Stoppage as well as an increase in content costs associated with continued programming license fee increases and continued Fios subscriber growth.

Selling, General and Administrative Expense

Selling, general and administrative expense decreased $0.2 billion, or 3.1%, during 2017 compared to 2016, due to a decline in net pension and postretirement benefit costs, primarily driven by collective bargaining agreements ratified in June 2016 and the fact that there were no 2016 Work Stoppage costs in 2017, partially offset by a 9.5% increase in expenses resulting from the acquisition of XO.

Selling, general and administrative expense decreased $0.7 billion, or 9.3%, during 2016 compared to 2015, primarily due to declines in employee costs as a result of reduced headcount, a decline in net pension and postretirement benefit costs and decreases in non-income taxes.

Depreciation and Amortization Expense

Depreciation and amortization expense increased during 2017 compared to 2016 primarily due to increases in net depreciable assets as a result of the acquisition of XO.

Depreciation and amortization expense decreased during 2016 compared to 2015 primarily due to decreases in net depreciable assets.

Segment Operating Income (Loss) and EBITDA

(dollars in millions)

Years Ended December 31,	**2017**	2016	2015	**Increase/(Decrease) 2017 vs. 2016**		Increase/(Decrease) 2016 vs. 2015	
Segment Operating Income (Loss)	**$ 380**	$ (294)	$ (826)	**$ 674**	nm	$ 532	64.4 %
Add Depreciation and amortization expense	**6,104**	5,975	6,353	**129**	2.2%	(378)	(5.9)
Segment EBITDA	**$ 6,484**	$ 5,681	$ 5,527	**$ 803**	14.1	$ 154	2.8

Segment operating income (loss) margin	**1.2%**	(1.0)%	(2.7)%
Segment EBITDA margin	**21.1%**	18.6 %	17.7 %

nm - not meaningful

The changes in the table above during the periods presented were primarily a result of the factors described in connection with operating revenues and operating expenses.

Special Items

Severance, Pension and Benefit Charges (Credits)

During 2017, we recorded pre-tax severance, pension and benefit charges of approximately $1.4 billion, exclusive of acquisition related severance charges, in accordance with our accounting policy to recognize actuarial gains and losses in the period in which they occur. The pension and benefit remeasurement charges of approximately $0.9 billion were primarily driven by a decrease in our discount rate assumption used to determine the current year liabilities of our pension and postretirement benefit plans from a weighted-average of 4.2% at December 31, 2016 to a weighted-average of 3.7% at December 31, 2017 ($2.6 billion). The charges were partially offset by the difference between our estimated return on assets of 7.0% and our actual return on assets of 14.0% ($1.2 billion), a change in mortality assumptions primarily driven by the use of updated actuarial tables (MP-2017) issued by the Society of Actuaries ($0.2 billion) and other assumption adjustments ($0.3 billion). As part of these charges, we also recorded severance costs of $0.5 billion under our existing separation plans.

During 2016, we recorded net pre-tax severance, pension and benefit charges of $2.9 billion in accordance with our accounting policy to recognize actuarial gains and losses in the period in which they occur. The pension and benefit remeasurement charges of $2.5 billion were primarily driven by a decrease in our discount rate assumption used to determine the current year liabilities of our pension and other postretirement benefit plans from a weighted-average of 4.6% at December 31, 2015 to a weighted-average of 4.2% at December 31, 2016 ($2.1 billion), updated health care trend cost assumptions ($0.9 billion), the difference between our estimated return on assets of 7.0% and our actual return on assets of 6.0% ($0.2 billion) and other assumption adjustments ($0.3 billion). These charges were partially offset by a change in mortality assumptions primarily driven by the use of updated actuarial tables (MP-2016) issued by the Society of Actuaries ($0.5 billion) and lower negotiated prescription drug pricing ($0.5 billion). As part of these charges, we also recorded severance costs of $0.4 billion under our existing separation plans.

The net pre-tax severance, pension and benefit charges during 2016 were comprised of a net pre-tax pension remeasurement charge of $0.2 billion measured as of March 31, 2016 related to settlements for employees who received lump-sum distributions in one of our defined benefit pension plans, a net pre-tax pension and benefit remeasurement charge of $0.8 billion measured as of April 1, 2016 related to curtailments in three of our defined benefit pension and one of our other postretirement plans, a net pre-tax pension and benefit remeasurement charge of $2.7 billion measured as of May 31, 2016 in two defined benefit pension plans and three other postretirement benefit plans as a result of our accounting for the contractual healthcare caps and bargained for changes, a net pre-tax pension remeasurement charge of $0.1 billion measured as of May 31, 2016 related to settlements for employees who received lump-sum distributions in three of our defined benefit pension plans, a net pre-tax pension remeasurement charge of $0.6 billion measured as of August 31, 2016 related to settlements for employees who received lump-sum distributions in five of our defined benefit pension plans, and a net pre-tax pension and benefit credit of $1.9 billion as a result of our fourth quarter remeasurement of our pension and other postretirement assets and liabilities based on updated actuarial assumptions.

During 2015, we recorded net pre-tax severance, pension and benefit credits of approximately $2.3 billion primarily for our pension and postretirement plans in accordance with our accounting policy to recognize actuarial gains and losses in the year in which they occur. The credits were primarily driven by an increase in our discount rate assumption used to determine the current year liabilities from a weighted-average of 4.2% at December 31, 2014 to a weighted-average of 4.6% at December 31, 2015 ($2.5 billion), the execution of a new prescription drug contract during 2015 ($1.0 billion) and a change in mortality assumptions primarily driven by the use of updated actuarial tables (MP-2015) issued by the Society of Actuaries ($0.9 billion), partially offset by the difference between our estimated return on assets of 7.25% at December 31, 2014 and our actual return on assets of 0.7% at December 31, 2015 ($1.2 billion), severance costs recorded under our existing separation plans ($0.6 billion) and other assumption adjustments ($0.3 billion).

The Consolidated Adjusted EBITDA non-GAAP measure presented in the Consolidated Net Income, Operating Income and EBITDA discussion (see "Consolidated Results of Operations") excludes the severance, pension and benefit charges (credits) presented above.

Early Debt Redemptions

During 2017 and 2016, we recorded losses on early debt redemptions of $2.0 billion and $1.8 billion, respectively.

We recognize losses on early debt redemptions in Other income (expense), net on our consolidated statements of income. See Note 6 to the consolidated financial statements for additional information related to our early debt redemptions.

Net Gain on Sale of Divested Businesses

During the second quarter of 2017, we completed the Data Center Sale. In connection with the Data Center Sale and other insignificant transactions, we recorded a net gain on the sale of divested businesses of approximately $1.8 billion in Selling, general and administrative expense on our consolidated statement of income for the year ended December 31, 2017.

During the second quarter of 2016, we completed the Access Line Sale. As a result of this transaction, we recorded a pre-tax gain of approximately $1.0 billion in Selling, general and administrative expense on our consolidated statement of income for the year ended December 31, 2016. The pre-tax gain included a $0.5 billion pension and postretirement benefit curtailment gain due to the elimination of the accrual of pension and other postretirement benefits for some or all future services of a significant number of employees covered in three of our defined benefit pension plans and one of our other postretirement benefit plans.

The Consolidated Adjusted EBITDA non-GAAP measure presented in the Consolidated Net Income, Operating Income and EBITDA discussion (see "Consolidated Results of Operations") excludes the gain on the Access Line Sale described above.

Gain on Spectrum License Transactions

During the fourth quarter of 2017, we completed a license exchange transaction with affiliates of T-Mobile USA Inc. (T-Mobile USA) to exchange certain Advanced Wireless Services (AWS) and Personal Communication Services (PCS) spectrum licenses. As a result of this agreement, we received $0.4 billion of AWS and PCS spectrum licenses at fair value and recorded a pre-tax gain of $0.1 billion in Selling, general and administrative expense on our consolidated statement of income for the year ended December 31, 2017.

During the first quarter of 2017, we completed a license exchange transaction with affiliates of AT&T Inc. (AT&T) to exchange certain AWS and PCS spectrum licenses. As a result of this non-cash exchange, we received $1.0 billion of AWS and PCS spectrum licenses at fair value and recorded a pre-tax gain of $0.1 billion in Selling, general and administrative expense on our consolidated statement of income for the year ended December 31, 2017.

During the first quarter of 2016, we completed a license exchange transaction with affiliates of AT&T to exchange certain AWS and PCS spectrum licenses. As a result of this non-cash exchange, we received $0.4 billion of AWS and PCS spectrum licenses at fair value and we recorded a pre-tax gain of approximately $0.1 billion in Selling, general and administrative expense on our consolidated statement of income for the year ended December 31, 2016.

During the fourth quarter of 2015, we completed a license exchange transaction with an affiliate of T-Mobile USA to exchange certain AWS and PCS licenses. As a result of this non-cash exchange, we received $0.4 billion of AWS and PCS spectrum licenses at fair value and we recorded a pre-tax gain of approximately $0.3 billion in Selling, general and administrative expense on our consolidated statement of income for the year ended December 31, 2015.

The Consolidated Adjusted EBITDA non-GAAP measure presented in the Consolidated Net Income, Operating Income and EBITDA discussion (see "Consolidated Results of Operations") excludes the gains on the spectrum license transactions described above.

Acquisition and Integration Related Charges

During the second quarter of 2017, we completed the acquisition of Yahoo's operating business. We recorded acquisition and integration related charges of approximately $0.9 billion, including $0.6 billion of acquisition related severance charges during the year ended December 31, 2017, primarily related to the acquisition of Yahoo's operating business. These charges were primarily recorded in Selling, general and administrative expense on our consolidated statement of income for the year ended December 31, 2017.

The Consolidated Adjusted EBITDA non-GAAP measure presented in the Consolidated Net Income, Operating Income and EBITDA discussion (see "Consolidated Results of Operations") excludes the acquisition and integration related charges described above.

Product Realignment

During the fourth quarter of 2017, we recorded product realignment charges of approximately $0.7 billion. Product realignment costs primarily related to charges taken against certain early-stage developmental technologies. These non-cash charges were recorded in Selling, general and administrative expense, Cost of services, and Depreciation and amortization expense on our consolidated statement of income for the year ended December 31, 2017.

The Consolidated Adjusted EBITDA non-GAAP measure presented in the Consolidated Net Income, Operating Income and EBITDA discussion (see "Consolidated Results of Operations") excludes the product realignment costs described above.

Impact of Tax Reform

During the fourth quarter of 2017, we recorded a one-time corporate tax reduction of approximately $16.8 billion in Benefit (provision) for income taxes on our consolidated statement of income for the year ended December 31, 2017.

Operating Environment and Trends

The industries that we operate in are highly competitive, which we expect to continue particularly as traditional, non-traditional and emerging service providers seek increased market share. We believe that our high-quality customer base and networks differentiate us from our competitors and give us the ability to plan and manage through changing economic and competitive conditions. We remain focused on executing on the fundamentals of the business: maintaining a high-quality customer base, delivering strong financial and operating results and generating strong free cash flows. We will continue to invest for growth, which we believe is the key to creating value for our shareowners. We are investing in innovative technologies, such as 5G and high-speed fiber, as well as the platforms that will position us to capture incremental profitable growth in new areas, like media and telematics, to position ourselves at the center of growth trends of the future.

The U.S. wireless market has achieved a high penetration of smartphones which reduces the opportunity for new phone connection growth for the industry. We expect future revenue growth in the industry to be driven by monetization of usage through new ecosystems, and penetration increases in other connected devices including tablets and IoT devices. Current and potential competitors in the U.S. wireless market include other national wireless service providers, various regional wireless service providers, wireless resellers, cable companies, as well as other communications and technology companies providing wireless products and services.

Service and equipment pricing continues to play an important role in the wireless competitive landscape. We compete in this area by offering our customers services and devices that we believe they will regard as the best available value for the price. As the demand for wireless data services continues to grow, we and many other wireless service providers offer service plans at competitive prices that include unlimited data usage (subject to certain restrictions). We and other wireless service providers also offer service plans that provide a specific amount of data access in varying megabyte or gigabyte sizes and, in some cases, the ability to carry over unused data allowances. These service offerings will vary from time to time as part of promotional offers or in response to the competitive environment.

Many wireless service providers, as well as equipment manufacturers, offer payment options, such as device payment plans, which provide customers with the ability to pay for their device over a period of time, and device leasing arrangements. Historically, wireless service providers offered customers wireless plans whereby, in exchange for the customer entering into a fixed-term service agreement, the wireless service providers significantly, and in some cases fully, subsidized the customer’s device purchase. We and many other wireless providers have limited or discontinued this form of device subsidy. As a result, we have experienced significant growth in the percentage of activations on device payment plans and the number of customers on plans with unsubsidized service pricing; however, the migration is approaching steady state. We expect future service revenue growth opportunities to arise from increased access revenue and also new account formation. Future service revenue growth opportunities will be dependent on expanding the penetration of our services and increasing the number of ways that our customers can connect with our network and services and the development of new ecosystems.

Current and potential competitors to our Wireline businesses include cable companies, wireless service providers, domestic and foreign telecommunications providers, satellite television companies, Internet service providers, over the top providers and other companies that offer network services and managed enterprise solutions.

In addition, companies with a global presence increasingly compete with our Wireline businesses. A relatively small number of telecommunications and integrated service providers with global operations serve customers in the global enterprise and, to a lesser extent, the global wholesale markets. We compete with these full or near-full service providers for large contracts to provide integrated services to global enterprises. Many of these companies have strong market presence, brand recognition, and existing customer relationships, all of which contribute to intensifying competition that may affect our future revenue growth.

Despite this challenging environment, we expect that we will be able to grow key aspects of our Wireline segment by providing network reliability, offering consumers product bundles that include broadband Internet access, digital television and local and long distance voice services, offering business and government customers more robust IP products and services, and accelerating our IoT strategies. We will also continue to focus on cost efficiencies to attempt to offset adverse impacts from unfavorable economic conditions and competitive pressures.

2018 Connection Trends

In our Wireless segment, we expect to continue to attract and maintain the loyalty of high-quality retail postpaid customers, capitalizing on demand for data services and bringing our customers new ways of using wireless services in their daily lives. We expect that future connection growth will be driven by smartphones, tablets and other connected devices such as wearables. We believe the overall customer experience of matching the unlimited plan with our high-quality network continues to attract and retain higher value retail postpaid connections, contributes to continued increases in the penetration of data services and helps us remain competitive with other wireless carriers. We expect to manage churn by providing a consistent, reliable experience on our wireless network and focusing on improving the customer experience through simplified pricing and better execution in our distribution channels.

In our Wireline segment, we have experienced continuing access line losses as customers have disconnected both primary and secondary lines and switched to alternative technologies such as wireless, VoIP and cable for voice and data services. We expect to continue to experience access line losses as customers continue to switch to alternate technologies. We expect to continue to grow our Fios Internet connections as we seek to increase our penetration rates within our Fios service areas. In Fios video, the business continues to face ongoing pressure as observed throughout the linear television market. We expect to expand our existing business through initiatives such as One Fiber, our multi-use fiber deployment.

2018 Operating Revenue Trends

In our Wireless segment, we expect to see a continuation of the service revenue trends that started in 2017 as the migration to unsubsidized pricing is largely behind us and as we gain momentum in new account formation driven by the introduction of new pricing structures in 2016 and 2017 and the use of promotions. Equipment revenues are largely dependent on wireless device sales volumes, the mix of devices, promotions and upgrade cycles, which are subject to device lifecycles, iconic device launches and competition within the wireless industry.

In our Wireline segment, we expect segment revenue growth driven primarily by revenue growth in Consumer Markets, offset by revenue declines in Partner Solutions. We expect Consumer Markets revenue growth to be driven by growth in our Fios broadband subscriber base, offset by continuing declines related to retail voice and legacy broadband connection losses. We expect a continued decline in core revenues for our Business Markets, Enterprise Solutions and Partner Solutions customer offerings; however, we expect revenue growth from advanced business and fiber-based services, including the expansion of our fiber footprint, to partially, and in some cases fully, mitigate these declines for the customer groups.

Due to the implementation of Accounting Standard Codification (ASC) Topic 606 on January 1, 2018, we estimate the overall impact from the opening balance sheet adjustment and ongoing impact from new contracts to result in an insignificant change to consolidated revenue for the full year 2018, based on currently available information, as the expected increase to wireless equipment revenue will be offset by an expected decrease to wireless service revenue.

We expect initiatives to develop platforms, content and applications in the media and IoT space will have a long-term positive impact on revenues, drive usage on our network and monetize our investments.

2018 Operating Expense and Cash Flow from Operations Trends

We expect our consolidated operating income margin and adjusted consolidated EBITDA margin to remain strong as we continue to undertake initiatives to reduce our overall cost structure by improving productivity and gaining efficiency in our operations throughout the business in 2018 and beyond. We have deployed a zero-based budgeting initiative to take $10 billion of cumulative cash outflows out of the business over the next four years. As part of this initiative, we will focus on both operating expenses and capital expenditures. Every area of the business will be examined with significant areas of focus being network costs, distribution and customer care. Expenses related to newly acquired businesses are expected to apply offsetting pressure to our margins.

Due to the implementation of ASC Topic 606, we estimate the overall impact from the opening balance sheet adjustment and ongoing impact from new contracts to result in a net decrease, ranging from $0.9 billion to $1.2 billion, to operating expenses primarily related to wireless and wireline commission expenses for the full year 2018, based on currently available information.

We expect that the Tax Cuts and Jobs Act will have a positive impact to Verizon's cash flow from operations in 2018 of approximately $3.5 billion to $4.0 billion.

We create value for our shareowners by investing the cash flows generated by our business in opportunities and transactions that support continued profitable growth, thereby increasing customer satisfaction and usage of our products and services. In addition, we have used our cash flows to maintain and grow our dividend payout to shareowners. Verizon’s Board of Directors increased the Company’s quarterly dividend by 2.2% during 2017, making this the eleventh consecutive year in which we have raised our dividend.

Our goal is to use our cash to create long-term value for our shareholders. We will continue to look for investment opportunities that will help us to grow the business, strengthen our balance sheet, acquire spectrum licenses (see "Cash Flows from Investing Activities"), pay dividends to our shareholders and, when appropriate, buy back shares of our outstanding common stock (see "Cash Flows from Financing Activities").

Capital Expenditures

Our 2018 capital program includes capital to fund advanced networks and services, including expanding our core networks, adding capacity and density to our 4G LTE network in order to stay ahead of our customers’ increasing data demands and pre-position our network for 5G, building out multi-use fiber to expand the future capabilities of both our wireless and wireline networks while reducing the cost to deliver services to our customers and pursuing other opportunities to drive operating efficiencies. We expect the new One Fiber architecture will also deliver high-speed Fios broadband to businesses and create new opportunities in the small and medium business market. The level and the timing of the Company’s capital expenditures within these broad categories can vary significantly as a result of a variety of factors outside of our control, such as material weather events. Capital expenditures for 2018 are expected to be in the range of $17.0 billion to $17.8 billion, including the commercial launch of 5G. Capital expenditures were $17.2 billion in 2017 and $17.1 billion in 2016. We believe that we have significant discretion over the amount and timing of our capital expenditures on a Company-wide basis as we are not subject to any agreement that would require significant capital expenditures on a designated schedule or upon the occurrence of designated events.

Consolidated Financial Condition

(dollars in millions)			
Years Ended December 31,	**2017**	2016	2015
Cash flows provided by (used in)			
Operating activities	**$ 25,305**	$ 22,810	$ 39,027
Investing activities	**(19,372)**	(10,983)	(30,043)
Financing activities	**(6,734)**	(13,417)	(15,112)
Decrease in cash and cash equivalents	**$ (801)**	$ (1,590)	$ (6,128)

We use the net cash generated from our operations to fund network expansion and modernization, service and repay external financing, pay dividends, invest in new businesses and, when appropriate, buy back shares of our outstanding common stock. Our sources of funds, primarily from operations and, to the extent necessary, from external financing arrangements, are sufficient to meet ongoing operating and investing requirements. We expect that our capital spending requirements will continue to be financed primarily through internally generated funds. Debt or equity financing may be needed to fund additional investments or development activities or to maintain an appropriate capital structure to ensure our financial flexibility. Our cash and cash equivalents are primarily held domestically and are invested to maintain principal and provide liquidity. Accordingly, we do not have significant exposure to foreign currency fluctuations. See "Market Risk" for additional information regarding our foreign currency risk management strategies.

Our available external financing arrangements include an active commercial paper program, credit available under credit facilities and other bank lines of credit, vendor financing arrangements, issuances of registered debt or equity securities, U.S. retail medium-term notes and other capital market securities that are privately-placed or offered overseas. In addition, we monetize our device payment plan agreement receivables through asset-backed debt transactions.

Cash Flows Provided By Operating Activities

Our primary source of funds continues to be cash generated from operations, primarily from our Wireless segment. Net cash provided by operating activities during 2017 increased by $2.5 billion primarily due to an increase in earnings and changes in working capital, partially offset by our discretionary contributions to qualified pension plans of $3.4 billion (approximately $2.1 billion, net of tax benefit) and the change in the method in which we monetize device payment plan receivables, as discussed below. As a result of the discretionary pension contribution in 2017, our mandatory pension funding through 2020 is expected to be minimal, which will benefit future cash flows. Further, the funded status of our qualified pension plan is improved.

Net cash provided by operating activities during 2016 decreased by $16.2 billion primarily due to a change in the method by which we monetize device payment plan receivables, as discussed below, as well as a decline in earnings, an increase in income taxes paid primarily as a result of the Access Line Sale and the fact that in 2015 we received $2.4 billion of cash proceeds as a result of our transaction (Tower Monetization Transaction) with American Tower Corporation (American Tower). We completed the Tower Monetization Transaction in March 2015, pursuant to which American Tower acquired the exclusive rights to lease and operate approximately 11,300 of our wireless towers for an upfront payment of $5.0 billion, of which $2.4 billion related to a portion of the towers for which the right-of-use has passed to the tower operator. See Note 2 to the consolidated financial statements for additional information.

During 2016, we changed the strategic method by which we monetize device payment plan receivables from sales of device payment plan receivables, which were recorded within cash flows provided by operating activities, to asset-backed debt transactions, which are recorded in cash flows from financing activities. During 2016 and 2015, we received cash proceeds related to sales of wireless device payment plan agreement receivables of approximately $2.0 billion and $7.2 billion, respectively. See Note 7 to the consolidated financial statements for additional information. During 2017 and 2016, we received proceeds from asset-backed debt transactions of approximately $4.3 billion and $5.0 billion, respectively. See Note 6 to the consolidated financial statements and "Cash Flows Used in Financing Activities" for additional information.

Cash Flows Used In Investing Activities

Capital Expenditures

Capital expenditures continue to relate primarily to the use of capital resources to facilitate the introduction of new products and services, enhance responsiveness to competitive challenges and increase the operating efficiency and productivity of our networks.

Capital expenditures, including capitalized software, were as follows:

(dollars in millions)			
Years Ended December 31,	**2017**	2016	2015
Wireless	**$ 10,310**	$ 11,240	$ 11,725
Wireline	**5,339**	4,504	5,049
Other	**1,598**	1,315	1,001
	$ 17,247	$ 17,059	$ 17,775
Total as a percentage of revenue	**13.7%**	13.5%	13.5%

Capital expenditures decreased at Wireless in 2017 and 2016 primarily due to the shift in investments to fiber assets, which support the densification of our 4G LTE network and pre-position us for 5G technology deployment. Capital expenditures increased at Wireline in 2017 primarily as a result of an increase in investments to support our multi-use fiber deployment. Capital expenditures declined at Wireline in 2016 as a result of the avoidance of capital expenditures related to the assets included in the Access Line Sale that were sold to Frontier in April 2016, and reduced capital spending during the 2016 Work Stoppage.

Acquisitions

During 2017, 2016 and 2015, we invested $0.6 billion, $0.5 billion and $9.9 billion, respectively, in acquisitions of wireless licenses. During 2017, 2016 and 2015, we also invested $5.9 billion, $3.8 billion and $3.5 billion, respectively, in acquisitions of businesses, net of cash acquired.

In February 2017, Verizon acquired XO, which owns and operates one of the largest fiber-based IP and Ethernet networks, for total cash consideration of approximately $1.5 billion, of which $0.1 billion was paid in 2015.

In June 2017, Verizon acquired Yahoo's operating business for cash consideration of approximately $4.5 billion, net of cash acquired.

In December 2017, Verizon purchased certain fiber-optic network assets in the Chicago market from WideOpenWest, Inc. (WOW!) for cash consideration of approximately $0.2 billion.

In July 2016, we acquired Telogis, a global cloud-based mobile enterprise management business, for $0.9 billion of cash consideration.

In November 2016, we acquired Fleetmatics, a leading global provider of fleet and mobile workforce management solutions, for $60.00 per ordinary share in cash. The aggregate merger consideration was approximately $2.5 billion, including cash acquired of $0.1 billion.

In January 2015, the FCC completed an auction of 65 MHz of spectrum, which it identified as the AWS-3 band. Verizon participated in that auction, and was the high bidder on 181 spectrum licenses, for which we paid cash of approximately $10.4 billion. During the first quarter of 2015, we submitted an application to the FCC and paid $9.5 billion to the FCC to complete payment for these licenses. The cash payment of $9.5 billion is classified within Acquisitions of wireless licenses on our consolidated statement of cash flows for the year ended December 31, 2015. In April 2015, the FCC granted us these spectrum licenses.

In June 2015, Verizon acquired AOL for cash consideration of approximately $3.8 billion, net of cash acquired.

During 2017, 2016 and 2015, we acquired various other businesses and investments for cash consideration that was not significant.

See "Acquisitions and Divestitures" for additional information on our acquisitions.

Dispositions

During 2017, we received net cash proceeds of $3.5 billion in connection with the Data Center Sale on May 1, 2017. We also completed other insignificant transactions during 2017.

During 2016, we received cash proceeds of $9.9 billion in connection with the completion of the Access Line Sale on April 1, 2016.

See "Acquisitions and Divestitures" for additional information on our dispositions.

Other, net

In May 2015, we consummated a sale-leaseback transaction with a financial services firm for the buildings and real estate at our Basking Ridge, New Jersey location. We received total gross proceeds of $0.7 billion resulting in a deferred gain of $0.4 billion, which will be amortized over the initial leaseback term of twenty years. The leaseback of the buildings and real estate is accounted for as an operating lease. The proceeds received as a result of this transaction have been classified within Other, net investing activities for the year ended December 31, 2015. Also in 2015, we received proceeds of $0.2 billion related to a sale of real estate.

Cash Flows Used In Financing Activities

We seek to maintain a mix of fixed and variable rate debt to lower borrowing costs within reasonable risk parameters. During 2017, 2016 and 2015, net cash used in financing activities was $6.7 billion, $13.4 billion and $15.1 billion, respectively.

2017

During 2017, our net cash used in financing activities of $6.7 billion was primarily driven by:
- $24.2 billion used for repayments of long-term borrowings and capital lease obligations, which included $0.4 billion used for repayments of asset-backed long-term borrowings; and
- $9.5 billion used for dividend payments.

These uses of cash were partially offset by proceeds from long-term borrowings of $32.0 billion, which included $4.3 billion of proceeds from our asset-backed debt transactions.

Proceeds from and Repayments of Long-Term Borrowings

At December 31, 2017, our total debt increased to $117.1 billion as compared to $108.1 billion at December 31, 2016. Our effective interest rate was 4.7% and 4.8% during the years ended December 31, 2017 and 2016, respectively. The substantial majority of our total debt portfolio consists of fixed rate indebtedness, therefore, changes in interest rates do not have a material effect on our interest payments. See also "Market Risk" and Note 6 to the consolidated financial statements for additional details.

At December 31, 2017, approximately $18.0 billion or 15.3% of the aggregate principal amount of our total debt portfolio consisted of foreign denominated debt, primarily the Euro and British Pound Sterling. We have entered into cross currency swaps on a majority of our foreign denominated debt in order to fix our future interest and principal payments in U.S. dollars and mitigate the impact of foreign currency transaction gains or losses. See "Market Risk" for additional information.

Verizon may continue to acquire debt securities issued by Verizon and its affiliates in the future through open market purchases, privately negotiated transactions, tender offers, exchange offers, or otherwise, upon such terms and at such prices as Verizon may from time to time determine for cash or other consideration.

Other, net

Other, net financing activities during 2017 includes early debt redemption costs, see "Special Items" for additional information, as well as cash paid on debt exchanges and derivative related transactions.

Dividends

The Verizon Board of Directors assesses the level of our dividend payments on a periodic basis taking into account such factors as long-term growth opportunities, internal cash requirements and the expectations of our shareholders. During the third quarter of 2017, the Board increased our quarterly dividend payment 2.2% to $0.5900 from $0.5775 per share in the prior period. This is the eleventh consecutive year that Verizon’s Board of Directors has approved a quarterly dividend increase.

As in prior periods, dividend payments were a significant use of capital resources. During 2017, we paid $9.5 billion in dividends.

2016

During 2016, our net cash used in financing activities of $13.4 billion was primarily driven by:
- $19.2 billion used for repayments of long-term borrowings and capital lease obligations; and
- $9.3 billion used for dividend payments.

These uses of cash were partially offset by proceeds from long-term borrowings of $18.0 billion, which included $5.0 billion of proceeds from our asset-backed debt transactions.

Proceeds from and Repayments of Long-Term Borrowings

At December 31, 2016, our total debt decreased to $108.1 billion as compared to $109.7 billion at December 31, 2015. Our effective interest rate was 4.8% and 4.9% during the years ended December 31, 2016 and 2015, respectively. The substantial majority of our total debt portfolio consisted of fixed rate indebtedness, therefore, changes in interest rates did not have a material effect on our interest payments. See also "Market Risk" and Note 6 to the consolidated financial statements for additional details.

At December 31, 2016, approximately $11.6 billion or 10.7% of the aggregate principal amount of our total debt portfolio consisted of foreign denominated debt, primarily the Euro and British Pound Sterling. We have entered into cross currency swaps on a majority of our foreign denominated debt in order to fix our future interest and principal payments in U.S. dollars and mitigate the impact of foreign currency transaction gains or losses. See "Market Risk" for additional information.

Other, net

Other, net financing activities during 2016, includes early debt redemption costs of $1.8 billion. See "Special Items" for additional information related to the early debt redemption costs incurred during the year ended December 31, 2016.

Dividends

During the third quarter of 2016, the Board increased our quarterly dividend payment 2.2% to $0.5775 from $0.565 per share in the prior period.

As in prior periods, dividend payments were a significant use of capital resources. During 2016, we paid $9.3 billion in dividends.

2015

During 2015, our net cash used in financing activities of $15.1 billion was primarily driven by:
- $9.3 billion used for repayments of long-term borrowings and capital lease obligations, including the repayment of $6.5 billion of borrowings under a term loan agreement;
- $8.5 billion used for dividend payments; and
- $5.0 billion payment for our accelerated share repurchase agreement.

These uses of cash were partially offset by proceeds from long-term borrowings of $6.7 billion, which included $6.5 billion of borrowings under a term loan agreement which was used for general corporate purposes, including the acquisition of spectrum licenses, as well as $2.7 billion of cash proceeds received related to the Tower Monetization Transaction attributable to the portion of the towers that we continue to occupy and use for network operations.

Proceeds from and Repayments of Long-Term Borrowings

At December 31, 2015, our total debt decreased to $109.7 billion as compared to $112.8 billion at December 31, 2014. The substantial majority of our total debt portfolio consisted of fixed rate indebtedness, therefore, changes in interest rates did not have a material effect on our interest payments. See Note 6 to the consolidated financial statements for additional information regarding our debt activity.

At December 31, 2015, approximately $8.2 billion or 7.5% of the aggregate principal amount of our total debt portfolio consisted of foreign denominated debt, primarily the Euro and British Pound Sterling. We have entered into cross currency swaps in order to fix our future interest and principal payments in U.S. dollars and mitigate the impact of foreign currency transaction gains or losses. See "Market Risk" for additional information.

Other, net

Other, net financing activities during 2015 included $2.7 billion of cash proceeds received related to the Tower Monetization Transaction, which relates to the portion of the towers that we continue to occupy and use for network operations partially offset by the settlement of derivatives upon maturity for $0.4 billion.

Dividends

During the third quarter of 2015, the Board increased our quarterly dividend payment 2.7% to $0.565 per share from $0.550 per share in the same prior period.

As in prior periods, dividend payments were a significant use of capital resources. During 2015, we paid $8.5 billion in dividends.

Asset-Backed Debt

As of December 31, 2017, the carrying value of our asset-backed debt was $8.9 billion. Our asset-backed debt includes notes (the Asset-Backed Notes) issued to third-party investors (Investors) and loans (ABS Financing Facility) received from banks and their conduit facilities (collectively, the Banks). Our consolidated asset-backed debt bankruptcy remote legal entities (each, an ABS Entity or collectively, the ABS Entities) issue the debt or are otherwise party to the transaction documentation in connection with our asset-backed debt transactions. Under the terms of our asset-backed debt, we transfer device payment plan agreement receivables from Cellco Partnership and certain other affiliates of Verizon (collectively, the Originators) to one of the ABS Entities, which in turn transfers such receivables to another ABS Entity that issues the debt. Verizon entities retain the equity interests in the ABS Entities, which represent the rights to all funds not needed to make required payments on the asset-backed debt and other related payments and expenses.

Our asset-backed debt is secured by the transferred device payment plan agreement receivables and future collections on such receivables. The device payment plan agreement receivables transferred to the ABS Entities and related assets, consisting primarily of restricted cash, will only be available for payment of asset-backed debt and expenses related thereto, payments to the Originators in respect of additional transfers of device payment plan agreement receivables, and other obligations arising from our asset-backed debt transactions, and will not be available to pay other obligations or claims of Verizon’s creditors until the associated asset-backed debt and other obligations are satisfied. The Investors or

Banks, as applicable, which hold our asset-backed debt have legal recourse to the assets securing the debt, but do not have any recourse to Verizon with respect to the payment of principal and interest on the debt. Under a parent support agreement, Verizon has agreed to guarantee certain of the payment obligations of Cellco Partnership and the Originators to the ABS Entities.

Cash collections on the device payment plan agreement receivables are required at certain specified times to be placed into segregated accounts. Deposits to the segregated accounts are considered restricted cash and are included in Prepaid expenses and other and Other assets on our consolidated balance sheets.

Proceeds from our asset-backed debt transactions, deposits to the segregated accounts and payments to the Originators in respect of additional transfers of device payment plan agreement receivables are reflected in Cash flows from financing activities in our consolidated statements of cash flows. Repayments of our asset-backed debt and related interest payments made from the segregated accounts are non-cash activities and therefore not reflected within Cash flows from financing activities in our consolidated statements of cash flows. The asset-backed debt issued and the assets securing this debt are included on our consolidated balance sheets.

During September 2016 and May 2017, we entered into loan agreements through an ABS Entity with a number of financial institutions. Under these ABS loan agreements, we have the right to prepay all or a portion of the loans at any time without penalty, but in certain cases, with breakage costs. In December 2017, we prepaid $0.4 billion. The amount prepaid is available for further drawdowns until September 2018, except in certain circumstances.

Credit Facilities

In July 2017, we entered into credit facilities insured by various export credit agencies with the ability to borrow up to $4.0 billion to finance equipment-related purchases. The facilities have borrowings available, portions of which extend through October 2019, contingent upon the amount of eligible equipment-related purchases made by Verizon. At December 31, 2017, we had not drawn on these facilities.

In September 2016, we amended our $8.0 billion credit facility to increase the availability to $9.0 billion and extend the maturity to September 2020. As of December 31, 2017, the unused borrowing capacity under our $9.0 billion credit facility was approximately $8.9 billion. The credit facility does not require us to comply with financial covenants or maintain specified credit ratings, and it permits us to borrow even if our business has incurred a material adverse change. We use the credit facility for the issuance of letters of credit and for general corporate purposes.

In March 2016, we entered into a credit facility insured by Eksportkreditnamnden Stockholm, Sweden (EKN), the Swedish export credit agency. As of December 31, 2017, we had an outstanding balance of $0.8 billion. We used this credit facility to finance network equipment-related purchases.

Common Stock

Common stock has been used from time to time to satisfy some of the funding requirements of employee and shareowner plans. During the year ended December 31, 2017, we issued 2.8 million common shares from Treasury stock, which had an insignificant aggregate value. During the year ended December 31, 2016, we issued 3.5 million common shares from Treasury stock, which had an insignificant aggregate value. During the year ended December 31, 2015, we issued 22.6 million common shares from Treasury stock, which had an aggregate value of $0.9 billion.

On March 3, 2017, the Verizon Board of Directors authorized a new share buyback program to repurchase up to 100 million shares of the company's common stock. The new program will terminate when the aggregate number of shares purchased reaches 100 million, or at the close of business on February 28, 2020, whichever is sooner. The program permits Verizon to repurchase shares over time, with the amount and timing of repurchases depending on market conditions and corporate needs. There were no repurchases of common stock during 2017 and 2016. During 2015, we repurchased $0.1 billion of our common stock under our previous share buyback program.

In February 2015, the Verizon Board of Directors authorized Verizon to enter into an accelerated share repurchase (ASR) agreement to repurchase $5.0 billion of the Company’s common stock. On February 10, 2015, in exchange for an up-front payment totaling $5.0 billion, Verizon received an initial delivery of 86.2 million shares having a value of approximately $4.25 billion. On June 5, 2015, Verizon received an additional 15.4 million shares as final settlement of the transaction under the ASR agreement. In total, 101.6 million shares were delivered under the ASR at an average repurchase price of $49.21.

Credit Ratings

Verizon’s credit ratings did not change in 2017, 2016 and 2015.

Securities ratings assigned by rating organizations are expressions of opinion and are not recommendations to buy, sell or hold securities. A securities rating is subject to revision or withdrawal at any time by the assigning rating organization. Each rating should be evaluated independently of any other rating.

Covenants

Our credit agreements contain covenants that are typical for large, investment grade companies. These covenants include requirements to pay interest and principal in a timely fashion, pay taxes, maintain insurance with responsible and reputable insurance companies, preserve our corporate existence, keep appropriate books and records of financial transactions, maintain our properties, provide financial and other reports to our lenders, limit pledging and disposition of assets and mergers and consolidations, and other similar covenants.

We and our consolidated subsidiaries are in compliance with all of our restrictive covenants.

2017 Term Loan Agreement

During January 2017, we entered into a term loan credit agreement with a syndicate of major financial institutions, pursuant to which we could borrow up to $5.5 billion for (i) the acquisition of Yahoo and (ii) general corporate purposes. None of the $5.5 billion borrowing capacity was used during 2017. In March 2017, the term loan credit agreement was terminated in accordance with its terms and as such, the related fees were recognized in Other income (expense), net and were not significant.

Change In Cash and Cash Equivalents

Our Cash and cash equivalents at December 31, 2017 totaled $2.1 billion, a $0.8 billion decrease compared to Cash and cash equivalents at December 31, 2016 primarily as a result of the factors discussed above. Our Cash and cash equivalents at December 31, 2016 totaled $2.9 billion, a $1.6 billion decrease compared to Cash and cash equivalents at December 31, 2015 primarily as a result of the factors discussed above.

Free Cash Flow

Free cash flow is a non-GAAP financial measure that reflects an additional way of viewing our liquidity that, when viewed with our GAAP results, provides a more complete understanding of factors and trends affecting our cash flows. We believe it is a more conservative measure of cash flow since purchases of fixed assets are necessary for ongoing operations. Free cash flow has limitations due to the fact that it does not represent the residual cash flow available for discretionary expenditures. For example, free cash flow does not incorporate payments made on capital lease obligations or cash payments for business acquisitions. Therefore, we believe it is important to view free cash flow as a complement to our entire consolidated statements of cash flows. Free cash flow is calculated by subtracting capital expenditures from net cash provided by operating activities.

The following table reconciles net cash provided by operating activities to Free cash flow:

(dollars in millions)

Years Ended December 31,	**2017**	2016	2015
Net cash provided by operating activities	**$ 25,305**	$ 22,810	$ 39,027
Less Capital expenditures (including capitalized software)	**17,247**	17,059	17,775
Free cash flow	**$ 8,058**	$ 5,751	$ 21,252

The changes in free cash flow during 2017, 2016 and 2015 were a result of the factors described in connection with net cash provided by operating activities and capital expenditures. The change in free cash flow during 2017 was primarily due to an increase in earnings and changes in working capital, partially offset by our discretionary contributions to qualified pension plans of $3.4 billion (approximately $2.1 billion, net of tax benefit) and the change in the method in which we monetize device payment plan receivables, as discussed below. As a result of the discretionary pension contribution in 2017, our mandatory pension funding through 2020 is expected to be minimal, which will benefit future cash flows. Further, the funded status of our qualified pension plan is improved.

The change in free cash flow during 2016 was primarily due to a change in the method by which we monetize device payment plan receivables, as discussed below, as well as a decline in earnings, an increase in income taxes paid primarily as a result of the Access Line Sale and the fact that in 2015 we received $2.4 billion of cash proceeds as a result of our Tower Monetization Transaction with American Tower.

During 2016, we changed the strategic method by which we monetize device payment plan receivables from sales of device payment plan receivables, which were recorded within cash flows provided by operating activities, to asset-backed debt transactions, which are recorded in cash flows from financing activities. During 2016 and 2015, we received cash proceeds related to sales of wireless device payment plan agreement receivables of approximately $2.0 billion and $7.2 billion, respectively. See Note 7 to the consolidated financial statements for additional information. During 2017 and 2016, we received proceeds from asset-backed debt transactions of approximately $4.3 billion and $5.0 billion, respectively. See Note 6 to the consolidated financial statements and "Cash Flows Used in Financing Activities" for additional information.

Employee Benefit Plan Funded Status and Contributions

Employer Contributions

We operate numerous qualified and nonqualified pension plans and other postretirement benefit plans. These plans primarily relate to our domestic business units. During 2017, 2016 and 2015, contributions to our qualified pension plans were $4.0 billion, $0.8 billion and $0.7 billion, respectively. We also contributed $0.1 billion to our nonqualified pension plans each year in 2017, 2016 and 2015.

The company's overall investment strategy is to achieve a mix of assets that allows us to meet projected benefit payments while taking into consideration risk and return. In an effort to reduce the risk of our portfolio strategy and better align assets with liabilities, we have adopted a liability driven pension strategy that seeks to better match cash flows from investments with projected benefit payments. We expect that the strategy will reduce the likelihood that assets will decline at a time when liabilities increase (referred to as liability hedging), with the goal to reduce the risk of underfunding to the plan and its participants and beneficiaries; however, we also expect the strategy to result in lower asset returns. Nonqualified pension contributions are estimated to be approximately $0.1 billion in 2018.

Contributions to our other postretirement benefit plans generally relate to payments for benefits on an as-incurred basis since these other postretirement benefit plans do not have funding requirements similar to the pension plans. We contributed $1.3 billion, $1.1 billion and $0.9 billion to our other postretirement benefit plans in 2017, 2016 and 2015, respectively. Contributions to our other postretirement benefit plans are estimated to be approximately $0.8 billion in 2018.

Leasing Arrangements

See Note 5 to the consolidated financial statements for a discussion of leasing arrangements.

Contractual Obligations

The following table provides a summary of our contractual obligations and commercial commitments at December 31, 2017. Additional detail about these items is included in the notes to the consolidated financial statements.

(dollars in millions)

	Payments Due By Period				
Contractual Obligations	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
Long-term debt[1]	$ 116,459	$ 2,926	$ 12,482	$ 15,805	$ 85,246
Capital lease obligations[2]	1,020	382	411	118	109
Total long-term debt, including current maturities	117,479	3,308	12,893	15,923	85,355
Interest on long-term debt[1]	89,691	5,021	9,765	9,032	65,873
Operating leases[2]	20,734	3,290	5,729	4,253	7,462
Purchase obligations[3]	20,984	7,558	8,960	2,128	2,338
Other long-term liabilities[4]	1,366	1,075	291	—	—
Finance obligations[5]	2,093	271	559	582	681
Total contractual obligations	$ 252,347	$ 20,523	$ 38,197	$ 31,918	$ 161,709

(1) Items included in long-term debt with variable coupon rates exclude unamortized debt issuance costs, and are described in Note 6 to the consolidated financial statements.

(2) See Note 5 to the consolidated financial statements for additional information.

(3) Items included in purchase obligations are primarily commitments to purchase content and network services, equipment, software and marketing services, which will be used or sold in the ordinary course of business. These amounts do not represent our entire anticipated purchases in the future, but represent only those items that are the subject of contractual obligations. We also purchase products and services as needed with no firm commitment. For this reason, the amounts presented in this table alone do not provide a reliable indicator of our expected future cash outflows or changes in our expected cash position. See Note 15 to the consolidated financial statements for additional information.

(4) Other long-term liabilities include estimated postretirement benefit and qualified pension plan contributions. See Note 10 to the consolidated financial statements for additional information.

(5) Represents future minimum payments under the sublease arrangement for our tower transaction. See Note 5 to the consolidated financial statements for additional information.

We are not able to make a reasonable estimate of when the unrecognized tax benefits balance of $2.4 billion and related interest and penalties will be settled with the respective taxing authorities until issues or examinations are further developed. See Note 11 to the consolidated financial statements for additional information.

Guarantees

We guarantee the debentures of our operating telephone company subsidiaries as well as the debt obligations of GTE LLC, as successor in interest to GTE Corporation, that were issued and outstanding prior to July 1, 2003. See Note 6 to the consolidated financial statements for additional information.

As a result of the closing of the Access Line Sale on April 1, 2016, GTE Southwest Inc., Verizon California Inc. and Verizon Florida LLC are no longer wholly-owned subsidiaries of Verizon, and the guarantees of $0.6 billion aggregate principal amount of debentures and first mortgage bonds of those entities have terminated pursuant to their terms.

In connection with the execution of agreements for the sale of businesses and investments, Verizon ordinarily provides representations and warranties to the purchasers pertaining to a variety of nonfinancial matters, such as ownership of the securities being sold, as well as financial losses. See Note 15 to the consolidated financial statements for additional information.

As of December 31, 2017, letters of credit totaling approximately $0.6 billion, which were executed in the normal course of business and support several financing arrangements and payment obligations to third parties, were outstanding. See Note 15 to the consolidated financial statements for additional information.

Market Risk

We are exposed to various types of market risk in the normal course of business, including the impact of interest rate changes, foreign currency exchange rate fluctuations, changes in investment, equity and commodity prices and changes in corporate tax rates. We employ risk management strategies, which may include the use of a variety of derivatives including cross currency swaps, forward interest rate swaps, interest rate swaps and interest rate caps. We do not hold derivatives for trading purposes.

It is our general policy to enter into interest rate, foreign currency and other derivative transactions only to the extent necessary to achieve our desired objectives in optimizing exposure to various market risks. Our objectives include maintaining a mix of fixed and variable rate debt to lower borrowing costs within reasonable risk parameters and to protect against earnings and cash flow volatility resulting from changes in market conditions. We do not hedge our market risk exposure in a manner that would completely eliminate the effect of changes in interest rates and foreign exchange rates on our earnings.

Counterparties to our derivative contracts are major financial institutions with whom we have negotiated derivatives agreements (ISDA master agreements) and credit support annex agreements (CSA) which provide rules for collateral exchange. Our CSA agreements entered into prior to the fourth quarter of 2017 generally require collateralized arrangements with our counterparties in connection with uncleared derivatives. At December 31, 2016, we had posted collateral of approximately $0.2 billion related to derivative contracts under collateral exchange arrangements, which were recorded as Prepaid expenses and other in our consolidated balance sheet. Prior to 2017, we had entered into amendments to our CSA agreements with substantially all of our counterparties that suspended the requirement for cash collateral posting for a specified period of time by both counterparties. During the first and second quarter of 2017, we paid an insignificant amount of cash to extend certain of such amendments to certain collateral exchange arrangements. During the fourth quarter of 2017, we began negotiating and executing new ISDA master agreements and CSAs with our counterparties. The newly executed CSAs contain rating based thresholds such that we or our counterparties may be required to hold or post collateral based upon changes in outstanding positions as compared to established thresholds and changes in credit ratings. We did not post any collateral at December 31, 2017. While we may be exposed to credit losses due to the nonperformance of our counterparties, we consider the risk remote and do not expect that any such nonperformance would result in a significant effect on our results of operations or financial condition due to our diversified pool of counterparties. See Note 8 to the consolidated financial statements for additional information regarding the derivative portfolio.

Interest Rate Risk

We are exposed to changes in interest rates, primarily on our short-term debt and the portion of long-term debt that carries floating interest rates. As of December 31, 2017, approximately 76% of the aggregate principal amount of our total debt portfolio consisted of fixed rate indebtedness, including the effect of interest rate swap agreements designated as hedges. The impact of a 100-basis-point change in interest rates affecting our floating rate debt would result in a change in annual interest expense, including our interest rate swap agreements that are designated as hedges, of approximately $0.3 billion. The interest rates on substantially all of our existing long-term debt obligations are unaffected by changes to our credit ratings.

The table that follows summarizes the fair values of our long-term debt, including current maturities, and interest rate swap derivatives as of December 31, 2017 and 2016. The table also provides a sensitivity analysis of the estimated fair values of these financial instruments assuming 100-basis-point upward and downward shifts in the yield curve. Our sensitivity analysis does not include the fair values of our commercial paper and bank loans, if any, because they are not significantly affected by changes in market interest rates.

(dollars in millions)

Long-term debt and related derivatives	Fair Value	Fair Value assuming + 100 basis point shift	Fair Value assuming - 100 basis point shift
At December 31, 2017	**$ 128,867**	**$ 119,235**	**$ 140,216**
At December 31, 2016	117,580	109,029	128,007

Interest Rate Swaps

We enter into interest rate swaps to achieve a targeted mix of fixed and variable rate debt. We principally receive fixed rates and pay variable rates based on the London Interbank Offered Rate, resulting in a net increase or decrease to Interest expense. These swaps are designated as fair value hedges and hedge against interest rate risk exposure of designated debt issuances. At December 31, 2017, the fair value of the asset and liability of these contracts were $0.1 billion and $0.4 billion, respectively. At December 31, 2016, the fair value asset and liability of these contracts were $0.1 billion and $0.2 billion, respectively. At December 31, 2017 and 2016, the total notional amount of the interest rate swaps was $20.2 billion and $13.1 billion, respectively.

Interest Rate Caps

We also have interest rate caps which we use as an economic hedge but for which we have elected not to apply hedge accounting. We enter into interest rate caps to mitigate our interest exposure to interest rate increases on our ABS Financing Facility and Asset-Backed Notes. The fair value of these contracts was insignificant at December 31, 2017 and 2016. At December 31, 2017 and 2016, the total notional value of these contracts was $2.8 billion and $2.5 billion, respectively.

Foreign Currency Translation

The functional currency for our foreign operations is primarily the local currency. The translation of income statement and balance sheet amounts of our foreign operations into U.S. dollars is recorded as cumulative translation adjustments, which are included in Accumulated other comprehensive income in our consolidated balance sheets. Gains and losses on foreign currency transactions are recorded in the consolidated statements of income in Other income (expense), net. At December 31, 2017, our primary translation exposure was to the British Pound Sterling, Euro, Australian Dollar and Japanese Yen.

Cross Currency Swaps

We enter into cross currency swaps to exchange British Pound Sterling, Euro, Swiss Franc and Australian Dollar-denominated cash flows into U.S. dollars and to fix our cash payments in U.S. dollars, as well as to mitigate the impact of foreign currency transaction gains or losses. These swaps are designated as cash flow hedges. The fair value of the asset of these contracts was $0.5 billion and insignificant at December 31, 2017 and 2016, respectively. At December 31, 2017 and 2016, the fair value of the liability of these contracts was insignificant and $1.8 billion, respectively. At December 31, 2017 and 2016, the total notional amount of the cross currency swaps was $16.6 billion and $12.9 billion, respectively.

Critical Accounting Estimates and Recently Issued Accounting Standards

Critical Accounting Estimates

A summary of the critical accounting estimates used in preparing our financial statements is as follows:

- Wireless licenses and Goodwill are a significant component of our consolidated assets. Both our wireless licenses and goodwill are treated as indefinite-lived intangible assets and, therefore are not amortized, but rather are tested for impairment annually in the fourth fiscal quarter, unless there are events requiring an earlier assessment or changes in circumstances during an interim period that indicate these assets may not be recoverable. We believe our estimates and assumptions are reasonable and represent appropriate marketplace considerations as of the valuation date. Although we use consistent methodologies in developing the assumptions and estimates underlying the fair value calculations used in our impairment tests, these estimates and assumptions are uncertain by nature, may change over time and can vary from actual results. It is possible that in the future there may be changes in our estimates and assumptions, including the timing and amount of future cash flows, margins, growth rates, market participant assumptions, comparable benchmark companies and related multiples and discount rates, which could result in different fair value estimates. Significant and adverse changes to any one or more of the above-noted estimates and assumptions could result in a goodwill impairment for one or more of our reporting units.

Wireless Licenses

The carrying value of our wireless licenses was approximately $88.4 billion as of December 31, 2017. We aggregate our wireless licenses into one single unit of accounting, as we utilize our wireless licenses on an integrated basis as part of our nationwide wireless network. Our wireless licenses provide us with the exclusive right to utilize certain radio frequency spectrum to provide wireless communication services. There are currently no legal, regulatory, contractual, competitive, economic or other factors that limit the useful life of our wireless licenses.

In 2017 and 2016, we performed a qualitative impairment assessment to determine whether it is more likely than not that the fair value of our wireless licenses was less than the carrying amount. As part of our assessment we considered several qualitative factors including the business enterprise value of Wireless, macroeconomic conditions (including changes in interest rates and discount rates), industry and market considerations (including industry revenue and EBITDA margin projections), the projected financial performance of Wireless, as well as other factors. Based on our assessments in 2017 and 2016, we qualitatively concluded that it was more likely than not that the fair value of our wireless licenses exceeded their carrying value and, therefore, did not result in an impairment.

In 2015, our quantitative impairment test consisted of comparing the estimated fair value of our aggregate wireless licenses to the aggregated carrying amount as of the test date. If the estimated fair value of our aggregated wireless licenses is less than the aggregated carrying amount of the wireless licenses then an impairment charge would have been recognized. Our quantitative impairment test for 2015 indicated that the fair value exceeded the carrying value and, therefore, did not result in an impairment.

In 2015, using a quantitative assessment, we estimated the fair value of our wireless licenses using the Greenfield approach. The Greenfield approach is an income based valuation approach that values the wireless licenses by calculating the cash flow generating potential of a hypothetical start-up company that goes into business with no assets except the wireless licenses to be valued. A discounted cash flow analysis is used to estimate what a marketplace participant would be willing to pay to purchase the aggregated wireless licenses as of the valuation date. As a result, we were required to make significant estimates about future cash flows specifically associated with our wireless licenses, an appropriate discount rate based on the risk associated with those estimated cash flows and assumed terminal value and growth rates. We considered current and expected future economic conditions, current and expected availability of wireless network technology and infrastructure and related equipment and the costs thereof as well as other relevant factors in estimating future cash flows. The discount rate represented our estimate of the weighted-average cost of capital (WACC), or expected return, that a marketplace participant would have required as of the valuation date. We developed the discount rate based on our consideration of the cost of debt and equity of a group of guideline companies as of the valuation date. Accordingly, our discount rate incorporated our estimate of the expected return a marketplace participant would have required as of the valuation date, including the risk premium associated with the current and expected economic conditions as of the valuation date. The terminal value growth rate represented our estimate of the marketplace's long-term growth rate.

Goodwill

In 2017, Verizon combined Yahoo's operating business with our previously existing Media business to create a newly branded organization, Oath. At December 31, 2017, the balance of our goodwill was approximately $29.2 billion, of which $18.4 billion was in our Wireless reporting unit, $4.0 billion was in our Wireline reporting unit, $4.6 billion was in our Media reporting unit and $2.2 billion was in our other reporting units. To determine if goodwill is potentially impaired, we have the option to perform a qualitative assessment to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value. If we elect to bypass the qualitative assessment or if indications of a potential impairment exist, the determination of whether an impairment has occurred requires the determination of fair value of each respective reporting unit.

In 2017 and 2016, we performed a qualitative assessment for our Wireless reporting unit to determine whether it is more likely than not that the fair value of the reporting unit was less than the carrying amount. As part of our assessment we considered several qualitative factors, including the business enterprise value of Wireless from the last quantitative test and the excess of fair value over carrying value from this test, macroeconomic conditions (including changes in interest rates and discount rates), industry and market considerations (including industry revenue and EBITDA margin projections), the projected financial performance of Wireless, as well as other factors. Based on our assessments in 2017 and 2016, we qualitatively concluded that it was more likely than not that the fair value of the Wireless reporting unit exceeded its carrying value and, therefore, did not result in an impairment.

We performed a quantitative impairment assessment for our Wireless reporting unit in 2015 and for our Wireline and other reporting units in 2017, 2016 and 2015. For 2017, 2016 and 2015, our quantitative impairment tests indicated that the fair value of each of our reporting units exceeded their carrying value and therefore, did not result in an impairment. In the event of a 10% decline in the fair value of any of our reporting units, the fair value of each of our reporting units would have still exceeded their book value. However, the excess of fair value over carrying value for Wireline continues to decline such that it is reasonably possible that small changes to our valuation inputs, such as a decline in actual or projected operating results or an increase in discount rates, or a combination of such changes, could trigger a goodwill impairment loss in the future. For our Media reporting unit, some of our valuation inputs are dependent on discount rates, and the continued expansion of the digital advertising industry coupled with the effective execution of our strategic plans for Oath. These valuation inputs are inherently uncertain, and an adverse change in one or a combination of these inputs could trigger a goodwill impairment loss in the future.

In conjunction with our test for goodwill impairment, our Wireline reporting unit had fair value that exceeded its carrying amount by 14% and 20% in 2017 and 2016, respectively. For our Media reporting unit, its fair value exceeded its carrying amount by more than 20% in 2017.

Under our quantitative assessment, the fair value of the reporting unit is calculated using a market approach and a discounted cash flow method. The market approach includes the use of comparative multiples to corroborate discounted cash flow results. The discounted cash flow method is based on the present value of two components—projected cash flows and a terminal value. The terminal value represents the expected normalized future cash flows of the reporting unit beyond the cash flows from the discrete projection period. The fair value of the reporting unit is calculated based on the sum of the present value of the cash flows from the discrete period and the present value of the terminal value. The discount rate represented our estimate of the WACC, or expected return, that a marketplace participant would have required as of the valuation date.

- We maintain benefit plans for most of our employees, including, for certain employees, pension and other postretirement benefit plans. At December 31, 2017, in the aggregate, pension plan benefit obligations exceeded the fair value of pension plan assets, which will result in higher future pension plan expense. Other postretirement benefit plans have larger benefit obligations than plan assets, resulting in expense. Significant benefit plan assumptions, including the discount rate used, the long-term rate of return on plan assets, the determination of the substantive plan and health care trend rates are periodically updated and impact the amount of benefit plan income, expense, assets and obligations. Changes to one or more of these assumptions could significantly impact our accounting for pension and other postretirement benefits. A sensitivity analysis of the impact of changes in these assumptions on the benefit obligations and expense (income) recorded, as well as on the funded status due to an increase or a decrease in the actual versus expected return on plan assets as of December 31, 2017 and for the year then ended pertaining to Verizon's pension and postretirement benefit plans, is provided in the table below.

(dollars in millions)	Percentage point change	Increase (decrease) at December 31, 2017*
Pension plans discount rate	+0.50	$ (1,149)
	-0.50	1,282
Rate of return on pension plan assets	+1.00	(165)
	-1.00	165
Postretirement plans discount rate	+0.50	(995)
	-0.50	1,098
Rate of return on postretirement plan assets	+1.00	(12)
	-1.00	12
Health care trend rates	+1.00	532
	-1.00	(516)

* In determining its pension and other postretirement obligation, the Company used a weighted-average discount rate of 3.7%. The rate was selected to approximate the composite interest rates available on a selection of high-quality bonds available in the market at December 31, 2017. The bonds selected had maturities that coincided with the time periods during which benefits payments are expected to occur, were non-callable and available in sufficient quantities to ensure marketability (at least $0.3 billion par outstanding).

The annual measurement date for both our pension and other postretirement benefits is December 31. Effective January 1, 2016, we adopted the full yield curve approach to estimate the interest cost component of net periodic benefit cost for pension and other postretirement benefits. We accounted for this change as a change in accounting estimate and, accordingly, accounted for it prospectively beginning in the first quarter of 2016. Prior to this change, we estimated the interest cost component utilizing a single weighted-average discount rate derived from the yield curve used to measure the benefit obligation at the beginning of the period.

The full yield curve approach refines our estimate of interest cost by applying the individual spot rates from a yield curve composed of the rates of return on several hundred high-quality fixed income corporate bonds available at the measurement date. These individual spot rates align with the timing of each future cash outflow for benefit payments and therefore provide a more precise estimate of interest cost.

- Our current and deferred income taxes and associated valuation allowances are impacted by events and transactions arising in the normal course of business as well as in connection with the adoption of new accounting standards, changes in tax laws and rates, acquisitions and dispositions of businesses and non-recurring items. As a global commercial enterprise, our income tax rate and the classification of income taxes can be affected by many factors, including estimates of the timing and realization of deferred income tax assets and the timing and amount of income tax payments. We account for tax benefits taken or expected to be taken in our tax returns in accordance with the accounting standard relating to the uncertainty in income taxes, which requires the use of a two-step approach for recognizing and measuring tax benefits taken or expected to be taken in a tax return. We review and adjust our liability for unrecognized tax benefits based on our best judgment given the facts, circumstances and information available at each reporting date. To the extent that the final outcome of these tax positions is different than the amounts recorded, such differences may impact income tax expense and actual tax payments. We recognize any interest and penalties accrued related to unrecognized tax benefits in income tax expense. Actual tax payments may materially differ from estimated liabilities as a result of changes in tax laws as well as unanticipated transactions impacting related income tax balances. See Note 11 to the consolidated financial statements for additional information.

- Our Property, plant and equipment balance represents a significant component of our consolidated assets. We record Property, plant and equipment at cost. We depreciate Property, plant and equipment on a straight-line basis over the estimated useful life of the assets. We expect that a one-year increase in estimated useful lives of our Property, plant and equipment would result in a decrease to our 2017 depreciation expense of $2.7 billion and that a one-year decrease would result in an increase of approximately $5.1 billion in our 2017 depreciation expense.

- We maintain allowances for uncollectible accounts receivable, including our device payment plan agreement receivables, for estimated losses resulting from the failure or inability of our customers to make required payments. Our allowance for uncollectible accounts receivable is based on management's assessment of the collectability of specific customer accounts and includes consideration of the credit worthiness and financial condition of those customers. We record an allowance to reduce the receivables to the amount that is reasonably believed to be collectible. We also record an allowance for all other receivables based on multiple factors, including historical experience with bad debts, the general economic environment and the aging of such receivables. If there is a deterioration of our customers' financial condition or if future actual default rates on receivables in general differ from those currently anticipated, we may have to adjust our allowance for doubtful accounts, which would affect earnings in the period the adjustments are made.

Recently Issued Accounting Standards

See Note 1 to the consolidated financial statements for a discussion of recently issued accounting standard updates not yet adopted as of December 31, 2017.

Acquisitions and Divestitures

Wireless

Spectrum License Transactions

From time to time, we enter into agreements to buy, sell or exchange spectrum licenses. We believe these spectrum license transactions have allowed us to continue to enhance the reliability of our network while also resulting in a more efficient use of spectrum. See Note 2 to the consolidated financial statements for additional information regarding our spectrum license transactions.

Tower Monetization Transaction

In March 2015, we completed a transaction with American Tower pursuant to which American Tower acquired the exclusive rights to lease and operate many of our wireless towers for an upfront payment of $5.1 billion, which also included payment for the sale of 162 towers. See Note 2 to the consolidated financial statements for additional information.

Straight Path

In May 2017, we entered into a purchase agreement to acquire Straight Path Communications Inc. (Straight Path), a holder of millimeter wave spectrum configured for 5G wireless services, for consideration reflecting an enterprise value of approximately $3.1 billion. Under the terms of the purchase agreement, we agreed to pay (i) Straight Path shareholders $184.00 per share, payable in Verizon shares, and (ii) certain transaction costs payable in cash of approximately $0.7 billion, consisting primarily of a fee to be paid to the FCC. The acquisition is subject to customary regulatory approvals and closing conditions, and is expected to close by the end of the first quarter of 2018.

Wireline

Access Line Sale

In February 2015, we entered into a definitive agreement with Frontier pursuant to which Verizon sold its local exchange business and related landline activities in California, Florida and Texas, including Fios Internet and video customers, switched and special access lines and high-speed Internet service and long distance voice accounts in these three states, for approximately $10.5 billion (approximately $7.3 billion net of income taxes), subject to certain adjustments and including the assumption of $0.6 billion of indebtedness from Verizon by Frontier. The transaction, which included the acquisition by Frontier of the equity interests of Verizon's incumbent local exchange carriers in California, Florida and Texas, did not involve any assets or liabilities of Verizon Wireless. The transaction closed on April 1, 2016. See Note 2 to the consolidated financial statements for additional information.

XO Holdings

In February 2016, we entered into a purchase agreement to acquire XO, which owned and operated one of the largest fiber-based IP and Ethernet networks in the U.S. Concurrently, we entered into a separate agreement to utilize certain wireless spectrum from a wholly-owned subsidiary of XO Holdings, NextLink Wireless LLC (NextLink), that holds its wireless spectrum, which included an option, subject to certain conditions, to buy the subsidiary. In February 2017, we completed our acquisition of XO for total cash consideration of approximately $1.5 billion, of which $0.1 billion was paid in 2015.

In April 2017, we exercised our option to buy NextLink for approximately $0.5 billion, subject to certain adjustments. The transaction closed in January 2018. The spectrum acquired as part of the transaction will be used for our 5G technology deployment.

Data Center Sale

In December 2016, we entered into a definitive agreement, which was subsequently amended in March 2017, with Equinix Inc. pursuant to which we agreed to sell 23 customer-facing data center sites in the U.S. and Latin America for approximately $3.6 billion, subject to certain adjustments. The transaction closed in May 2017.

WideOpenWest, Inc.

In August 2017, we entered into a definitive agreement to purchase certain fiber-optic network assets in the Chicago market from WOW!, a leading provider of communications services. The transaction closed in December 2017. In addition, the parties entered into a separate agreement pursuant to which WOW! will complete the build-out of the network assets we acquired by the second half of 2018. The total cash consideration for the transactions is expected to be approximately $0.3 billion, of which $0.2 billion is related to the transaction that closed in December 2017.

Other

Acquisition of AOL Inc.

In May 2015, we entered into the Merger Agreement with AOL pursuant to which we commenced a tender offer to acquire all of the outstanding shares of common stock of AOL at a price of $50.00 per share, net to the seller in cash, without interest and less any applicable withholding taxes. On June 23, 2015, we completed the tender offer and merger, and AOL became a wholly-owned subsidiary of Verizon. The aggregate cash consideration paid by Verizon at the closing of these transactions was approximately $3.8 billion. Holders of approximately 6.6 million shares exercised appraisal rights under Delaware law. If they had not exercised these rights, Verizon would have paid an additional $330 million for such shares at the closing.

AOL was a leader in the digital content and advertising platform space. Verizon has been investing in emerging technology that taps into the market shift to digital content and advertising. AOL's business model aligns with this approach, and we believe that its combination of owned and operated content properties plus a digital advertising platform enhances our ability to further develop future revenue streams. See Note 2 to the consolidated financial statements for additional information.

Acquisition of Yahoo! Inc.'s Operating Business

In July 2016, Verizon entered into a stock purchase agreement (the Purchase Agreement) with Yahoo. Pursuant to the Purchase Agreement, upon the terms and subject to the conditions thereof, we agreed to acquire the stock of one or more subsidiaries of Yahoo holding all of Yahoo's operating business for approximately $4.83 billion in cash, subject to certain adjustments (the Transaction).

In February 2017, Verizon and Yahoo entered into an amendment to the Purchase Agreement, pursuant to which the Transaction purchase price was reduced by $350 million to approximately $4.48 billion in cash, subject to certain adjustments. Subject to certain exceptions, the parties also agreed that certain user security and data breaches incurred by Yahoo (and the losses arising therefrom) were to be disregarded (1) for purposes of specified conditions to Verizon's obligations to close the Transaction and (2) in determining whether a "Business Material Adverse Effect" under the Purchase Agreement has occurred.

Concurrently with the amendment of the Purchase Agreement, Yahoo and Yahoo Holdings, Inc., a wholly-owned subsidiary of Yahoo that Verizon agreed to purchase pursuant to the Transaction, also entered into an amendment to the related reorganization agreement, pursuant to which Yahoo (which has changed its name to Altaba Inc. following the closing of the Transaction) retains 50% of certain post-closing liabilities arising out of governmental or third-party investigations, litigations or other claims related to certain user security and data breaches incurred by Yahoo prior to its acquisition by Verizon, including an August 2013 data breach disclosed by Yahoo on December 14, 2016. At that time, Yahoo disclosed that more than one billion of the approximately three billion accounts existing in 2013 had likely been affected. In accordance with the original Transaction agreements, Yahoo will continue to retain 100% of any liabilities arising out of any shareholder lawsuits (including derivative claims) and investigations and actions by the SEC.

In June 2017, we completed the Transaction. The aggregate purchase consideration of the Transaction was approximately $4.7 billion, including cash acquired of $0.2 billion.

Prior to the closing of the Transaction, pursuant to a related reorganization agreement, Yahoo transferred all of the assets and liabilities constituting Yahoo's operating business to the subsidiaries that we acquired in the Transaction. The assets that we acquired did not include Yahoo's ownership interests in Alibaba, Yahoo! Japan and certain other investments, certain undeveloped land recently divested by Yahoo, certain non-core intellectual property or its cash, other than the cash from its operating business we acquired. We received for our benefit and that of our current and certain future affiliates a non-exclusive, worldwide, perpetual, royalty-free license to all of Yahoo's intellectual property that was not conveyed with the business.

In October 2017, based upon information that we received in connection with our integration of Yahoo's operating business, we disclosed that we believe that the August 2013 data breach previously disclosed by Yahoo affected all of its accounts.

Oath, our organization that combines Yahoo's operating business with our existing Media business, includes diverse media and technology brands that engage approximately a billion people around the world. We believe that Oath, with its technology, content and data, will help us expand the global scale of our digital media business and build brands for the future.

Fleetmatics Group PLC

In July 2016, we entered into an agreement to acquire Fleetmatics. Fleetmatics was a leading global provider of fleet and mobile workforce management solutions. Pursuant to the terms of the agreement, we acquired Fleetmatics for $60.00 per ordinary share in cash. The aggregate merger consideration was approximately $2.5 billion, including cash acquired of $0.1 billion. We completed the acquisition on November 7, 2016.

Other

In July 2016, we acquired Telogis, a global cloud-based mobile enterprise management software business, for $0.9 billion of cash consideration.

From time to time, we enter into strategic agreements to acquire various other businesses and investments. See Note 2 to the consolidated financial statements for additional information.

Cautionary Statement Concerning Forward-Looking Statements

In this report we have made forward-looking statements. These statements are based on our estimates and assumptions and are subject to risks and uncertainties. Forward-looking statements include the information concerning our possible or assumed future results of operations. Forward-looking statements also include those preceded or followed by the words "anticipates," "believes," "estimates," "expects," "hopes" or similar expressions. For those statements, we claim the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995. We undertake no obligation to revise or publicly release the results of any revision to these forward-looking statements, except as required by law. Given these risks and uncertainties, readers are cautioned not to place undue reliance on such forward-looking statements.

The following important factors, along with those discussed elsewhere in this report and in other filings with the SEC, could affect future results and could cause those results to differ materially from those expressed in the forward-looking statements:

- adverse conditions in the U.S. and international economies;
- the effects of competition in the markets in which we operate;
- material changes in technology or technology substitution;
- disruption of our key suppliers’ provisioning of products or services;
- changes in the regulatory environment in which we operate, including any increase in restrictions on our ability to operate our networks;
- breaches of network or information technology security, natural disasters, terrorist attacks or acts of war or significant litigation and any resulting financial impact not covered by insurance;
- our high level of indebtedness;
- an adverse change in the ratings afforded our debt securities by nationally accredited ratings organizations or adverse conditions in the credit markets affecting the cost, including interest rates, and/or availability of further financing;
- material adverse changes in labor matters, including labor negotiations, and any resulting financial and/or operational impact;
- significant increases in benefit plan costs or lower investment returns on plan assets;
- changes in tax laws or treaties, or in their interpretation;
- changes in accounting assumptions that regulatory agencies, including the SEC, may require or that result from changes in the accounting rules or their application, which could result in an impact on earnings;
- the inability to implement our business strategies; and
- the inability to realize the expected benefits of strategic transactions.

Report of Management on Internal Control Over Financial Reporting

We, the management of Verizon Communications Inc., are responsible for establishing and maintaining adequate internal control over financial reporting of the company. Management has evaluated internal control over financial reporting of the company using the criteria for effective internal control established in Internal Control–Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission in 2013.

Management has assessed the effectiveness of the company's internal control over financial reporting as of December 31, 2017. Based on this assessment, we believe that the internal control over financial reporting of the company is effective as of December 31, 2017. In connection with this assessment, there were no material weaknesses in the company's internal control over financial reporting identified by management.

The company's financial statements included in this Annual Report have been audited by Ernst & Young LLP, independent registered public accounting firm. Ernst & Young LLP has also provided an attestation report on the company's internal control over financial reporting.

/s/ **Lowell C. McAdam**

Lowell C. McAdam

Chairman and Chief Executive Officer

/s/ **Matthew D. Ellis**

Matthew D. Ellis

Executive Vice President and Chief Financial Officer

/s/ **Anthony T. Skiadas**

Anthony T. Skiadas

Senior Vice President and Controller

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareowners of Verizon Communications Inc.:

Opinion on Internal Control over Financial Reporting

We have audited Verizon Communications Inc. and subsidiaries' (Verizon) internal control over financial reporting as of December 31, 2017, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Verizon maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of Verizon as of December 31, 2017 and 2016, the related consolidated statements of income, comprehensive income, cash flows and changes in equity for each of the three years in the period ended December 31, 2017, and the related notes and our report dated February 23, 2018 expressed an unqualified opinion thereon.

Basis for Opinion

Verizon's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Report of Management on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on Verizon's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to Verizon in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ **Ernst & Young LLP**

Ernst & Young LLP
New York, New York

February 23, 2018

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareowners of Verizon Communications Inc.:

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Verizon Communications Inc. and subsidiaries (Verizon) as of December 31, 2017 and 2016, the related consolidated statements of income, comprehensive income, cash flows and changes in equity for each of the three years in the period ended December 31, 2017, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of Verizon at December 31, 2017 and 2016, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2017, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), Verizon's internal control over financial reporting as of December 31, 2017, based on criteria established in Internal Control–Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 23, 2018 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of Verizon's management. Our responsibility is to express an opinion on Verizon's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to Verizon in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ **Ernst & Young LLP**

Ernst & Young LLP

We have served as Verizon's auditor since 2000.

New York, New York

February 23, 2018

Consolidated Statements of Income Verizon Communications Inc. and Subsidiaries

(dollars in millions, except per share amounts)

Years Ended December 31,		2017		2016		2015
Operating Revenues						
Service revenues and other	**$**	**107,145**	$	108,468	$	114,696
Wireless equipment revenues		**18,889**		17,512		16,924
Total Operating Revenues		**126,034**		125,980		131,620
Operating Expenses						
Cost of services (exclusive of items shown below)		**29,409**		29,186		29,438
Wireless cost of equipment		**22,147**		22,238		23,119
Selling, general and administrative expense (including net gain on sale of divested businesses of $1,774, $1,007 and $0, respectively)		**30,110**		31,569		29,986
Depreciation and amortization expense		**16,954**		15,928		16,017
Total Operating Expenses		**98,620**		98,921		98,560
Operating Income		**27,414**		27,059		33,060
Equity in losses of unconsolidated businesses		**(77)**		(98)		(86)
Other income (expense), net		**(2,010)**		(1,599)		186
Interest expense		**(4,733)**		(4,376)		(4,920)
Income Before Benefit (Provision) For Income Taxes		**20,594**		20,986		28,240
Benefit (provision) for income taxes		**9,956**		(7,378)		(9,865)
Net Income	**$**	**30,550**	$	13,608	$	18,375
Net income attributable to noncontrolling interests	**$**	**449**	$	481	$	496
Net income attributable to Verizon		**30,101**		13,127		17,879
Net Income	**$**	**30,550**	$	13,608	$	18,375
Basic Earnings Per Common Share						
Net income attributable to Verizon	**$**	**7.37**	$	3.22	$	4.38
Weighted-average shares outstanding (in millions)		**4,084**		4,080		4,085
Diluted Earnings Per Common Share						
Net income attributable to Verizon	**$**	**7.36**	$	3.21	$	4.37
Weighted-average shares outstanding (in millions)		**4,089**		4,086		4,093

See Notes to Consolidated Financial Statements

Consolidated Statements of Comprehensive Income Verizon Communications Inc. and Subsidiaries

(dollars in millions)

Years Ended December 31,		**2017**		2016		2015
Net Income	**$**	**30,550**	$	13,608	$	18,375
Other Comprehensive Income, net of tax expense (benefit)						
Foreign currency translation adjustments		**245**		(159)		(208)
Unrealized gains (losses) on cash flow hedges, net of tax of $(20), $168 and $(160)		**(31)**		198		(194)
Unrealized losses on marketable securities, net of tax of $(10), $(26) and $(4)		**(14)**		(55)		(11)
Defined benefit pension and postretirement plans, net of tax of $(144), $1,339 and $(91)		**(214)**		2,139		(148)
Other comprehensive income (loss) attributable to Verizon		**(14)**		2,123		(561)
Total Comprehensive Income	**$**	**30,536**	$	15,731	$	17,814
Comprehensive income attributable to noncontrolling interests		**449**		481		496
Comprehensive income attributable to Verizon		**30,087**		15,250		17,318
Total Comprehensive Income	**$**	**30,536**	$	15,731	$	17,814

See Notes to Consolidated Financial Statements

Consolidated Balance Sheets Verizon Communications Inc. and Subsidiaries

(dollars in millions, except per share amounts)

At December 31,	**2017**	2016
Assets		
Current assets		
Cash and cash equivalents	**$ 2,079**	$ 2,880
Accounts receivable, net of allowances of $939 and $845	**23,493**	17,513
Inventories	**1,034**	1,202
Assets held for sale	**—**	882
Prepaid expenses and other	**3,307**	3,918
Total current assets	**29,913**	26,395
Property, plant and equipment	**246,498**	232,215
Less accumulated depreciation	**157,930**	147,464
Property, plant and equipment, net	**88,568**	84,751
Investments in unconsolidated businesses	**1,039**	1,110
Wireless licenses	**88,417**	86,673
Goodwill	**29,172**	27,205
Other intangible assets, net	**10,247**	8,897
Non-current assets held for sale	**—**	613
Other assets	**9,787**	8,536
Total assets	**$ 257,143**	$ 244,180
Liabilities and Equity		
Current liabilities		
Debt maturing within one year	**$ 3,453**	$ 2,645
Accounts payable and accrued liabilities	**21,232**	19,593
Other	**8,352**	8,102
Total current liabilities	**33,037**	30,340
Long-term debt	**113,642**	105,433
Employee benefit obligations	**22,112**	26,166
Deferred income taxes	**31,232**	45,964
Other liabilities	**12,433**	12,245
Total long-term liabilities	**179,419**	189,808
Commitments and Contingencies (Note 15)		
Equity		
Series preferred stock ($.10 par value; 250,000,000 shares authorized; none issued)	**—**	—
Common stock ($.10 par value; 6,250,000,000 shares authorized in each period; 4,242,374,240 shares issued in each period)	**424**	424
Additional paid in capital	**11,101**	11,182
Retained earnings	**35,635**	15,059
Accumulated other comprehensive income	**2,659**	2,673
Common stock in treasury, at cost (162,897,868 and 165,689,589 shares outstanding)	**(7,139)**	(7,263)
Deferred compensation – employee stock ownership plans and other	**416**	449
Noncontrolling interests	**1,591**	1,508
Total equity	**44,687**	24,032
Total liabilities and equity	**$ 257,143**	$ 244,180

See Notes to Consolidated Financial Statements

Consolidated Statements of Cash Flows Verizon Communications Inc. and Subsidiaries

(dollars in millions)

Years Ended December 31,	2017	2016	2015
Cash Flows from Operating Activities			
Net Income	$ 30,550	$ 13,608	$ 18,375
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization expense	16,954	15,928	16,017
Employee retirement benefits	440	2,705	(1,747)
Deferred income taxes	(14,463)	(1,063)	3,516
Provision for uncollectible accounts	1,167	1,420	1,610
Equity in losses of unconsolidated businesses, net of dividends received	117	138	127
Changes in current assets and liabilities, net of effects from acquisition/disposition of businesses			
Accounts receivable	(5,436)	(5,067)	(945)
Inventories	168	61	(99)
Other assets	656	449	942
Accounts payable and accrued liabilities	(335)	(1,079)	2,545
Discretionary contribution to qualified pension plans	(3,411)	(186)	—
Net gain on sale of divested businesses	(1,774)	(1,007)	—
Other, net	672	(3,097)	(1,314)
Net cash provided by operating activities	25,305	22,810	39,027
Cash Flows from Investing Activities			
Capital expenditures (including capitalized software)	(17,247)	(17,059)	(17,775)
Acquisitions of businesses, net of cash acquired	(5,928)	(3,765)	(3,545)
Acquisitions of wireless licenses	(583)	(534)	(9,942)
Proceeds from dispositions of businesses	3,614	9,882	48
Other, net	772	493	1,171
Net cash used in investing activities	(19,372)	(10,983)	(30,043)
Cash Flows from Financing Activities			
Proceeds from long-term borrowings	27,707	12,964	6,667
Proceeds from asset-backed long-term borrowings	4,290	4,986	—
Repayments of long-term borrowings and capital lease obligations	(23,837)	(19,159)	(9,340)
Repayments of asset-backed long-term borrowings	(400)	—	—
Decrease in short-term obligations, excluding current maturities	(170)	(149)	(344)
Dividends paid	(9,472)	(9,262)	(8,538)
Purchase of common stock for treasury	—	—	(5,134)
Other, net	(4,852)	(2,797)	1,577
Net cash used in financing activities	(6,734)	(13,417)	(15,112)
Decrease in cash and cash equivalents	(801)	(1,590)	(6,128)
Cash and cash equivalents, beginning of period	2,880	4,470	10,598
Cash and cash equivalents, end of period	$ 2,079	$ 2,880	$ 4,470

See Notes to Consolidated Financial Statements

Consolidated Statements of Changes in Equity Verizon Communications Inc. and Subsidiaries

(dollars in millions, except per share amounts, and shares in thousands)

Years Ended December 31,	2017		2016		2015	
	Shares	**Amount**	Shares	Amount	Shares	Amount
Common Stock						
Balance at beginning of year	**4,242,374**	**$ 424**	4,242,374	$ 424	4,242,374	$ 424
Balance at end of year	**4,242,374**	**424**	4,242,374	424	4,242,374	424
Additional Paid In Capital						
Balance at beginning of year		**11,182**		11,196		11,155
Other		**(81)**		(14)		41
Balance at end of year		**11,101**		11,182		11,196
Retained Earnings						
Balance at beginning of year		**15,059**		11,246		2,447
Net income attributable to Verizon		**30,101**		13,127		17,879
Dividends declared ($2.335, $2.285, $2.23) per share		**(9,525)**		(9,314)		(9,080)
Balance at end of year		**35,635**		15,059		11,246
Accumulated Other Comprehensive Income						
Balance at beginning of year attributable to Verizon		**2,673**		550		1,111
Foreign currency translation adjustments		**245**		(159)		(208)
Unrealized gains (losses) on cash flow hedges		**(31)**		198		(194)
Unrealized losses on marketable securities		**(14)**		(55)		(11)
Defined benefit pension and postretirement plans		**(214)**		2,139		(148)
Other comprehensive income (loss)		**(14)**		2,123		(561)
Balance at end of year attributable to Verizon		**2,659**		2,673		550
Treasury Stock						
Balance at beginning of year	**(165,690)**	**(7,263)**	(169,199)	(7,416)	(87,410)	(3,263)
Shares purchased	**—**	**—**	—	—	(104,402)	(5,134)
Employee plans (Note 14)	**2,787**	**124**	3,439	150	17,072	740
Shareowner plans (Note 14)	**5**	**—**	70	3	5,541	241
Balance at end of year	**(162,898)**	**(7,139)**	(165,690)	(7,263)	(169,199)	(7,416)
Deferred Compensation-ESOPs and Other						
Balance at beginning of year		**449**		428		424
Restricted stock equity grant		**157**		223		208
Amortization		**(190)**		(202)		(204)
Balance at end of year		**416**		449		428
Noncontrolling Interests						
Balance at beginning of year		**1,508**		1,414		1,378
Net income attributable to noncontrolling interests		**449**		481		496
Total comprehensive income		**449**		481		496
Distributions and other		**(366)**		(387)		(460)
Balance at end of year		**1,591**		1,508		1,414
Total Equity		**$ 44,687**		$ 24,032		$ 17,842

See Notes to Consolidated Financial Statements

Note 1

Description of Business and Summary of Significant Accounting Policies

Description of Business

Verizon Communications Inc. (Verizon or the Company) is a holding company that, acting through its subsidiaries, is one of the world's leading providers of communications, information and entertainment products and services to consumers, businesses and governmental agencies with a presence around the world. We have two reportable segments, Wireless and Wireline. For additional information concerning our business segments, see Note 12.

The Wireless segment provides wireless communications products and services, including wireless voice and data services and equipment sales, across the United States (U.S.) using one of the most extensive and reliable wireless networks. We provide these services and equipment sales to consumer, business and government customers across the U.S. on a postpaid and prepaid basis.

The Wireline segment provides voice, data and video communications products and enhanced services, including broadband video and data services, corporate networking solutions, security and managed network services and local and long distance voice services. We provide these products and services to consumers in the U.S., as well as to carriers, businesses and government customers both in the U.S. and around the world.

Consolidation

The method of accounting applied to investments, whether consolidated, equity or cost, involves an evaluation of all significant terms of the investments that explicitly grant or suggest evidence of control or influence over the operations of the investee. The consolidated financial statements include our controlled subsidiaries, as well as variable interest entities (VIE) where we are deemed to be the primary beneficiary. For controlled subsidiaries that are not wholly-owned, the noncontrolling interests are included in Net income and Total equity. Investments in businesses that we do not control, but have the ability to exercise significant influence over operating and financial policies, are accounted for using the equity method. Investments in which we do not have the ability to exercise significant influence over operating and financial policies are accounted for under the cost method. Equity and cost method investments are included in Investments in unconsolidated businesses in our consolidated balance sheets. All significant intercompany accounts and transactions have been eliminated.

Basis of Presentation

We have reclassified certain prior year amounts to conform to the current year presentation.

Use of Estimates

We prepare our financial statements using U.S. generally accepted accounting principles (GAAP), which requires management to make estimates and assumptions that affect reported amounts and disclosures. Actual results could differ from those estimates.

Examples of significant estimates include the allowance for doubtful accounts, the recoverability of property, plant and equipment, the recoverability of intangible assets and other long-lived assets, fair values of financial instruments, unrecognized tax benefits, valuation allowances on tax assets, accrued expenses, pension and postretirement benefit obligations, contingencies and the identification and valuation of assets acquired and liabilities assumed in connection with business combinations.

Revenue Recognition

Multiple Deliverable Arrangements

We offer products and services to our wireless and wireline customers through bundled arrangements. These arrangements involve multiple deliverables, which may include products, services or a combination of products and services.

Wireless

Our Wireless segment earns revenue primarily by providing access to and usage of its network, as well as the sale of equipment. In general, access revenue is billed one month in advance and recognized when earned. Usage revenue is generally billed in arrears and recognized when service is rendered. Equipment sales revenue associated with the sale of wireless devices and accessories is generally recognized when the products are delivered to and accepted by the customer, as this is considered to be a separate earnings process from providing wireless services. For agreements involving the resale of third-party services in which we are considered the primary obligor in the arrangements, we record the revenue gross at the time of the sale.

Under the Verizon device payment program, our eligible wireless customers purchase wireless devices under a device payment plan agreement. We may offer certain promotions that allow a customer to trade in his or her owned device in connection with the purchase of a new device.

Under these types of promotions, the customer receives a credit for the value of the trade-in device. In addition, we may provide the customer with additional future credits that will be applied against the customer's monthly bill as long as service is maintained. We recognize a liability for the trade-in device measured at fair value, which is approximated by considering several factors, including the weighted-average selling prices obtained in recent resales of devices eligible for trade-in. Future credits are recognized when earned by the customer.

From time to time, we offer certain marketing promotions that allow our customers to upgrade to a new device after paying down a certain specified portion of their required device payment plan agreement amount and trading in their device in good working order. When a customer enters into a device payment plan agreement with the right to upgrade to a new device, we account for this trade-in right as a guarantee obligation. The full amount of the trade-in right's fair value (not an allocated value) is recognized as a guarantee liability and the remaining allocable consideration is allocated to the device. The value of the guarantee liability effectively results in a reduction to the revenue recognized for the sale of the device.

In multiple element arrangements that bundle devices and monthly wireless service, revenue is allocated to each unit of accounting using a relative selling price method. At the inception of the arrangement, the amount allocable to the delivered units of accounting is limited to the amount that is not contingent upon the delivery of the monthly wireless service (the noncontingent amount). We effectively recognize revenue on the delivered device at the lesser of the amount allocated based on the relative selling price of the device or the noncontingent amount owed when the device is sold.

Wireline

Our Wireline segment earns revenue based upon usage of its network and facilities and contract fees. In general, fixed monthly fees for voice, video, data and certain other services are billed one month in advance and recognized when earned. Revenue from services that are not fixed in amount and are based on usage is generally billed in arrears and recognized when service is rendered.

We sell each of the services we offer on a bundled basis (i.e., voice, video and data) and separately. Therefore, each of our products and services has a standalone selling price. Revenue from the sale of each product or service is allocated to each deliverable using a relative selling price method. Under this method, arrangement consideration is allocated to each separate deliverable based on our standalone selling price for each product or service. These services include Fios services, individually or in bundles, and high-speed Internet.

When we bundle equipment with maintenance and monitoring services, we recognize equipment revenue when the equipment is installed in accordance with contractual specifications and ready for the customer's use. The maintenance and monitoring services are recognized monthly over the term of the contract as we provide the services.

Installation-related fees, along with the associated costs up to but not exceeding these fees, are deferred and amortized over the estimated customer relationship period.

Other

Advertising revenues are generated through display advertising and search advertising. Display advertising revenue is generated by the display of graphical advertisements and other performance-based advertising. Search advertising revenue is generated when a consumer clicks on a text-based advertisement on their screen. Agreements for advertising typically take the forms of impression-based contracts, time-based contracts or performance-based contracts. Advertising revenues derived from impression-based contracts under which we provide impressions in exchange for a fixed fee, are generally recognized as the impressions are delivered. Advertising revenues derived from time-based contracts under which we provide promotions over a specified time period for a fixed fee, are recognized on a straight-line basis over the term of the contract, provided that we meet and continue to meet our obligations under the contract. Advertising revenues derived from contracts under which we are compensated based on certain performance criteria are recognized as we complete the contractually specified performance.

We are considered the principal in our programmatic advertising contracts as we are the primary obligor. We present all revenues from these contracts on a gross basis.

We report taxes imposed by governmental authorities on revenue-producing transactions between us and our customers, net of taxes we pass through to our customers.

Maintenance and Repairs

We charge the cost of maintenance and repairs, including the cost of replacing minor items not constituting substantial betterments, principally to Cost of services as these costs are incurred.

Advertising Costs

Costs for advertising products and services, as well as other promotional and sponsorship costs, are charged to Selling, general and administrative expense in the periods in which they are incurred. See Note 14 for additional information.

Earnings Per Common Share

Basic earnings per common share are based on the weighted-average number of shares outstanding during the period. Where appropriate, diluted earnings per common share include the dilutive effect of shares issuable under our stock-based compensation plans.

There were a total of approximately 5 million, 6 million and 8 million outstanding dilutive securities, primarily consisting of restricted stock units, included in the computation of diluted earnings per common share for the years ended December 31, 2017, 2016 and 2015, respectively.

Cash and Cash Equivalents

We consider all highly liquid investments with a maturity of 90 days or less when purchased to be cash equivalents. Cash equivalents are stated at cost, which approximates quoted market value and includes amounts held in money market funds.

Marketable Securities

We have investments in marketable securities, which are considered "available-for-sale" under the provisions of the accounting standard for certain debt and equity securities and are included in the accompanying consolidated balance sheets in Other assets. We continually evaluate our investments in marketable securities for impairment due to declines in market value considered to be other-than-temporary. That evaluation includes, in addition to persistent, declining stock prices, general economic and company-specific evaluations. In the event of a determination that a decline in market value is other-than-temporary, a charge to earnings is recorded for the loss and a new cost basis in the investment is established.

Allowance for Doubtful Accounts

Accounts receivable are recorded in the consolidated financial statements at cost net of an allowance for credit losses, with the exception of device payment plan agreement receivables, which are initially recorded at fair value based on a number of factors including historical write-off experience, credit quality of the customer base and other factors such as macroeconomic conditions. We maintain allowances for uncollectible accounts receivable, including our device payment plan agreement receivables, for estimated losses resulting from the failure or inability of our customers to make required payments. Our allowance for uncollectible accounts receivable is based on management's assessment of the collectability of specific customer accounts and includes consideration of the credit worthiness and financial condition of those customers. We record an allowance to reduce the receivables to the amount that is reasonably believed to be collectible. We also record an allowance for all other receivables based on multiple factors, including historical experience with bad debts, the general economic environment and the aging of such receivables. Due to the device payment plan agreement being incorporated in the standard Verizon Wireless bill, the collection and risk strategies continue to follow historical practices. We monitor the aging of our accounts with device payment plan agreement receivables and write-off account balances if collection efforts are unsuccessful and future collection is unlikely.

Inventories

Inventory consists of wireless and wireline equipment held for sale, which is carried at the lower of cost (determined principally on either an average cost or first-in, first-out basis) or market.

Plant and Depreciation

We record property, plant and equipment at cost. Property, plant and equipment are generally depreciated on a straight-line basis.

Leasehold improvements are amortized over the shorter of the estimated life of the improvement or the remaining term of the related lease, calculated from the time the asset was placed in service.

When depreciable assets are retired or otherwise disposed of, the related cost and accumulated depreciation are deducted from the plant accounts and any gains or losses on disposition are recognized in income.

We capitalize and depreciate network software purchased or developed along with related plant assets. We also capitalize interest associated with the acquisition or construction of network-related assets. Capitalized interest is reported as a reduction in interest expense and depreciated as part of the cost of the network-related assets.

In connection with our ongoing review of the estimated useful lives of property, plant and equipment during 2016, we determined that the average useful lives of certain leasehold improvements would be increased from 5 to 7 years. This change resulted in a decrease to depreciation expense of $0.2 billion in 2016. We determined that changes were also necessary to the remaining estimated useful lives of certain assets as a result of technology upgrades, enhancements and planned retirements. These changes resulted in an increase in depreciation expense of $0.3 billion, $0.3 billion and $0.4 billion in 2017, 2016 and 2015, respectively. While the timing and extent of current deployment plans are subject to ongoing analysis and modification, we believe that the current estimates of useful lives are reasonable.

Computer Software Costs

We capitalize the cost of internal-use network and non-network software that has a useful life in excess of one year. Subsequent additions, modifications or upgrades to internal-use network and non-network software are capitalized only to the extent that they allow the software to perform a task it previously did not perform. Planning, software maintenance and training costs are expensed in the period in which they are incurred. Also, we capitalize interest associated with the development of internal-use network and non-network software. Capitalized non-network internal-use software costs are amortized using the straight-line method over a period of 3 to 7 years and are included in Other intangible assets, net in our consolidated balance sheets. For a discussion of our impairment policy for capitalized software costs, see "Goodwill and Other Intangible Assets" below. Also, see Note 3 for additional information of internal-use non-network software reflected in our consolidated balance sheets.

Goodwill and Other Intangible Assets

Goodwill

Goodwill is the excess of the acquisition cost of businesses over the fair value of the identifiable net assets acquired. Impairment testing for goodwill is performed annually in the fourth fiscal quarter or more frequently if impairment indicators are present. To determine if goodwill is potentially impaired, we have the option to perform a qualitative assessment. However, we may elect to bypass the qualitative assessment and perform an impairment test even if no indications of a potential impairment exist. The impairment test for goodwill is performed at the reporting unit level and compares the fair value of the reporting unit (calculated using a combination of a market approach and a discounted cash flow method) to its carrying value. The market approach includes the use of comparative multiples to corroborate discounted cash flow results. The discounted cash flow method is based on the present value of two components, a projected cash flows and a terminal value. The terminal value represents the expected normalized future cash flows of the reporting unit beyond the cash flows from the discrete projection period. The fair value of the reporting unit is calculated based on the sum of the present value of the cash flows from the discrete period and the present value of the terminal value. The discount rate represented our estimate of the weighted-average cost of capital, or expected return, that a marketplace participant would have required as of the valuation date. If the carrying value exceeds the fair value, an impairment charge is booked for the excess carrying value over fair value, limited to the total amount of goodwill of that reporting unit. Our assessments in 2017, 2016 and 2015 indicated that the fair value of each of our Wireless, Wireline, Media and Telematics reporting units exceeded their carrying value and therefore did not result in an impairment.

Intangible Assets Not Subject to Amortization

A significant portion of our intangible assets are wireless licenses that provide our wireless operations with the exclusive right to utilize designated radio frequency spectrum to provide wireless communication services. While licenses are issued for only a fixed time, generally ten years, such licenses are subject to renewal by the Federal Communications Commission (FCC). License renewals have occurred routinely and at nominal cost. Moreover, we have determined that there are currently no legal, regulatory, contractual, competitive, economic or other factors that limit the useful life of our wireless licenses. As a result, we treat the wireless licenses as an indefinite-lived intangible asset. We re-evaluate the useful life determination for wireless licenses each year to determine whether events and circumstances continue to support an indefinite useful life. We aggregate our wireless licenses into one single unit of accounting, as we utilize our wireless licenses on an integrated basis as part of our nationwide wireless network.

We test our wireless licenses for potential impairment annually or more frequently if impairment indicators are present. We have the option to first perform a qualitative assessment to determine whether it is necessary to perform a quantitative impairment test. However, we may elect to bypass the qualitative assessment in any period and proceed directly to performing the quantitative impairment test. In 2017 and 2016, we performed a qualitative assessment to determine whether it is more likely than not that the fair value of our wireless licenses was less than the carrying amount. As part of our assessment, we considered several qualitative factors including the business enterprise value of our Wireless segment, macroeconomic conditions (including changes in interest rates and discount rates), industry and market considerations (including industry revenue and EBITDA (Earnings before interest, taxes, depreciation and amortization)), margin projections, the projected financial performance of our Wireless segment, as well as other factors. The most recent quantitative assessments of our wireless licenses occurred in 2015. Our quantitative assessment consisted of comparing the estimated fair value of our aggregate wireless licenses to the aggregated carrying amount as of the test date. Using a quantitative assessment, we estimated the fair value of our aggregate wireless licenses using the Greenfield approach. The Greenfield approach is an income based valuation approach that values the wireless licenses by calculating the cash flow generating potential of a hypothetical start-up company that goes into business with no assets except the wireless licenses to be valued. A discounted cash flow analysis is used to estimate what a marketplace participant would be willing to pay to purchase the aggregated wireless licenses as of the valuation date. If the estimated fair value of the aggregated wireless licenses is less than the aggregated carrying amount of the wireless licenses, then an impairment charge is recognized. Our assessments in 2017, 2016 and 2015 indicated that the fair value of our wireless licenses exceeded the carrying value and, therefore, did not result in an impairment.

Interest expense incurred while qualifying activities are performed to ready wireless licenses for their intended use is capitalized as part of wireless licenses. The capitalization period ends when the development is discontinued or substantially completed and the license is ready for its intended use.

Intangible Assets Subject to Amortization and Long-Lived Assets

Our intangible assets that do not have indefinite lives (primarily customer lists and non-network internal-use software) are amortized over their estimated useful lives. All of our intangible assets subject to amortization, and long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable. If any indications of impairment are present, we would test for recoverability by comparing the carrying amount of the asset group to the net undiscounted cash flows expected to be generated from the asset group. If those net undiscounted cash flows do not exceed the carrying amount, we would perform the next step, which is to determine the fair value of the asset and record an impairment, if any. We re-evaluate the useful life determinations for these intangible assets each year to determine whether events and circumstances warrant a revision to their remaining useful lives.

For information related to the carrying amount of goodwill, wireless licenses and other intangible assets, as well as the major components and average useful lives of our other acquired intangible assets, see Note 3.

Fair Value Measurements

Fair value of financial and non-financial assets and liabilities is defined as an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. The three-tier hierarchy for inputs used in measuring fair value, which prioritizes the inputs used in the methodologies of measuring fair value for assets and liabilities, is as follows:

Level 1—Quoted prices in active markets for identical assets or liabilities
Level 2—Observable inputs other than quoted prices in active markets for identical assets and liabilities
Level 3—No observable pricing inputs in the market

Financial assets and financial liabilities are classified in their entirety based on the lowest level of input that is significant to the fair value measurements. Our assessment of the significance of a particular input to the fair value measurements requires judgment and may affect the valuation of the assets and liabilities being measured and their categorization within the fair value hierarchy.

Income Taxes

Our effective tax rate is based on pre-tax income, statutory tax rates, tax laws and regulations and tax planning strategies available to us in the various jurisdictions in which we operate.

Deferred income taxes are provided for temporary differences in the basis between financial statement and income tax assets and liabilities. Deferred income taxes are recalculated annually at tax rates in effect. We record valuation allowances to reduce our deferred tax assets to the amount that is more likely than not to be realized.

We use a two-step approach for recognizing and measuring tax benefits taken or expected to be taken in a tax return. The first step is recognition: we determine whether it is more likely than not that a tax position will be sustained upon examination, including resolution of any related appeals or litigation processes, based on the technical merits of the position. In evaluating whether a tax position has met the more-likely-than-not recognition threshold, we presume that the position will be examined by the appropriate taxing authority that has full knowledge of all relevant information. The second step is measurement: a tax position that meets the more-likely-than-not recognition threshold is measured to determine the amount of benefit to recognize in the financial statements. The tax position is measured at the largest amount of benefit that is greater than 50 percent likely of being realized upon ultimate settlement. Differences between tax positions taken in a tax return and amounts recognized in the financial statements will generally result in one or more of the following: an increase in a liability for income taxes payable, a reduction of an income tax refund receivable, a reduction in a deferred tax asset or an increase in a deferred tax liability.

Significant management judgment is required in evaluating our tax positions and in determining our effective tax rate.

We recorded provisional amounts in the consolidated financial statements for the income tax effects of the Tax Cuts and Jobs Act (TCJA) based upon currently available information.

Stock-Based Compensation

We measure and recognize compensation expense for all stock-based compensation awards made to employees and directors based on estimated fair values. See Note 9 for additional information.

Foreign Currency Translation

The functional currency of our foreign operations is generally the local currency. For these foreign entities, we translate income statement amounts at average exchange rates for the period, and we translate assets and liabilities at end-of-period exchange rates. We record these translation adjustments in Accumulated other comprehensive income, a separate component of Equity, in our consolidated balance sheets. We report exchange gains and losses on intercompany foreign currency transactions of a long-term nature in Accumulated other comprehensive income. Other exchange gains and losses are reported in income.

Employee Benefit Plans

Pension and postretirement health care and life insurance benefits earned during the year, as well as interest on projected benefit obligations, are accrued currently. Prior service costs and credits resulting from changes in plan benefits are generally amortized over the average remaining service period of the employees expected to receive benefits. Expected return on plan assets is determined by applying the return on assets assumption to the actual fair value of plan assets. Actuarial gains and losses are recognized in operating results in the year in which they occur. These gains and losses are measured annually as of December 31 or upon a remeasurement event. Verizon management employees no longer earn pension benefits or earn service towards the company retiree medical subsidy. See Note 10 for additional information.

We recognize a pension or a postretirement plan's funded status as either an asset or liability on the consolidated balance sheets. Also, we measure any unrecognized prior service costs and credits that arise during the period as a component of Accumulated other comprehensive income, net of applicable income tax.

Derivative Instruments

We enter into derivative transactions primarily to manage our exposure to fluctuations in foreign currency exchange rates and interest rates. We employ risk management strategies, which may include the use of a variety of derivatives including cross currency swaps, forward interest rate swaps, interest rate swaps and interest rate caps. We do not hold derivatives for trading purposes. See Note 8 for additional information.

We measure all derivatives at fair value and recognize them as either assets or liabilities on our consolidated balance sheets. Our derivative instruments are valued primarily using models based on readily observable market parameters for all substantial terms of our derivative contracts and thus are classified as Level 2. Changes in the fair values of derivative instruments not qualifying for hedge accounting are recognized in earnings in the current period. For fair value hedges, the change in the fair value of the derivative instruments is recognized in earnings, along with the change in the fair value of the hedged item. For cash flow hedges, the change in the fair value of the derivative instruments, along with the change in the fair value of the hedged item, are reported in Other comprehensive income (loss) and recognized in earnings when the hedged item is recognized in earnings. For net investment hedges of certain of our foreign operations, the change in the fair value of the derivative instruments is reported in Other comprehensive income (loss) as part of the cumulative translation adjustment and partially offset the impact of foreign currency changes on the value of our net investment.

Variable Interest Entities

VIEs are entities that lack sufficient equity to permit the entity to finance its activities without additional subordinated financial support from other parties, have equity investors that do not have the ability to make significant decisions relating to the entity's operations through voting rights, do not have the obligation to absorb the expected losses, or do not have the right to receive the residual returns of the entity. We consolidate the assets and liabilities of VIEs when we are deemed to be the primary beneficiary. The primary beneficiary is the party that has the power to make the decisions that most significantly affect the economic performance of the VIE and has the obligation to absorb losses or the right to receive benefits that could potentially be significant to the VIE.

Recently Adopted Accounting Standards

During the first quarter of 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2016-09, "Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting." This standard update intends to simplify several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. This standard update was effective as of the first quarter of 2017. The adoption of this standard update did not have a significant impact on our consolidated financial statements.

During the first quarter of 2017, the FASB issued ASU 2017-04, "Intangibles - Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment." The amendments in this update eliminate the requirement to perform step two of the goodwill impairment test, which requires a hypothetical purchase price allocation when an impairment is determined to have occurred. A goodwill impairment will now be the amount by which a reporting unit's carrying value exceeds its fair value, not to exceed the carrying amount of goodwill. This standard update is effective as of the first quarter of 2020; however, early adoption is permitted for any interim or annual impairment tests performed after January 1, 2017. Verizon early adopted this standard on January 1, 2017. The adoption of this standard update did not have a significant impact on our consolidated financial statements.

During the first quarter of 2017, the FASB issued ASU 2017-01, "Business Combinations (Topic 805): Clarifying the Definition of a Business." The amendments in this update provide a framework - the "screen" - in which to evaluate whether a set of transferred assets and activities is a business. The screen requires that such set is not a business when substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or a group of similar identifiable assets. The standard also aligns the definition of outputs with how outputs are described in Accounting Standards Codification (ASC) 606, Revenue from Contracts with Customers. This standard is effective as of the first quarter of 2018; however, early adoption is permitted. Verizon early adopted this standard, on a prospective basis, in the fourth quarter of 2017. The adoption of this standard update did not have a significant impact on our consolidated financial statements.

During the third quarter of 2017, the FASB issued ASU 2017-12, "Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities." The amendments in this update simplify the application of hedge accounting and increase the transparency of hedge results. The updated standard also amends the presentation and disclosure requirements and changes how companies can assess the effectiveness of their hedging relationships. Companies will now have until the end of the first quarter in which a hedge is entered into to perform an initial assessment of a hedge's effectiveness. After initial qualification, the new guidance permits a qualitative effectiveness assessment for certain hedges instead of a quantitative test if the company can reasonably support an expectation of high effectiveness throughout the term of the hedge. An initial quantitative test to establish that the hedge relationship is highly effective is still required. For cash flow hedges, if the hedge is highly effective, all changes in the fair value of the derivative hedging instrument will be recorded in Other comprehensive income (loss). These changes in fair value will be reclassified to earnings when the hedged item impacts earnings. The standard update is effective as of the first quarter of 2019; however, early adoption is permitted within an interim period. Verizon early adopted this standard in the fourth quarter of 2017. The adoption of this standard update did not have a significant impact on our consolidated financial statements.

Recently Issued Accounting Standards

In February 2018, the FASB issued ASU 2018-02, "Income Statement - Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income." This standard update allows entities, as an accounting policy election, the option to reclassify from accumulated other comprehensive income to retained earnings stranded tax effects resulting from the newly enacted federal corporate income tax rate in TCJA. It also allows entities to elect to reclassify other stranded tax effects that relate to TCJA but do not directly relate to the change in the federal rate such as state taxes. The tax effects that are stranded in accumulated other comprehensive income for other reasons such as a change in valuation allowance may not be reclassified. This standard update is effective as of the first quarter of 2019; however, early adoption is permitted. The standard update can be applied on a retrospective basis to each period in which the effect of the change in the federal income tax rate in TCJA the Act is recognized or applied it in the reporting period of adoption. We are currently evaluating the impact that this standard update will have on our consolidated financial statements.

In March 2017, the FASB issued ASU 2017-07, "Compensation - Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost." The amendments in this update require an employer to report the service cost component in the same line item or items as other compensation costs arising from services rendered by the pertinent employees during the period. The other components of net benefit cost, including the recognition of prior service credits, will be presented in the income statement separately from the service cost component and outside a subtotal of income from operations. The amendments in this update also allow only the service cost component of pension and other postretirement benefit costs to be eligible for capitalization when applicable. The amendments in this update would be applied retrospectively for the presentation of the service cost component and other components of net periodic benefit cost in the income statement and prospectively, on and after the effective date, for the capitalization of the service cost component of net periodic benefit cost in assets. Disclosures of the nature of and reason for the change in accounting principle would be required in the first interim and annual reporting periods of adoption. This standard update is effective as of the first quarter of 2018; however, early adoption is permitted as of the beginning of an annual period for which financial statements have not been issued. We will adopt this standard in the first quarter of 2018. The impact of the retrospective adoption of this standard update will be an increase to consolidated operating income of approximately $2.2 billion for the year ended December 31, 2016. There will be an insignificant impact to consolidated operating income for the year ended December 31, 2017 and no impact to consolidated net income for the years ended December 31, 2017 and 2016.

In February 2017, the FASB issued ASU 2017-05, "Other Income - Gains and Losses From the Derecognition of Nonfinancial Assets (Subtopic 610-20): Clarifying the Scope of Asset Derecognition Guidance and Accounting for Partial Sales of Nonfinancial Assets." The new guidance defines an "in substance nonfinancial asset" as an asset or group of assets for which substantially all of the fair value consists of nonfinancial assets and the group or subsidiary is not a business. The standard requires entities to derecognize nonfinancial assets or in substance nonfinancial assets when the entity no longer has (or ceases to have) a controlling financial interest in the legal entity that holds the asset and the entity transfers control of the asset. The standard update also unifies guidance related to partial sales of nonfinancial assets to be more consistent with the sale of a business. This standard update is effective as of the first quarter of 2018; however, early adoption is permitted. We do not expect that this standard update will have a significant impact on our consolidated financial statements.

In November 2016, the FASB issued ASU 2016-18, "Statement of Cash Flows (Topic 230): Restricted Cash." The amendments in this update require that cash and cash equivalent balances in a statement of cash flows include those amounts deemed to be restricted cash and restricted cash equivalents. This standard update is effective as of the first quarter of 2018; however, early adoption is permitted. We do not expect the adoption of this standard will have a significant impact on our consolidated financial statements.

In August 2016, the FASB issued ASU 2016-15, "Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments." This standard update addresses eight specific cash flow issues with the objective of reducing the existing diversity in practice for these issues. Among the updates, this standard update requires cash receipts from payments on a transferor's beneficial interests in securitized trade receivables to be classified as cash inflows from investing activities. This standard update is effective as of the first quarter of 2018; however, early adoption is permitted. We expect the amendment relating to beneficial interests in securitization transactions will have an impact on our presentation of collections of the deferred purchase price from sales of wireless device payment plan agreement receivables in our consolidated statements of cash flows. Upon adoption of this standard update in the first quarter of 2018, we expect to retrospectively reclassify approximately $0.6 billion of collections of deferred purchase price related to collections from customers from Cash flows from operating activities to Cash flows from investing activities in our consolidated statement of cash flows for the year ended December 31, 2017 and $1.1 billion for the year ended December 31, 2016.

In June 2016, the FASB issued ASU 2016-13, "Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments." This standard update requires that certain financial assets be measured at amortized cost net of an allowance for estimated credit losses such that the net receivable represents the present value of expected cash collection. In addition, this standard update requires that certain financial assets be measured at amortized cost reflecting an allowance for estimated credit losses expected to occur over the life of the assets.

The estimate of credit losses must be based on all relevant information including historical information, current conditions and reasonable and supportable forecasts that affect the collectability of the amounts. This standard update is effective as of the first quarter of 2020; however, early adoption is permitted. We intend to adopt this standard update in the first quarter of 2020. We are currently evaluating the impact that this standard update will have on our consolidated financial statements upon adoption.

In February 2016, the FASB issued ASU 2016-02, "Leases (Topic 842)." This standard update intends to increase transparency and improve comparability by requiring entities to recognize assets and liabilities on the balance sheet for all leases, with certain exceptions. In addition, through improved disclosure requirements, the standard update will enable users of financial statements to further understand the amount, timing, and uncertainty of cash flows arising from leases. This standard update is effective as of the first quarter of 2019; however, early adoption is permitted. Verizon's current operating lease portfolio is primarily comprised of network, real estate, and equipment leases. Upon adoption of this standard, we expect our balance sheet to include a right-of-use asset and liability related to substantially all operating lease arrangements. We have established a cross-functional coordinated implementation team to implement the standard update related to leases. We are in the process of determining the scope of arrangements that will be subject to this standard as well as assessing the impact to our systems, processes and internal controls to meet the standard update's reporting and disclosure requirements.

In May 2014, the FASB issued ASU 2014-09, "Revenue from Contracts with Customers (Topic 606)." This standard, along with subsequently issued updates, clarifies the principles for recognizing revenue and develops a common revenue standard for U.S. generally accepted accounting principles (GAAP). The standard provides a more robust framework for addressing revenue issues; improves comparability of revenue recognition practices across entities, industries, jurisdictions, and capital markets; and provides more useful information to users of financial statements through improved disclosure requirements. The standard also amends current guidance for the recognition of costs to obtain and fulfill contracts with customers such that incremental costs of obtaining and direct costs of fulfilling contracts with customers will be deferred and amortized consistent with the transfer of the related good or service. The two permitted transition methods under the new standard are the full retrospective method, in which case the standard would be applied to each prior reporting period presented and the cumulative effect of applying the standard would be recognized at the earliest period shown, or the modified retrospective method, in which case the standard is applied only to the most current period presented and the cumulative effect of applying the standard would be recognized at the date of initial application. In August 2015, an accounting standard update was issued that delayed the effective date of this standard until the first quarter of 2018, at which time we will adopt the standard using the modified retrospective approach applied to open contracts. We have a cross-functional coordinated team working on the implementation of this standard. Summarized below are the key impacts and areas requiring significant judgment arising from the initial adoption of Topic 606.

The ultimate impact on revenue resulting from the application of the new standard is subject to assessments that are dependent on many variables, including, but not limited to, the terms of our contractual arrangements and mix of business. The allocation of revenue between equipment and service for our wireless subsidy contracts will result in more revenue allocated to equipment and recognized upon delivery, and less service revenue recognized over the contract term than under current GAAP. Total revenue over the full contract term will be unchanged and there will be no change to customer billing, the timing of cash flows or the presentation of cash flows.

Additionally, the new standard requires the deferral of incremental costs to obtain a customer contract, which are then amortized to expense, as part of Selling, general and administrative expense, over the respective periods of expected benefit. As a result, a significant amount of our sales commission costs, which would have historically been expensed as incurred by our Wireless and Wireline businesses under our previous accounting, will be deferred and amortized.

Based on currently available information, we expect the cumulative effect of initially applying the new standard to result in an increase to the opening balance of retained earnings ranging from approximately $4.0 billion to $4.6 billion on a pre-tax basis.

We also evaluated the impact of Topic 606 as it relates to gross versus net revenue presentation for our programmatic advertising services and the treatment of financing component inherent in our Wireless direct channel contracts. We concluded that we are the principal in our programmatic advertising contracts with our customers and, therefore, we will continue to present all revenues from these contracts on a gross basis. With respect to our direct channel wireless contracts, we have concluded that our contracts currently do not contain a significant financing component for our classes of customers. These conclusions will be reassessed periodically based on current facts and circumstances.

We have identified and implemented changes to our systems, processes and internal controls to meet the standard's reporting and disclosure requirements.

Note 2
Acquisitions and Divestitures

Wireless

Spectrum License Transactions

Since 2015, we have entered into several strategic spectrum transactions including:

- In January 2015, the FCC completed an auction of 65MHz of spectrum, which it identified as the Advanced Wireless Services (AWS)-3 band. Verizon participated in that auction and was the high bidder on 181 spectrum licenses, for which we paid cash of approximately

$10.4 billion. During the fourth quarter of 2014, we made a deposit of $0.9 billion related to our participation in this auction. During the first quarter of 2015, we submitted an application to the FCC and paid the remaining $9.5 billion to the FCC to complete payment for these licenses. The cash payment of $9.5 billion is classified within Acquisitions of wireless licenses on our consolidated statement of cash flows for the year ended December 31, 2015. The FCC granted us these spectrum licenses in April 2015.

- During the fourth quarter of 2015, we completed a license exchange transaction with an affiliate of T-Mobile USA, Inc. (T-Mobile USA) to exchange certain AWS and Personal Communication Services (PCS) spectrum licenses. As a result, we received $0.4 billion of AWS and PCS spectrum licenses at fair value and recorded a pre-tax gain of approximately $0.3 billion in Selling, general and administrative expense on our consolidated statement of income for the year ended December 31, 2015.

- During the fourth quarter of 2015, we entered into a license exchange agreement with affiliates of AT&T Inc. (AT&T) to exchange certain AWS and PCS spectrum licenses. This non-cash exchange was completed in March 2016. As a result, we received $0.4 billion of AWS and PCS spectrum licenses at fair value and recorded a pre-tax gain of $0.1 billion in Selling, general and administrative expense on our consolidated statement of income for the year ended December 31, 2016.

- During the first quarter of 2016, we entered into a license exchange agreement with affiliates of Sprint Corporation to exchange certain AWS and PCS spectrum licenses. This non-cash exchange was completed in September 2016. As a result, we received $0.3 billion of AWS and PCS spectrum licenses at fair value and recorded an insignificant gain in Selling, general and administrative expense on our consolidated statement of income for the year ended December 31, 2016.

- During the fourth quarter of 2016, we entered into a license exchange agreement with affiliates of AT&T to exchange certain AWS and PCS spectrum licenses. This non-cash exchange was completed in February 2017. As a result, we received $1.0 billion of AWS and PCS spectrum licenses at fair value and recorded a pre-tax gain of $0.1 billion in Selling, general and administrative expense on our consolidated statement of income for the year ended December 31, 2017.

- During the first quarter of 2017, we entered into a license exchange agreement with affiliates of Sprint Corporation to exchange certain PCS spectrum licenses. This non-cash exchange was completed in May 2017. As a result, we received $0.1 billion of PCS spectrum licenses at fair value and recorded an insignificant gain in Selling, general and administrative expense on our consolidated statement of income for the year ended December 31, 2017.

- During the third quarter of 2017, we entered into a license exchange agreement with affiliates of T-Mobile USA to exchange certain AWS and PCS spectrum licenses. This non-cash exchange was completed in December 2017. As a result, we received $0.4 billion of AWS and PCS spectrum licenses at fair value and recorded a pre-tax gain of $0.1 billion in Selling, general and administrative expense on our consolidated statement of income for the year ended December 31, 2017.

Tower Monetization Transaction

In March 2015, we completed a transaction with American Tower Corporation (American Tower) pursuant to which American Tower acquired the exclusive rights to lease and operate approximately 11,300 of our wireless towers for an upfront payment of $5.0 billion. Under the terms of the leases, American Tower has exclusive rights to lease and operate the towers over an average term of approximately 28 years. As the leases expire, American Tower has fixed-price purchase options to acquire these towers based on their anticipated fair market values at the end of the lease terms. As part of this transaction, we also sold 162 towers for $0.1 billion. We have subleased capacity on the towers from American Tower for a minimum of 10 years at current market rates, with options to renew. The upfront payment, including the towers sold, which is primarily included within Other liabilities on our consolidated balance sheets, was accounted for as deferred rent and as a financing obligation. The $2.4 billion accounted for as deferred rent, which is presented within Other, net cash flows provided by operating activities, relates to the portion of the towers for which the right-of-use has passed to the tower operator. The $2.7 billion accounted for as a financing obligation, which is presented within Other, net cash flows used in financing activities, relates to the portion of the towers that we continue to occupy and use for network operations. See Note 5 for additional information.

Straight Path

In May 2017, we entered into a purchase agreement to acquire Straight Path Communications Inc. (Straight Path), a holder of millimeter wave spectrum configured for fifth-generation (5G) wireless services, for consideration reflecting an enterprise value of approximately $3.1 billion. Under the terms of the purchase agreement, we agreed to pay (i) Straight Path shareholders $184.00 per share, payable in Verizon shares, and (ii) certain transaction costs payable in cash of approximately $0.7 billion, consisting primarily of a fee to be paid to the FCC. The acquisition is subject to customary regulatory approvals and closing conditions, and is expected to close by the end of the first quarter of 2018.

Other

During 2017, 2016 and 2015, we entered into and completed various other wireless license transactions for an insignificant amount of cash consideration.

<u>Wireline</u>

Access Line Sale

In February 2015, we entered into a definitive agreement with Frontier Communications Corporation (Frontier) pursuant to which Verizon sold its local exchange business and related landline activities in California, Florida and Texas, including Fios Internet and video customers, switched and special access lines and high-speed Internet service and long distance voice accounts in these three states, for approximately $10.5 billion (approximately $7.3 billion net of income taxes), subject to certain adjustments and including the assumption of $0.6 billion of indebtedness from Verizon by Frontier (Access Line Sale). The transaction, which included the acquisition by Frontier of the equity interests of Verizon's incumbent local exchange carriers (ILECs) in California, Florida and Texas, did not involve any assets or liabilities of Verizon Wireless. The transaction closed on April 1, 2016.

The transaction resulted in Frontier acquiring approximately 3.3 million voice connections, 1.6 million Fios Internet subscribers, 1.2 million Fios video subscribers and the related ILEC businesses from Verizon. For the years ended December 31, 2016 and 2015, these businesses generated revenues of approximately $1.3 billion and $5.3 billion, respectively, and operating income of $0.7 billion and $2.8 billion, respectively, for Verizon. The operating results of these businesses are excluded from our Wireline segment for all periods presented to reflect comparable segment operating results consistent with the information regularly reviewed by our chief operating decision maker.

During April 2016, Verizon used the net cash proceeds received of $9.9 billion to reduce its consolidated indebtedness. See Note 6 for additional information. The assets and liabilities that were sold were included in Verizon's continuing operations and classified as assets held for sale and liabilities related to assets held for sale on our consolidated balance sheets through the completion of the transaction on April 1, 2016. As a result of the closing of the transaction, we derecognized property, plant and equipment of $9.0 billion, goodwill of $1.3 billion, $0.7 billion of defined benefit pension and other postretirement benefit plan obligations and $0.6 billion of indebtedness assumed by Frontier.

We recorded a pre-tax gain of approximately $1.0 billion in Selling, general and administrative expense on our consolidated statement of income for the year ended December 31, 2016. The pre-tax gain included a $0.5 billion pension and postretirement benefit curtailment gain due to the elimination of the accrual of pension and other postretirement benefits for some or all future services of a significant number of employees covered by three of our defined benefit pension plans and one of our other postretirement benefit plans.

XO Holdings

In February 2016, we entered into a purchase agreement to acquire XO Holdings' wireline business (XO), which owned and operated one of the largest fiber-based Internet Protocol (IP) and Ethernet networks in the U.S. Concurrently, we entered into a separate agreement to utilize certain wireless spectrum from a wholly-owned subsidiary of XO Holdings, NextLink Wireless LLC (NextLink), that holds its wireless spectrum, which included an option, subject to certain conditions, to buy the subsidiary. In February 2017, we completed our acquisition of XO for total cash consideration of approximately $1.5 billion, of which $0.1 billion was paid in 2015.

In April 2017, we exercised our option to buy NextLink for approximately $0.5 billion, subject to certain adjustments. The transaction closed in January 2018. The spectrum acquired as part of the transaction will be used for our 5G technology deployment.

The consolidated financial statements include the results of XO's operations from the date the acquisition closed. If the acquisition of XO had been completed as of January 1, 2016, the results of operations of Verizon would not have been significantly different than our previously reported results of operations.

The acquisition of XO was accounted for as a business combination. The consideration was allocated to the assets acquired and liabilities assumed based on their fair values as of the close of the acquisition. We recorded approximately $1.2 billion of plant, property and equipment, $0.2 billion of goodwill and $0.2 billion of other intangible assets. Goodwill is calculated as the difference between the acquisition date fair value of the consideration transferred and the fair value of the net assets acquired. The goodwill recorded as a result of the XO transaction represents future economic benefits we expect to achieve as a result of the acquisition. The goodwill related to this acquisition is included within our Wireline segment. See Note 3 for additional information.

Data Center Sale

In December 2016, we entered into a definitive agreement, which was subsequently amended in March 2017, with Equinix, Inc. (Equinix) pursuant to which we agreed to sell 23 customer-facing data center sites in the U.S. and Latin America for approximately $3.6 billion, subject to certain adjustments (Data Center Sale). The transaction closed in May 2017.

For the years ended December 31, 2017 and 2016, these sites generated an insignificant amount of revenues and earnings. As a result of the closing of the transaction, we derecognized assets with a carrying value of $1.4 billion, primarily consisting of goodwill, property, plant and equipment and other intangible assets. The liabilities associated with the sale were insignificant.

In connection with the Data Center Sale and other insignificant divestitures, we recorded a net gain on sale of divested businesses of approximately $1.8 billion in Selling, general and administrative expense on our consolidated statement of income for the year ended December 31, 2017.

WideOpenWest, Inc.

In August 2017, we entered into a definitive agreement to purchase certain fiber-optic network assets in the Chicago market from WideOpenWest, Inc. (WOW!), a leading provider of communications services. The transaction closed in December 2017. In addition, the parties entered into a separate agreement pursuant to which WOW! will complete the build-out of the network assets we acquired by the second half of 2018. The total cash consideration for the transactions is expected to be approximately $0.3 billion, of which $0.2 billion is related to the transaction that closed in December 2017.

Other

Acquisition of AOL Inc.

In May 2015, we entered into an Agreement and Plan of Merger (the Merger Agreement) with AOL Inc. (AOL) pursuant to which we commenced a tender offer to acquire all of the outstanding shares of common stock of AOL at a price of $50.00 per share, net to the seller in cash, without interest and less any applicable withholding taxes.

On June 23, 2015, we completed the tender offer and merger, and AOL became a wholly-owned subsidiary of Verizon. The aggregate cash consideration paid by Verizon at the closing of these transactions was approximately $3.8 billion. Holders of approximately 6.6 million shares exercised appraisal rights under Delaware law. If they had not exercised these rights, Verizon would have paid an additional $330 million for such shares at the closing.

AOL was a leader in the digital content and advertising platform space. Verizon has been investing in emerging technology that taps into the market shift to digital content and advertising. AOL's business model aligns with this approach, and we believe that its combination of owned and operated content properties plus a digital advertising platform enhances our ability to further develop future revenue streams.

The acquisition of AOL has been accounted for as a business combination. The fair values of the assets acquired and liabilities assumed were determined using the income, cost and market approaches. The fair value measurements were primarily based on significant inputs that are not observable in the market and thus represent a Level 3 measurement as defined in ASC 820, other than long-term debt assumed in the acquisition. The income approach was primarily used to value the intangible assets, consisting primarily of acquired technology and customer relationships. The income approach indicates value for an asset based on the present value of cash flow projected to be generated by the asset. Projected cash flow is discounted at a required rate of return that reflects the relative risk of achieving the cash flow and the time value of money. The cost approach, which estimates value by determining the current cost of replacing an asset with another of equivalent economic utility, was used, as appropriate, for property, plant and equipment. The cost to replace a given asset reflects the estimated reproduction or replacement cost for the property, less an allowance for loss in value due to depreciation.

The following table summarizes the consideration to AOL's shareholders and the identification of the assets acquired, including cash acquired of $0.5 billion, and liabilities assumed as of the close of the acquisition, as well as the fair value at the acquisition date of AOL's noncontrolling interests:

(dollars in millions)		**As of June 23, 2015**
Cash payment to AOL's equity holders	$	3,764
Estimated liabilities to be paid[(1)]		377
Total consideration	$	4,141
Assets acquired:		
Goodwill	$	1,938
Intangible assets subject to amortization		2,504
Other		1,551
Total assets acquired		5,993
Liabilities assumed:		
Total liabilities assumed		1,851
Net assets acquired:		4,142
Noncontrolling interest		(1)
Total consideration	$	4,141

(1) During the years ended December 31, 2017 and 2016, we made cash payments of $1 million and $179 million, respectively, in respect of acquisition-date estimated liabilities to be paid. As of December 31, 2017, the remaining balance of estimated liabilities to be paid was $197 million.

Goodwill is calculated as the difference between the acquisition date fair value of the consideration transferred and the fair value of the net assets acquired. The goodwill recorded as a result of the AOL transaction represents future economic benefits we expect to achieve as a result of combining the operations of AOL and Verizon as well as assets acquired that could not be individually identified and separately recognized. The goodwill related to this acquisition is included within Corporate and other. See Note 3 for additional information.

Acquisition of Yahoo! Inc.'s Operating Business

In July 2016, Verizon entered into a stock purchase agreement (the Purchase Agreement) with Yahoo! Inc. (Yahoo). Pursuant to the Purchase Agreement, upon the terms and subject to the conditions thereof, we agreed to acquire the stock of one or more subsidiaries of Yahoo holding all of Yahoo's operating business for approximately $4.83 billion in cash, subject to certain adjustments (the Transaction).

In February 2017, Verizon and Yahoo entered into an amendment to the Purchase Agreement, pursuant to which the Transaction purchase price was reduced by $350 million to approximately $4.48 billion in cash, subject to certain adjustments. Subject to certain exceptions, the parties also agreed that certain user security and data breaches incurred by Yahoo (and the losses arising therefrom) were to be disregarded (1) for purposes of specified conditions to Verizon's obligations to close the Transaction and (2) in determining whether a "Business Material Adverse Effect" under the Purchase Agreement has occurred.

Concurrently with the amendment of the Purchase Agreement, Yahoo and Yahoo Holdings, Inc., a wholly-owned subsidiary of Yahoo that Verizon agreed to purchase pursuant to the Transaction, also entered into an amendment to the related reorganization agreement, pursuant to which Yahoo (which has changed its name to Altaba Inc. following the closing of the Transaction) retains 50% of certain post-closing liabilities arising out of governmental or third-party investigations, litigations or other claims related to certain user security and data breaches incurred by Yahoo prior to its acquisition by Verizon, including an August 2013 data breach disclosed by Yahoo on December 14, 2016. At that time, Yahoo disclosed that more than one billion of the approximately three billion accounts existing in 2013 had likely been affected. In accordance with the original Transaction agreements, Yahoo will continue to retain 100% of any liabilities arising out of any shareholder lawsuits (including derivative claims) and investigations and actions by the SEC.

In June 2017, we completed the Transaction. The aggregate purchase consideration of the Transaction was approximately $4.7 billion, including cash acquired of $0.2 billion.

Prior to the closing of the Transaction, pursuant to a related reorganization agreement, Yahoo transferred all of the assets and liabilities constituting Yahoo's operating business to the subsidiaries that we acquired in the Transaction. The assets that we acquired did not include Yahoo's ownership interests in Alibaba, Yahoo! Japan and certain other investments, certain undeveloped land recently divested by Yahoo, certain non-core intellectual property or its cash, other than the cash from its operating business we acquired. We received for our benefit and that of our current and certain future affiliates a non-exclusive, worldwide, perpetual, royalty-free license to all of Yahoo's intellectual property that was not conveyed with the business.

In October 2017, based upon information that we received in connection with our integration of Yahoo's operating business, we disclosed that we believe that the August 2013 data breach previously disclosed by Yahoo affected all of its accounts.

Oath, our organization that combines Yahoo's operating business with our existing Media business, includes diverse media and technology brands that engage approximately a billion people around the world. We believe that Oath, with its technology, content and data, will help us expand the global scale of our digital media business and build brands for the future.

The acquisition of Yahoo's operating business has been accounted for as a business combination. We are currently assessing the identification and measurement of the assets acquired and liabilities assumed. The preliminary results, which are summarized below, will be finalized within 12 months following the close of the acquisition. The preliminary results do not include any amount for potential liability arising from certain user security and data breaches since a reasonable estimate of loss, if any, cannot be determined at this time. We will continue to evaluate the accounting for these contingencies in conjunction with finalizing our accounting for this business combination and thereafter. When the valuations are finalized, any changes to the preliminary valuation of assets acquired and liabilities assumed may result in adjustments to the preliminary fair value of the net identifiable assets acquired and goodwill.

The fair values of the assets acquired and liabilities assumed were determined using the income, cost, market and multiple period excess earnings approaches. The fair value measurements were primarily based on significant inputs that are not observable in the market and thus represent a Level 3 measurement as defined in ASC 820 other than long-term debt assumed in the acquisition. The income approach was primarily used to value the intangible assets, consisting primarily of acquired technology and customer relationships. The income approach indicates value for an asset based on the present value of cash flow projected to be generated by the asset. Projected cash flow is discounted at a required rate of return that reflects the relative risk of achieving the cash flow and the time value of money. The cost approach, which estimates value by determining the current cost of replacing an asset with another of equivalent economic utility, was used, as appropriate, for property, plant and equipment. The cost to replace a given asset reflects the estimated reproduction or replacement cost for the property, less an allowance for loss in value due to depreciation.

The following table summarizes the consideration to Yahoo's shareholders and the preliminary identification of the assets acquired, including cash acquired of $0.2 billion, and liabilities assumed as of the close of the acquisition, as well as the fair value at the acquisition date of Yahoo's noncontrolling interests:

(dollars in millions)	As of June 13, 2017	Measurement-period adjustments [1]	As of December 31, 2017
Cash payment to Yahoo's equity holders	$ 4,723	$ (50)	$ 4,673
Estimated liabilities to be paid	38	—	38
Total consideration	$ 4,761	$ (50)	$ 4,711
Assets acquired:			
Goodwill	$ 874	$ 1,055	$ 1,929
Intangible assets subject to amortization	2,586	(713)	1,873
Property, plant, and equipment	1,796	9	1,805
Other	1,362	(30)	1,332
Total assets acquired	6,618	321	6,939
Liabilities assumed:			
Total liabilities assumed	1,824	354	2,178
Net assets acquired:	4,794	(33)	4,761
Noncontrolling interest	(33)	(17)	(50)
Total consideration	$ 4,761	$ (50)	$ 4,711

[1] Adjustments to preliminary fair value measurements to reflect new information obtained about facts and circumstances that existed as of the acquisition date that, if known, would have affected the measurement of the amounts recognized as of that date.

On the closing date of the Transaction, each unvested and outstanding Yahoo restricted stock unit award that was held by an employee who became an employee of Verizon was replaced with a Verizon restricted stock unit award, which is generally payable in cash upon the applicable vesting date. The value of those outstanding restricted stock units on the acquisition date was approximately $1.0 billion.

Goodwill is calculated as the difference between the acquisition date fair value of the consideration transferred and the fair value of the net assets acquired. The goodwill is primarily attributable to increased synergies that are expected to be achieved from the integration of Yahoo's operating business into our Media business. The preliminary goodwill related to this acquisition is included within Corporate and other. See Note 3 for additional information.

The consolidated financial statements include the results of Yahoo's operating business from the date the acquisition closed. If the acquisition of Yahoo's operating business had been completed as of January 1, 2016, the results of operations of Verizon would not have been significantly different than our previously reported results of operations.

Acquisition and Integration Related Charges

In connection with the Yahoo Transaction, we recognized $0.8 billion of acquisition and integration related charges during the year ended December 31, 2017, of which $0.5 billion, $0.1 billion and $0.2 billion related to Severance, Transaction costs and Integration costs, respectively. These charges were recorded in Selling, general and administrative expense on our consolidated statements of income.

Fleetmatics Group PLC

In July 2016, we entered into an agreement to acquire Fleetmatics Group PLC, a public limited company incorporated in Ireland (Fleetmatics). Fleetmatics was a leading global provider of fleet and mobile workforce management solutions. Pursuant to the terms of the agreement, we acquired Fleetmatics for $60.00 per ordinary share in cash. The aggregate merger consideration was approximately $2.5 billion, including cash acquired of $0.1 billion. We completed the acquisition on November 7, 2016. As a result of the transaction, Fleetmatics became a wholly-owned subsidiary of Verizon.

The consolidated financial statements include the results of Fleetmatics' operations from the date the acquisition closed. Had this acquisition been completed on January 1, 2016 or 2015, the results of operations of Verizon would not have been significantly different than our previously reported results of operations. Upon closing, we recorded approximately $1.4 billion of goodwill and $1.1 billion of other intangibles.

The acquisition of Fleetmatics was accounted for as a business combination. The consideration was allocated to the assets acquired and liabilities assumed based on their fair values as of the close of the acquisition.

Goodwill is calculated as the difference between the acquisition date fair value of the consideration transferred and the fair value of the net assets acquired. The goodwill recorded as a result of the Fleetmatics transaction represents future economic benefits we expect to achieve as a result of the acquisition. The goodwill related to this acquisition is included within Corporate and other. See Note 3 for additional information.

Other

In July 2016, we acquired Telogis, Inc., a global cloud-based mobile enterprise management software business, for $0.9 billion of cash consideration. Upon closing, we recorded $0.5 billion of goodwill that is included within Corporate and other.

During 2017, 2016 and 2015, we entered into and completed various other transactions for an insignificant amount of cash consideration.

Real Estate Transaction

On May 19, 2015, we consummated a sale-leaseback transaction with a financial services firm for the buildings and real estate at our Basking Ridge, New Jersey location. We received total gross proceeds of $0.7 billion resulting in a deferred gain of $0.4 billion, which will be amortized over the initial leaseback term of twenty years. The leaseback of the buildings and real estate is accounted for as an operating lease. The proceeds received as a result of this transaction have been classified within Cash flows used in investing activities on our consolidated statement of cash flows for the year ended December 31, 2015.

Note 3

Wireless Licenses, Goodwill and Other Intangible Assets

Wireless Licenses

The carrying amounts of Wireless licenses are as follows:

(dollars in millions)

At December 31,		2017		2016
Wireless licenses	$	**88,417**	$	86,673

At December 31, 2017 and 2016, approximately $8.8 billion and $10.0 billion, respectively, of wireless licenses were under development for commercial service for which we were capitalizing interest costs. We recorded approximately $0.5 billion of capitalized interest on wireless licenses for the years ended December 31, 2017 and 2016.

The average remaining renewal period of our wireless license portfolio was 5.4 years as of December 31, 2017. See Note 1 for additional information.

See Note 2 for additional information regarding spectrum license transactions.

Goodwill

Changes in the carrying amount of Goodwill are as follows:

(dollars in millions)

		Wireless		Wireline		Other		Total
Balance at January 1, 2016	$	18,393	$	4,331	$	2,607	$	25,331
Acquisitions (Note 2)		—		—		2,310		2,310
Reclassifications, adjustments and other		—		(547)		111		(436)
Balance at December 31, 2016	$	18,393	$	3,784	$	5,028	$	27,205
Acquisitions (Note 2)		**4**		**208**		**1,956**		**2,168**
Reclassifications, adjustments and other		**—**		**1**		**(202)**		**(201)**
Balance at December 31, 2017	**$**	**18,397**	**$**	**3,993**	**$**	**6,782**	**$**	**29,172**

During 2016, we allocated $0.1 billion of goodwill on a relative fair value basis from Wireline to Other as a result of the reclassification of our telematics businesses. See Note 12 for additional information. In addition, during 2016, we allocated $0.4 billion of goodwill on a relative fair value basis from Wireline to Non-current assets held for sale on our consolidated balance sheet as of December 31, 2016 as a result of our agreement to sell 23 data center sites. See Note 2 for additional information. As a result of acquisitions completed during 2016, we recognized preliminary goodwill of $2.3 billion, which is included within Other. See Note 2 for additional information.

During 2017, we recognized preliminary goodwill of $1.9 billion within Other as a result of the acquisition of Yahoo's operating business and $0.2 billion in Wireline as a result of the acquisition of XO. See Note 2 for additional information.

Other Intangible Assets

The following table displays the composition of Other intangible assets, net:

(dollars in millions)

At December 31,	2017 Gross Amount	2017 Accumulated Amortization	2017 Net Amount	2016 Gross Amount	2016 Accumulated Amortization	2016 Net Amount
Customer lists (5 to 13 years)	**$ 3,621**	**$ (691)**	**$ 2,930**	$ 2,884	$ (480)	$ 2,404
Non-network internal-use software (3 to 7 years)	**18,010**	**(12,374)**	**5,636**	16,135	(10,913)	5,222
Other (2 to 25 years)	**2,474**	**(793)**	**1,681**	1,854	(583)	1,271
Total	**$ 24,105**	**$ (13,858)**	**$ 10,247**	$ 20,873	$ (11,976)	$ 8,897

At December 31, 2017, we recognized preliminary other intangible assets of $1.9 billion in Corporate and other as a result of the acquisition of Yahoo's operating business and $0.2 billion in Wireline as a result of the acquisition of XO. See Note 2 for additional information.

The amortization expense for Other intangible assets was as follows:

Years	(dollars in millions)
2017	**$ 2,213**
2016	1,701
2015	1,694

Estimated annual amortization expense for Other intangible assets is as follows:

Years	(dollars in millions)
2018	$ 2,079
2019	1,787
2020	1,478
2021	1,227
2022	1,024

Note 4
Property, Plant and Equipment

The following table displays the details of Property, plant and equipment, which is stated at cost:

(dollars in millions)

At December 31,	Lives (years)	2017	2016
Land	**—**	**$ 806**	$ 667
Buildings and equipment	**7-45**	**28,914**	27,117
Central office and other network equipment	**3-50**	**145,093**	136,737
Cable, poles and conduit	**7-50**	**47,972**	45,639
Leasehold improvements	**5-20**	**8,394**	7,627
Work in progress	**—**	**6,139**	5,710
Furniture, vehicles and other	**3-20**	**9,180**	8,718
		246,498	232,215
Less accumulated depreciation		**157,930**	147,464
Property, plant and equipment, net		**$ 88,568**	$ 84,751

Note 5
Leasing Arrangements

As Lessee

We lease certain facilities and equipment for use in our operations under both capital and operating leases. Total rent expense under operating leases amounted to $3.8 billion in 2017, $3.6 billion in 2016, and $3.2 billion in 2015.

Amortization of capital leases is included in Depreciation and amortization expense in the consolidated statements of income. Capital lease amounts included in Property, plant and equipment are as follows:

(dollars in millions)

At December 31,	**2017**	2016
Capital leases	**$ 1,463**	$ 1,277
Less accumulated amortization	**(692)**	(524)
Total	**$ 771**	$ 753

The aggregate minimum rental commitments under noncancelable leases for the periods shown at December 31, 2017, are as follows:

(dollars in millions)

Years	**Capital Leases**	**Operating Leases**
2018	$ 413	$ 3,290
2019	268	3,046
2020	179	2,683
2021	87	2,301
2022	50	1,952
Thereafter	135	7,462
Total minimum rental commitments	1,132	$ 20,734
Less interest and executory costs	112	
Present value of minimum lease payments	1,020	
Less current installments	382	
Long-term obligation at December 31, 2017	$ 638	

Tower Monetization Transaction

During March 2015, we completed a transaction with American Tower pursuant to which American Tower acquired the exclusive rights to lease and operate approximately 11,300 of our wireless towers for an upfront payment of $5.0 billion. We have subleased capacity on the towers from American Tower for a minimum of 10 years at current market rates, with options to renew. Under this agreement, total rent payments amounted to $0.3 billion for both the years ended December 31, 2017 and 2016. We expect to make minimum future lease payments of approximately $2.1 billion. We continue to include the towers in Property, plant and equipment, net in our consolidated balance sheets and depreciate them accordingly. At December 31, 2017 and 2016, $0.4 billion and $0.5 billion of towers related to this transaction were included in Property, plant and equipment, net, respectively. See Note 2 for additional information.

Note 6
Debt

Changes to debt during 2017 are as follows:

(dollars in millions)

	Debt Maturing within One Year	**Long-term Debt**	**Total**
Balance at January 1, 2017	**$ 2,645**	**$ 105,433**	**$ 108,078**
Proceeds from long-term borrowings	**103**	**27,604**	**27,707**
Proceeds from asset-backed long-term borrowings	**—**	**4,290**	**4,290**
Repayments of long-term borrowings and capital leases obligations	**(8,191)**	**(15,646)**	**(23,837)**
Repayments of asset-backed long-term borrowings	**(400)**	**—**	**(400)**
Decrease in short-term obligations, excluding current maturities	**(170)**	**—**	**(170)**
Reclassifications of long-term debt	**9,255**	**(9,255)**	**—**
Other	**211**	**1,216**	**1,427**
Balance at December 31, 2017	**$ 3,453**	**$ 113,642**	**$ 117,095**

Debt maturing within one year is as follows:

(dollars in millions)		
At December 31,	**2017**	2016
Long-term debt maturing within one year	**$ 3,303**	$ 2,477
Short-term notes payable	**150**	168
Total debt maturing within one year	**$ 3,453**	$ 2,645

Credit facilities

In September 2016, we amended our $8.0 billion credit facility to increase the availability to $9.0 billion and extend the maturity to September 2020. As of December 31, 2017, the unused borrowing capacity under our $9.0 billion credit facility was approximately $8.9 billion. The credit facility does not require us to comply with financial covenants or maintain specified credit ratings, and it permits us to borrow even if our business has incurred a material adverse change. We use the credit facility for the issuance of letters of credit and for general corporate purposes.

In March 2016, we entered into a credit facility insured by Eksportkreditnamnden Stockholm, Sweden (EKN), the Swedish export credit agency. As of December 31, 2017, we had an outstanding balance of $0.8 billion. We used this credit facility to finance network equipment-related purchases.

In July 2017, we entered into credit facilities insured by various export credit agencies with the ability to borrow up to $4.0 billion to finance equipment-related purchases. The facilities have borrowings available, portions of which extend through October 2019, contingent upon the amount of eligible equipment-related purchases made by Verizon. At December 31, 2017, we had not drawn on these facilities. In January 2018, we drew down $0.5 billion.

Long-Term Debt

Outstanding long-term debt obligations are as follows:

				(dollars in millions)
At December 31,	**Interest Rates %**	**Maturities**	**2017**	2016
Verizon—notes payable and other	**1.38 – 3.96**	**2018 – 2047**	**$ 31,370**	$ 28,491
	4.09 – 5.51	**2020 – 2055**	**67,906**	53,909
	5.82 – 6.90	**2026 – 2054**	**5,835**	11,295
	7.35 – 8.95	**2029 – 2039**	**1,106**	1,860
	Floating	**2018 – 2025**	**6,684**	9,750
Verizon Wireless—Alltel assumed notes	**6.80 – 7.88**	**2029 – 2032**	**234**	525
Telephone subsidiaries—debentures	**5.13 – 6.50**	**2028 – 2033**	**226**	319
	7.38 – 7.88	**2022 – 2032**	**341**	561
	8.00 – 8.75	**2022 – 2031**	**229**	328
Other subsidiaries—notes payable, debentures and other	**6.70 – 8.75**	**2018 – 2028**	**748**	1,102
Verizon Wireless and other subsidiaries—asset-backed debt	**1.42 – 2.65**	**2021 – 2022**	**6,293**	2,485
	Floating	**2021 – 2022**	**2,620**	2,520
Capital lease obligations (average rate of 3.6% and 3.5% in 2017 and 2016, respectively)			**1,020**	950
Unamortized discount, net of premium			**(7,133)**	(5,716)
Unamortized debt issuance costs			**(534)**	(469)
Total long-term debt, including current maturities			**116,945**	107,910
Less long-term debt maturing within one year			**3,303**	2,477
Total long-term debt			**$ 113,642**	$ 105,433

2017

February Exchange Offers and Cash Offers

In February 2017, we completed private exchange and tender offers for 18 series of notes issued by Verizon (February Old Notes) for (i) new notes issued by Verizon (and, for certain series, cash) (February Exchange Offers) or (ii) cash (February Cash Offers). The February Old Notes had coupon rates ranging from 1.375% to 8.950% and maturity dates ranging from 2018 to 2043. In connection with the February Exchange Offers, we issued $3.2 billion aggregate principal amount of Verizon 2.946% Notes due 2022, $1.7 billion aggregate principal amount of Verizon 4.812% Notes due 2039 and $4.1 billion aggregate principal amount of Verizon 5.012% Notes due 2049, plus applicable cash of $0.6 billion, in exchange for $8.3 billion aggregate principal amount of February Old Notes. In connection with the February Cash Offers, we paid $0.5 billion cash to purchase $0.5 billion aggregate principal amount of February Old Notes. We subsequently purchased an additional $0.1 billion aggregate principal amount of February Old Notes for $0.1 billion cash, from certain holders whose tenders of notes in the February Cash Offers had been rejected. In addition to the exchange or purchase price, any accrued and unpaid interest on Old February Notes was paid at settlement.

Term Loan Credit Agreements

During January 2017, we entered into a term loan credit agreement with a syndicate of major financial institutions, pursuant to which we could borrow up to $5.5 billion for (i) the acquisition of Yahoo and (ii) general corporate purposes. None of the $5.5 billion borrowing capacity was used during 2017. In March 2017, the term loan credit agreement was terminated in accordance with its terms and as such, the related fees were recognized in Other income (expense), net and were not significant.

In March 2017, we prepaid $1.7 billion of the outstanding $3.3 billion term loan that had an original maturity date of July 2019. During April 2017, we repaid the remaining outstanding amount under the term loan agreement.

March Tender Offers

In March 2017, we completed tender offers for 30 series of notes issued by Verizon and certain of its subsidiaries with coupon rates ranging from 5.125% to 8.950% and maturity dates ranging from 2018 to 2043 (March Tender Offers). In connection with the March Tender Offers, we purchased $2.8 billion aggregate principal amount of Verizon notes, $0.2 billion aggregate principal amount of our operating telephone company subsidiary notes and $0.1 billion aggregate principal amount of GTE LLC notes for total cash consideration of $3.8 billion. In addition to the purchase price, any accrued and unpaid interest on the purchased notes was paid to the date of purchase.

August Exchange Offers and Cash Offers

In August 2017, we completed private exchange and tender offers for 17 series of notes issued by Verizon and GTE LLC (August Old Notes) for (i) new notes issued by Verizon (and, for certain series, cash) or (ii) cash (August Exchange Offers and Cash Offers). The August Old Notes had coupon rates ranging from 1.375% to 8.750%, and maturity dates ranging from 2018 to 2023. In connection with the August Exchange Offers and Cash Offers, we issued $4.0 billion of Verizon 3.376% Notes due 2025, in exchange for $4.0 billion aggregate principal amount of August Old Notes and paid $3.0 billion cash to purchase $3.0 billion aggregate principal amount of August Old Notes. In addition to the exchange or purchase price, any accrued and unpaid interest on the August Old Notes accepted for exchange or purchase was paid at settlement.

August Tender Offers

In August 2017, we completed tender offers for 29 series of notes issued by Verizon and certain of its subsidiaries with coupon rates ranging from 5.050% to 8.950% and maturity dates ranging from 2022 to 2043 (August Tender Offers). In connection with the August Tender Offers, we purchased $1.5 billion aggregate principal amount of Verizon notes, $0.1 billion aggregate principal amount of our operating telephone company subsidiary notes, $0.2 billion aggregate principal amount of Alltel Corporation notes, and an insignificant amount of GTE LLC notes for total cash consideration of $2.1 billion. In addition to the purchase price, any accrued and unpaid interest on the purchased notes was paid to the date of purchase.

October Tender Offers

In October 2017, we completed tender offers for 5 series of Euro and British Pound Sterling-denominated notes issued by Verizon with coupon rates ranging from 0.500% to 4.750% and maturity dates ranging from 2022 to 2034 (October Tender Offers). In connection with the October Tender Offers, we purchased €2.1 billion and £0.7 billion aggregate principal amount of Verizon notes for total cash consideration of $3.6 billion. In addition to the purchase price, any accrued and unpaid interest on the purchased notes was paid to the date of purchase.

December Tender Offers

In December 2017, we completed tender offers for 31 series of notes issued by Verizon and certain of its subsidiaries with coupon rates ranging from 5.050% to 8.950% and maturity dates ranging from 2018 to 2043 (December Tender Offers). In connection with the December Tender Offers, we purchased $0.2 billion aggregate principal amount of Verizon notes and an insignificant amount of GTE LLC notes, operating telephone company subsidiary notes, and Alltel Corporation notes for total cash consideration of $0.3 billion. In addition to the purchase price, any accrued and unpaid interest on the purchased notes was paid to the date of purchase.

December Exchange Offers

In December 2017, we completed private exchange offers and consent solicitations for 18 series of notes issued by certain subsidiaries of Verizon (December Old Notes) for new notes issued by Verizon (and, for certain series, cash) or, in lieu of new notes in certain circumstances, cash (December Exchange offers). The December Old Notes had coupon rates ranging from 5.125% to 8.750% and maturity dates ranging from 2021 to 2033. In connection with the December Exchange Offers, we issued $0.1 billion of Verizon 6.800% Notes due 2029 and $0.1 billion of Verizon 7.875% Notes due 2032, and paid an insignificant amount of cash, in exchange for $0.2 billion aggregate principal amount of December Old Notes. In addition to the exchange or purchase price, any accrued and unpaid interest on December Old Notes accepted for exchange or purchase was paid at settlement.

Debt Issuances and Redemptions

During February 2017, we redeemed $0.2 billion of the $0.6 billion 6.940% GTE LLC Notes due 2028 at 124.8% of the principal amount of the notes repurchased.

During February 2017, we issued approximately $1.5 billion aggregate principal amount of 4.950% Notes due 2047. The issuance of these notes resulted in cash proceeds of approximately $1.5 billion, net of discounts and issuance costs and after reimbursement of certain expenses. The net proceeds were used for general corporate purposes.

During March 2017, we issued $11.0 billion aggregate principal amount of fixed and floating rate notes. The issuance of these notes resulted in cash proceeds of approximately $10.9 billion, net of discounts and issuance costs and after reimbursement of certain expenses. The issuance consisted of the following series of notes: $1.4 billion aggregate principal amount of Floating Rate Notes due 2022, $1.85 billion aggregate principal amount of 3.125% Notes due 2022, $3.25 billion aggregate principal amount of 4.125% Notes due 2027, $3.0 billion aggregate principal amount of 5.250% Notes due 2037, and $1.5 billion aggregate principal amount of 5.500% Notes due 2047. The floating rate notes bear interest at a rate equal to the three-month London Interbank Offered Rate (LIBOR) plus 1.000%, which rate will be reset quarterly. The net proceeds were primarily used for the March Tender Offers and general corporate purposes, including discretionary contributions to our qualified pension plans of $3.4 billion. We also used certain of the net proceeds to finance our acquisition of Yahoo’s operating business.

During April 2017, we redeemed in whole $0.5 billion aggregate principal amount of Verizon 6.100% Notes due 2018 at 104.485% of the principal amount of such notes and $0.5 billion aggregate principal amount of Verizon 5.500% Notes due 2018 at 103.323% of the principal amount of such notes, plus accrued and unpaid interest to the date of redemption.

During May 2017, we issued $1.5 billion aggregate principal amount of Floating Rate Notes due 2020. The issuance of these notes resulted in cash proceeds of approximately $1.5 billion, net of discounts and issuance costs. The floating rate notes bear interest at a rate equal to three-month LIBOR plus 0.550%, which will be reset quarterly. The net proceeds were primarily used for general corporate purposes, which included the repayment of outstanding indebtedness. In addition we issued CHF 0.6 billion aggregate principal amount of 0.375% Bonds due 2023, and CHF 0.4 billion aggregate principal amount of 1.000% Bonds due 2027. The issuance of these bonds resulted in cash proceeds of approximately $1.0 billion, net of discounts and issuance costs. The net proceeds were primarily used for general corporate purposes including the repayment of debt.

During May 2017, we initiated a retail notes program in connection with the issuance and sale from time to time of our notes that are due nine months or more from the date of issue. As of December 31, 2017 we have issued $0.9 billion of retail notes with interest rates ranging from 2.600% to 4.900% and maturity dates ranging from 2022 to 2047.

During June 2017, $1.3 billion of Verizon floating rate notes matured and were repaid.

During June 2017, we redeemed in whole $0.5 billion aggregate principal amount of Verizon 1.100% Notes due 2017 at 100.003% of the principal amount of such notes, plus accrued and unpaid interest to the date of redemption.

During August 2017, we issued $3.0 billion aggregate principal amount of 4.500% Notes due 2033 resulting in cash proceeds of approximately $3.0 billion, net of discounts and issuance costs. In addition, we issued the following four series of Australian Dollar (AUD) denominated notes resulting in cash proceeds of $1.7 billion net of discounts and issuance costs: AUD 0.55 billion aggregate principal amount of 3.500% Notes due 2023, AUD 0.45 billion aggregate principal amount of 4.050% Notes due 2025, AUD 0.7 billion aggregate principal amount of 4.500% Notes due 2027 and AUD 0.5 billion aggregate principal amount of Floating Rate Notes due 2023. The floating rate notes bear interest at a rate equal to the three-month Bank Bill Swap Reference Rate plus 1.220% which will be reset quarterly. In addition, we issued $1.0 billion aggregate principal amount of 5.150% Notes due 2050 resulting in cash proceeds of approximately $0.9 billion, net of discounts, issuance costs and reimbursement of certain expenses. The proceeds of the notes issued during August 2017 were used for general corporate purposes including the repayment of debt.

During September 2017, we redeemed in whole $1.3 billion aggregate principal amount of Verizon 3.650% Notes due 2018, at 101.961% of the principal amount of such notes, plus accrued and unpaid interest to the date of redemption.

During October 2017, we issued €3.5 billion and £1.0 billion aggregate principal amount of fixed rate notes. The issuance of these notes resulted in cash proceeds of approximately $5.4 billion, net of discounts and issuance costs and after reimbursement of certain expenses. The issuance consisted of the following series of notes: €1.25 billion aggregate principal amount of 1.375% Notes due 2026, €0.75 billion aggregate principal amount of 1.875% Notes due 2029, €1.5 billion aggregate principal amount of 2.875% Notes due 2038, and £1.0 billion aggregate principal amount of 3.375% Notes due 2036. The net proceeds were primarily used for the October Tender Offers and general corporate purposes.

During November 2017, we redeemed in whole $3.5 billion aggregate principal amount of Verizon 4.500% Notes due 2020, at 106.164% of the principal amount of such notes, plus accrued and unpaid interest to the date of redemption.

<u>*2016*</u>

April Tender Offers

In April 2016, we completed three concurrent, but separate, tender offers for 34 series of notes issued by Verizon and certain of its subsidiaries with coupon rates ranging from 2.000% to 8.950% and maturity dates ranging from 2016 to 2043 (April Tender Offers).

In connection with the April Tender Offers, we purchased $6.8 billion aggregate principal amount of Verizon notes, $1.2 billion aggregate principal amount of our operating telephone company subsidiary notes, $0.3 billion aggregate principal amount of GTE LLC notes, and $0.2 billion Alltel Corporation notes for total cash consideration of $10.2 billion, inclusive of accrued interest of $0.1 billion.

Debt Issuances and Redemptions

During April 2016, we redeemed in whole $0.9 billion aggregate principal amount of Verizon 2.500% Notes due 2016 at 100.773% of the principal amount of such notes, $0.5 billion aggregate principal amount of Verizon 2.000% Notes due 2016 at 100.775% of the principal amount of such notes, and $0.8 billion aggregate principal amount of Verizon 6.350% Notes due 2019 at 113.521% of the principal amount of such notes (April Redemptions). These notes were purchased and canceled for $2.3 billion, inclusive of an insignificant amount of accrued interest.

During August 2016, we issued $6.2 billion aggregate principal amount of fixed and floating rate notes. The issuance of these Notes resulted in cash proceeds of approximately $6.1 billion, net of discounts and issuance costs and after reimbursement of certain expenses. The issuance consisted of the following series of notes: $0.4 billion aggregate principal amount of Floating Rate Notes due 2019, $1.0 billion aggregate principal amount of 1.375% Notes due 2019, $1.0 billion aggregate principal amount of 1.750% Notes due 2021, $2.3 billion aggregate principal amount of 2.625% Notes due 2026, and $1.5 billion aggregate principal amount of 4.125% Notes due 2046. The floating rate notes bear interest at a rate equal to the three-month LIBOR plus 0.370%, which rate will be reset quarterly. The net proceeds were used for general corporate purposes, including to repay at maturity on September 15, 2016, $2.3 billion aggregate principal amount of our floating rate notes, plus accrued interest on the notes.

During September 2016, we issued $2.1 billion aggregate principal amount of 4.200% Notes due 2046. The issuance of these Notes resulted in cash proceeds of approximately $2.0 billion, net of discounts and issuance costs and after reimbursement of certain expenses. The net proceeds were used to redeem in whole $0.9 billion aggregate principal amount of Verizon 4.800% Notes due 2044 at 100% of the principal amount of such notes, plus any accrued and unpaid interest to the date of redemption, for an insignificant loss. Proceeds not used for the redemption of these notes were used for general corporate purposes.

During October 2016, we issued €1.0 billion aggregate principal amount of 0.500% Notes due 2022, €1.0 billion aggregate principal amount of 0.875% Notes due 2025, €1.25 billion aggregate principal amount of 1.375% Notes due 2028, and £0.45 billion aggregate principal amount of 3.125% Notes due 2035. The issuance of these notes resulted in cash proceeds of approximately $4.1 billion, net of discounts and issuance costs and after reimbursement of certain expenses. The net proceeds from the sale of the notes were used for general corporate purposes, including the financing of our acquisition of Fleetmatics and the repayment of outstanding indebtedness.

During December 2016, we redeemed in whole $2.0 billion aggregate principal amount of Verizon 1.350% Notes due 2017 at 100.321% of the principal amount of such notes, plus any accrued and unpaid interest to the date of redemption, for an insignificant loss. Also in December 2016, we repurchased $2.5 billion aggregate principal amount of eight-year Verizon notes at 100% of the aggregate principal amount of such notes plus accrued and unpaid interest to the date of redemption.

Asset-Backed Debt

At December 31, 2017, the carrying value of our asset-backed debt was $8.9 billion. Our asset-backed debt includes notes (the Asset-Backed Notes) issued to third-party investors (Investors) and loans (ABS Financing Facility) received from banks and their conduit facilities (collectively, the Banks). Our consolidated asset-backed debt bankruptcy remote legal entities (each, an ABS Entity or collectively, the ABS Entities) issue the debt or are otherwise party to the transaction documentation in connection with our asset-backed debt transactions. Under the terms of our asset-backed debt, we transfer device payment plan agreement receivables from Cellco Partnership and certain other affiliates of Verizon (collectively, the Originators) to one of the ABS Entities, which in turn transfers such receivables to another ABS Entity that issues the debt. Verizon entities retain the equity interests in the ABS Entities, which represent the rights to all funds not needed to make required payments on the asset-backed debt and other related payments and expenses.

Our asset-backed debt is secured by the transferred device payment plan agreement receivables and future collections on such receivables. The device payment plan agreement receivables transferred to the ABS Entities and related assets, consisting primarily of restricted cash, will only be available for payment of asset-backed debt and expenses related thereto, payments to the Originators in respect of additional transfers of device payment plan agreement receivables, and other obligations arising from our asset-backed debt transactions, and will not be available to pay other obligations or claims of Verizon's creditors until the associated asset-backed debt and other obligations are satisfied. The Investors or Banks, as applicable, which hold our asset-backed debt have legal recourse to the assets securing the debt, but do not have any recourse to Verizon with respect to the payment of principal and interest on the debt. Under a parent support agreement, Verizon has agreed to guarantee certain of the payment obligations of Cellco Partnership and the Originators to the ABS Entities.

Cash collections on the device payment plan agreement receivables are required at certain specified times to be placed into segregated accounts. Deposits to the segregated accounts are considered restricted cash and are included in Prepaid expenses and other and Other assets on our consolidated balance sheets.

Proceeds from our asset-backed debt transactions, deposits to the segregated accounts and payments to the Originators in respect of additional transfers of device payment plan agreement receivables are reflected in Cash flows from financing activities in our consolidated statements of cash flows. Repayments of our asset-backed debt and related interest payments made from the segregated accounts are non-cash activities and therefore not reflected within Cash flows from financing activities in our consolidated statements of cash flows. The asset-backed debt issued and the assets securing this debt are included on our consolidated balance sheets.

Asset-Backed Notes

In October 2017, we issued approximately $1.4 billion aggregate principal amount of senior and junior Asset-Backed Notes through an ABS Entity. The Class A-1a senior Asset-Backed Notes had an expected weighted-average life to maturity of 2.48 years at issuance and bear interest at 2.060% per annum, the Class A-1b senior Asset-Backed Notes had an expected weighted -average life to maturity of 2.48 years at issuance and bear interest at one-month LIBOR + 0.270%, which rate will be reset monthly, the Class B junior Asset-Backed Notes had an expected weighted-average life to maturity of 3.12 years at issuance and bear interest at 2.380% per annum and the Class C junior Asset-Backed Notes had an expected weighted-average life to maturity of 3.35 years at issuance and bear interest at 2.530% per annum.

In June 2017, we issued approximately $1.3 billion aggregate principal amount of senior and junior Asset-Backed Notes through an ABS Entity. The Class A senior Asset-Backed Notes had an expected weighted-average life to maturity of 2.47 years at issuance and bear interest at 1.920% per annum, the Class B junior Asset-Backed Notes had an expected weighted-average life to maturity of 3.11 years at issuance and bear interest at 2.220% per annum and the Class C junior Asset-Backed Notes had an expected weighted-average life to maturity of 3.34 years at issuance and bear interest at 2.380% per annum.

In March 2017, we issued approximately $1.3 billion aggregate principal amount of senior and junior Asset-Backed Notes through an ABS Entity. The Class A senior Asset-Backed Notes had an expected weighted-average life to maturity of 2.6 years at issuance and bear interest at 2.060% per annum, the Class B junior Asset-Backed Notes had an expected weighted-average life to maturity of 3.38 years at issuance and bear interest at 2.450% per annum and the Class C junior Asset-Backed Notes had an expected weighted-average life to maturity of 3.64 years at issuance and bear interest at 2.650% per annum.

In November 2016, we issued approximately $1.4 billion aggregate principal amount of senior and junior Asset-Backed Notes through an ABS Entity. The Class A senior Asset-Backed Notes had an expected weighted-average life to maturity of about 2.55 years at issuance and bear interest at 1.680% per annum. The Class B junior Asset-Backed Notes had an expected weighted-average life to maturity of about 3.32 years at issuance and bear interest at 2.150% per annum and the Class C junior Asset-Backed Notes had an expected weighted-average life to maturity of 3.59 years at issuance and bear interest at 2.360% per annum.

In July 2016, we issued approximately $1.2 billion aggregate principal amount of senior and junior Asset-Backed Notes through an ABS Entity, of which $1.1 billion of notes were sold to Investors. The Class A senior Asset-Backed Notes had an expected weighted-average life to maturity of about 2.52 years at issuance and bear interest at 1.420% per annum. The Class B junior Asset-Backed Notes had an expected weighted-average life to maturity of about 3.24 years at issuance and bear interest at 1.460% per annum and the Class C junior Asset-Backed Notes had an expected weighted-average life to maturity of 3.51 years at issuance and bear interest at 1.610% per annum.

Under the terms of each series of Asset-Backed Notes, there is a two year revolving period during which we may transfer additional receivables to the ABS Entity.

ABS Financing Facility

During September 2016, we entered into a loan agreement through an ABS Entity with a number of financial institutions. Under the terms of the loan agreement, such counterparties made advances under asset-backed loans backed by device payment plan agreement receivables for proceeds of $1.5 billion. We had the option of requesting an additional $1.5 billion of committed funding by December 31, 2016 and during December 2016, we received additional funding of $1.0 billion under this option. In May 2017, we received additional funding of $0.3 billion pursuant to an additional loan agreement with similar terms. These loans have an expected weighted-average life of about 2.4 years at issuance and bear interest at floating rates. There is a two year revolving period, beginning from September 2016, which may be extended, during which we may transfer additional receivables to the ABS Entity. Subject to certain conditions, we may also remove receivables from the ABS Entity.

Under these loan agreements, we have the right to prepay all or a portion of the loans at any time without penalty, but in certain cases, with breakage costs. In December 2017, we prepaid $0.4 billion. The amount prepaid is available for further drawdowns until September 2018, except in certain circumstances. As of December 31, 2017, outstanding borrowings under the loans were $2.4 billion.

Variable Interest Entities (VIEs)

The ABS Entities meet the definition of a VIE for which we have determined we are the primary beneficiary as we have both the power to direct the activities of the entity that most significantly impact the entity's performance and the obligation to absorb losses or the right to receive benefits of the entity. Therefore, the assets, liabilities and activities of the ABS Entities are consolidated in our financial results and are included in amounts presented on the face of our consolidated balance sheets.

The assets and liabilities related to our asset-backed debt arrangements included on our consolidated balance sheets were as follows:

		(dollars in millions)
At December 31,	**2017**	2016
Assets		
Account receivable, net	**$ 8,101**	$ 3,383
Prepaid expenses and other	**636**	236
Other Assets	**2,680**	2,383
Liabilities		
Accounts payable and accrued liabilities	**5**	4
Short-term portion of long-term debt	**1,932**	—
Long-term debt	**6,955**	4,988

See Note 7 for additional information on device payment plan agreement receivables used to secure asset-backed debt.

Early Debt Redemption and Other Costs

During 2017 and 2016, we recorded losses on early debt redemptions of $2.0 billion and $1.8 billion, respectively.

We recognize losses on early debt redemptions in Other income (expense), net on our consolidated statements of income and within our Net cash used in financing activities on our consolidated statements of cash flows.

Additional Financing Activities (Non-Cash Transactions)

During both the years ended December 31, 2017 and 2016, we financed, primarily through vendor financing arrangements, the purchase of approximately $0.5 billion of long-lived assets consisting primarily of network equipment. At December 31, 2017, $1.2 billion relating to these financing arrangements, including those entered into in prior years and liabilities assumed through acquisitions, remained outstanding. These purchases are non-cash financing activities and therefore not reflected within Capital expenditures on our consolidated statements of cash flows.

Guarantees

We guarantee the debentures of our operating telephone company subsidiaries. As of December 31, 2017, $0.8 billion aggregate principal amount of these obligations remained outstanding. Each guarantee will remain in place for the life of the obligation unless terminated pursuant to its terms, including the operating telephone company no longer being a wholly-owned subsidiary of Verizon.

As a result of the closing of the Access Line Sale on April 1, 2016, GTE Southwest Inc., Verizon California Inc. and Verizon Florida LLC are no longer wholly-owned subsidiaries of Verizon, and the guarantees of $0.6 billion aggregate principal amount of debentures and first mortgage bonds of those entities have terminated pursuant to their terms.

We also guarantee the debt obligations of GTE LLC as successor in interest to GTE Corporation that were issued and outstanding prior to July 1, 2003. As of December 31, 2017, $0.7 billion aggregate principal amount of these obligations remain outstanding.

Debt Covenants

We and our consolidated subsidiaries are in compliance with all of our restrictive covenants.

Maturities of Long-Term Debt

Maturities of long-term debt outstanding, excluding unamortized debt issuance costs, at December 31, 2017 are as follows:

Years		(dollars in millions)
2018	$	3,308
2019		6,306
2020		6,587
2021		6,403
2022		9,520
Thereafter		85,355

Note 7

Wireless Device Payment Plans

Under the Verizon device payment program, our eligible wireless customers purchase wireless devices under a device payment plan agreement. Customers that activate service on devices purchased under the device payment program pay lower service fees as compared to those under our fixed-term service plans, and their device payment plan charge is included on their standard wireless monthly bill. As of January 2017, we no longer offer consumers new fixed-term service plans for phones. However we continue to service existing plans and provide these plans to business customers.

Wireless Device Payment Plan Agreement Receivables

The following table displays device payment plan agreement receivables, net, that continue to be recognized in our consolidated balance sheets:

				(dollars in millions)
At December 31,		**2017**		2016
Device payment plan agreement receivables, gross	**$**	**17,770**	$	11,797
Unamortized imputed interest		**(821)**		(511)
Device payment plan agreement receivables, net of unamortized imputed interest		**16,949**		11,286
Allowance for credit losses		**(848)**		(688)
Device payment plan agreement receivables, net	**$**	**16,101**	$	10,598
Classified on our consolidated balance sheets:				
Accounts receivable, net	**$**	**11,064**	$	6,140
Other assets		**5,037**		4,458
Device payment plan agreement receivables, net	**$**	**16,101**	$	10,598

Included in our device payment plan agreement receivables, net at December 31, 2017, are net device payment plan agreement receivables of $10.7 billion that have been transferred to ABS Entities and continue to be reported in our consolidated balance sheet. See Note 6 for additional information.

We may offer certain promotions that allow a customer to trade in his or her owned device in connection with the purchase of a new device. Under these types of promotions, the customer receives a credit for the value of the trade-in device. In addition, we may provide the customer with additional future credits that will be applied against the customer's monthly bill as long as service is maintained. We recognize a liability for the trade-in device measured at fair value, which is determined by considering several factors, including the weighted-average selling prices obtained in recent resales of similar devices eligible for trade-in. Future credits are recognized when earned by the customer. Device payment plan agreement receivables, net does not reflect the trade-in device liability. At December 31, 2017, the amount of trade-in liability was insignificant.

From time to time, we offer certain marketing promotions that allow our customers to upgrade to a new device after paying down a certain specified portion of the required device payment plan agreement amount as well as trading in their device in good working order. When a customer enters into a device payment plan agreement with the right to upgrade to a new device, we account for this trade-in right as a guarantee obligation.

At the time of the sale of a device, we impute risk adjusted interest on the device payment plan agreement receivables. We record the imputed interest as a reduction to the related accounts receivable. Interest income, which is included within Service revenues and other on our consolidated statements of income, is recognized over the financed device payment term.

When originating device payment plan agreements, we use internal and external data sources to create a credit risk score to measure the credit quality of a customer and to determine eligibility for the device payment program. If a customer is either new to Verizon Wireless or has less than 210 days of customer tenure with Verizon Wireless (a new customer), the credit decision process relies more heavily on external data sources. If the customer has 210 days or more of customer tenure with Verizon Wireless (an existing customer), the credit decision process relies on internal data sources. Verizon Wireless' experience has been that the payment attributes of longer tenured customers are highly predictive for estimating their ability to pay in the future. External data sources include obtaining a credit report from a national consumer credit reporting agency, if available. Verizon Wireless uses its internal data and/or credit data obtained from the credit reporting agencies to create a custom credit risk score. The custom credit risk score is generated automatically (except with respect to a small number of applications where the information needs manual intervention) from the applicant's credit data using Verizon Wireless' proprietary custom credit models, which are empirically derived, demonstrably and statistically sound. The credit risk score measures the likelihood that the potential customer will become severely delinquent and be disconnected for non-payment. For a small portion of new customer applications, a traditional credit report is not available from one of the national credit reporting agencies because the potential customer does not have sufficient credit history. In those instances, alternate credit data is used for the risk assessment.

Based on the custom credit risk score, we assign each customer to a credit class, each of which has a specified required down payment percentage, which ranges from zero to 100%, and specified credit limits. Device payment plan agreement receivables originated from customers assigned to credit classes requiring no down payment represent the lowest risk. Device payment plan agreement receivables originated from customers assigned to credit classes requiring a down payment represent a higher risk.

Subsequent to origination, Verizon Wireless monitors delinquency and write-off experience as key credit quality indicators for its portfolio of device payment plan agreements and fixed-term service plans. The extent of our collection efforts with respect to a particular customer are based on the results of proprietary custom empirically derived internal behavioral scoring models that analyze the customer's past performance to predict the likelihood of the customer falling further delinquent. These customer scoring models assess a number of variables, including origination characteristics, customer account history and payment patterns. Based on the score derived from these models, accounts are grouped by risk category to determine the collection strategy to be applied to such accounts. We continuously monitor collection performance results and the credit quality of our device payment plan agreement receivables based on a variety of metrics, including aging. Verizon Wireless considers an account to be delinquent and in default status if there are unpaid charges remaining on the account on the day after the bill's due date.

The balance and aging of the device payment plan agreement receivables on a gross basis was as follows:

(dollars in millions)		
At December 31,	**2017**	2016
Unbilled	**$ 16,591**	$ 11,089
Billed:		
Current	**975**	557
Past due	**204**	151
Device payment plan agreement receivables, gross	**$ 17,770**	$ 11,797

Activity in the allowance for credit losses for the device payment plan agreement receivables was as follows:

(dollars in millions)		
	2017	2016
Balance at January 1,	**$ 688**	$ 444
Bad debt expense	**718**	692
Write-offs	**(558)**	(479)
Allowance related to receivables sold	**—**	28
Other	**—**	3
Balance at December 31,	**$ 848**	$ 688

Sales of Wireless Device Payment Plan Agreement Receivables

In 2015 and 2016, we established programs pursuant to a Receivables Purchase Agreement, or RPA, to sell from time to time, on an uncommitted basis, eligible device payment plan agreement receivables to a group of primarily relationship banks (Purchasers) on both a revolving (Revolving Program) and non-revolving (Non-Revolving Program) basis. In December 2017, the RPA and all other related transaction documents were terminated. Under the Programs, eligible device payment plan agreement receivables were transferred to the Purchasers for upfront cash proceeds and additional consideration upon settlement of the receivables, referred to as the deferred purchase price.

There were no sales of device payment plan agreement receivables under the Programs during 2017. During 2016, we sold \$3.3 billion of receivables, net of allowance and imputed interest, under the Revolving Program. We received cash proceeds from new transfers of \$2.0 billion and cash proceeds from reinvested collections of \$0.9 billion and recorded a deferred purchase price of \$0.4 billion. During 2015, we sold \$6.1 billion of receivables, net of allowances and imputed interest, under the Non-Revolving Program. In connection with this sale, we received cash proceeds from new transfers of \$4.5 billion and recorded a deferred purchase price of \$1.7 billion. During 2015, we also sold \$3.3 billion of receivables, net of allowances and imputed interest, under the Revolving Program. In connection with this sale, we received cash proceeds from new transfers of \$2.7 billion and recorded a deferred purchase price of \$0.6 billion.

The sales of receivables under the RPA did not have a significant impact on our consolidated statements of income. The cash proceeds received from the Purchasers were recorded within Cash flows provided by operating activities on our consolidated statements of cash flows.

Deferred Purchase Price

During 2017, 2016 and 2015, we collected $0.6 billion, $1.1 billion and an insignificant amount, respectively, which was returned as deferred purchase price and recorded within Cash flows provided by operating activities on our consolidated statements of cash flows. Collections, recorded within Cash flows used in investing activities on our consolidated statements of cash flows were $0.8 billion during 2017 and insignificant during 2016. During 2017, we repurchased all outstanding receivables previously sold to the Purchasers in exchange for the obligation to pay the associated deferred purchase price to the wholly-owned subsidiaries that are bankruptcy remote special purpose entities (Sellers). At December 31, 2017, our deferred purchase price receivable was fully satisfied. At December 31, 2016, our deferred purchase price receivable, which was held by the Sellers, was comprised of $1.2 billion included within Prepaid expenses and other and $0.4 billion included within Other assets in our consolidated balance sheet. The deferred purchase price was initially recorded at fair value, based on the remaining device payment amounts expected to be collected, adjusted, as applicable, for the time value of money and by the timing and estimated value of the device trade-in in connection with upgrades. The estimated value of the device trade-in considered prices expected to be offered to us by independent third parties. This estimate contemplated changes in value after the launch of a device. The fair value measurements were considered to be Level 3 measurements within the fair value hierarchy. The collection of the deferred purchase price was contingent on collections from customers.

Variable Interest Entities (VIEs)

Under the RPA, the Sellers' sole business consists of the acquisition of the receivables from Cellco Partnership and certain other affiliates of Verizon and the resale of the receivables to the Purchasers. The assets of the Sellers are not available to be used to satisfy obligations of any Verizon entities other than the Sellers. We determined that the Sellers are VIEs as they lack sufficient equity to finance their activities. Given that we have the power to direct the activities of the Sellers that most significantly impact the Sellers' economic performance, we are deemed to be the primary beneficiary of the Sellers. As a result, we consolidate the assets and liabilities of the Sellers into our consolidated financial statements.

Continuing Involvement

At December 31, 2017 and 2016, the total portfolio of device payment plan agreement receivables, including derecognized device payment plan agreement receivables, that we were servicing was $17.8 billion and $16.1 billion, respectively. There were no derecognized device payment plan agreement receivables outstanding at December 31, 2017. The outstanding portfolio of device payment plan agreement receivables derecognized from our consolidated balance sheet, but which we continued to service, was $4.3 billion at December 31, 2016. To date, we have collected and remitted approximately $10.1 billion, net of fees. At December 31, 2017, no amounts remained to be remitted to the Purchasers.

Verizon had continuing involvement with the sold receivables as it serviced the receivables. We continued to service the customer and their related receivables on behalf of the Purchasers, including facilitating customer payment collection, in exchange for a monthly servicing fee. While servicing the receivables, the same policies and procedures were applied to the sold receivables that applied to owned receivables, and we continued to maintain normal relationships with our customers. The credit quality of the customers we continued to service was consistent throughout the periods presented.

In addition, we had continuing involvement related to the sold receivables as we were responsible for absorbing additional credit losses pursuant to the agreements. Credit losses on receivables sold were $0.1 billion during 2017 and $0.2 billion during 2016.

Note 8

Fair Value Measurements and Financial Instruments

Recurring Fair Value Measurements

The following table presents the balances of assets and liabilities measured at fair value on a recurring basis as of December 31, 2017:

(dollars in millions)

	Level 1[1]	Level 2[2]	Level 3[3]	Total
Assets:				
Other assets:				
Equity securities	$ **74**	$ **—**	$ **—**	$ **74**
Fixed income securities	**—**	**366**	**—**	**366**
Interest rate swaps	**—**	**54**	**—**	**54**
Cross currency swaps	**—**	**450**	**—**	**450**
Interest rate caps	**—**	**6**	**—**	**6**
Total	$ **74**	$ **876**	$ **—**	$ **950**
Liabilities:				
Other liabilities:				
Interest rate swaps	$ **—**	$ **413**	$ **—**	$ **413**
Cross currency swaps	**—**	**46**	**—**	**46**
Total	$ **—**	$ **459**	$ **—**	$ **459**

The following table presents the balances of assets and liabilities measured at fair value on a recurring basis as of December 31, 2016:

(dollars in millions)

	Level 1 [1]	Level 2 [2]	Level 3 [3]	Total
Assets:				
Other assets:				
Equity securities	$ 123	$ —	$ —	$ 123
Fixed income securities	10	566	—	576
Interest rate swaps	—	71	—	71
Cross currency swaps	—	45	—	45
Interest rate caps	—	10	—	10
Total	$ 133	$ 692	$ —	$ 825
Liabilities:				
Other liabilities:				
Interest rate swaps	$ —	$ 236	$ —	$ 236
Cross currency swaps	—	1,803	—	1,803
Total	$ —	$ 2,039	$ —	$ 2,039

[1] quoted prices in active markets for identical assets or liabilities
[2] observable inputs other than quoted prices in active markets for identical assets and liabilities
[3] no observable pricing inputs in the market

Equity securities consist of investments in common stock of domestic and international corporations measured using quoted prices in active markets.

Fixed income securities consist primarily of investments in municipal bonds as well as U.S. Treasury securities. We used quoted prices in active markets for the majority of our U.S. Treasury securities, therefore these securities were classified as Level 1. For fixed income securities that do not have quoted prices in active markets, we use alternative matrix pricing resulting in these debt securities being classified as Level 2.

Derivative contracts are valued using models based on readily observable market parameters for all substantial terms of our derivative contracts and thus are classified within Level 2. We use mid-market pricing for fair value measurements of our derivative instruments. Our derivative instruments are recorded on a gross basis.

We recognize transfers between levels of the fair value hierarchy as of the end of the reporting period. There were no transfers between Level 1 and Level 2 during 2017 and 2016.

Fair Value of Short-term and Long-term Debt

The fair value of our debt is determined using various methods, including quoted prices for identical terms and maturities, which is a Level 1 measurement, as well as quoted prices for similar terms and maturities in inactive markets and future cash flows discounted at current rates, which are Level 2 measurements. The fair value of our short-term and long-term debt, excluding capital leases, was as follows:

(dollars in millions)

At December 31,	**2017**		2016	
	Carrying Amount	**Fair Value**	Carrying Amount	Fair Value
Short- and long-term debt, excluding capital leases	**$ 116,075**	**$ 128,658**	$ 107,128	$ 117,584

Derivative Instruments

The following table sets forth the notional amounts of our outstanding derivative instruments:

(dollars in millions)

At December 31,	**2017**	2016
Interest rate swaps	**$ 20,173**	$ 13,099
Cross currency swaps	**16,638**	12,890
Interest rate caps	**2,840**	2,540

Interest Rate Swaps

We enter into interest rate swaps to achieve a targeted mix of fixed and variable rate debt. We principally receive fixed rates and pay variable rates based on the LIBOR, resulting in a net increase or decrease to Interest expense. These swaps are designated as fair value hedges and hedge against interest rate risk exposure of designated debt issuances. We record the interest rate swaps at fair value on our consolidated balance sheets as assets and liabilities. Changes in the fair value of the interest rate swaps are recorded to Interest expense, which are offset by changes in the fair value of the hedged debt due to changes in interest rates.

During 2017, we entered into interest rate swaps with a total notional value of $7.5 billion and settled interest rate swaps with a total notional value of $0.5 billion. During 2016, we entered into interest rate swaps with a total notional value of $6.3 billion and settled interest rate swaps with a total notional value of $0.9 billion.

The ineffective portion of these interest rate swaps was insignificant for the years ended December 31, 2017 and 2016.

As of December 31, 2017 and 2016, the following amounts were recorded on the balance sheets related to cumulative basis adjustments for fair value hedges:

(dollars in millions)

Line item in balance sheets in which hedged item is included	Carrying amount of hedged liabilities		Cumulative amount of fair value hedging adjustment included in the carrying amount of the hedged liabilities	
	2017	2016	**2017**	2016
Long-term debt	**$ 22,011**	$ 13,013	**$ 316**	$ 113

Forward Interest Rate Swaps

In order to manage our exposure to future interest rate changes, we have entered into forward interest rate swaps. We designated these contracts as cash flow hedges. During 2016, we entered into forward interest rate swaps with a total notional value of $1.3 billion and subsequently settled all outstanding forward interest rate swaps. During 2016, a pre-tax loss of $0.2 billion was recognized in Other comprehensive income (loss).

Cross Currency Swaps

We have entered into cross currency swaps designated as cash flow hedges to exchange our British Pound Sterling, Euro, Swiss Franc and Australian Dollar-denominated cash flows into U.S. dollars and to fix our cash payments in U.S. dollars, as well as to mitigate the impact of foreign currency transaction gains or losses.

During 2017, we entered into cross currency swaps with a total notional value of $14.0 billion and settled $10.2 billion notional amount of cross currency swaps. A pre-tax gain of $1.4 billion was recognized in Other comprehensive income (loss) with respect to these swaps.

During 2016, we entered into cross currency swaps with a total notional value of $3.3 billion and settled $0.1 billion notional amount of cross currency swaps upon redemption of the related debt. A pre-tax loss of $0.1 billion was recognized in Other comprehensive income (loss) with respect to these swaps.

A portion of the gains and losses recognized in Other comprehensive income (loss) was reclassified to Other income (expense), net to offset the related pre-tax foreign currency transaction gain or loss on the underlying hedged item.

Net Investment Hedges

We have designated certain foreign currency instruments as net investment hedges to mitigate foreign exchange exposure related to non-U.S. dollar net investments in certain foreign subsidiaries against changes in foreign exchange rates. The notional amount of the Euro-denominated debt as a net investment hedge was $0.9 billion and $0.8 billion at December 31, 2017 and 2016, respectively.

Undesignated Derivatives

We also have the following derivative contracts which we use as an economic hedge but for which we have elected not to apply hedge accounting.

Interest Rate Caps

We enter into interest rate caps to mitigate our interest exposure to interest rate increases on our ABS Financing Facility and Asset-Backed Notes. During 2017, we entered into interest rate caps with a notional value of $0.3 billion. During 2016, we entered into such interest rate caps with a notional value of $2.5 billion. During 2017 and 2016, we recognized an insignificant increase and reduction in Interest expense, respectively.

Concentrations of Credit Risk

Financial instruments that subject us to concentrations of credit risk consist primarily of temporary cash investments, short-term and long-term investments, trade receivables, including device payment plan agreement receivables, certain notes receivable, including lease receivables and derivative contracts.

Counterparties to our derivative contracts are major financial institutions with whom we have negotiated derivatives agreements (ISDA master agreements) and credit support annex agreements (CSA) which provide rules for collateral exchange. Our CSA agreements entered into prior to the fourth quarter of 2017 generally require collateralized arrangements with our counterparties in connection with uncleared derivatives. At December 31, 2016, we had posted collateral of approximately $0.2 billion related to derivative contracts under collateral exchange arrangements, which were recorded as Prepaid expenses and other in our consolidated balance sheet. Prior to 2017, we had entered into amendments to our CSA agreements with substantially all of our counterparties that suspended the requirement for cash collateral posting for a specified period of time by both counterparties. During the first and second quarter of 2017, we paid an insignificant amount of cash to extend certain of such amendments to certain collateral exchange arrangements. During the fourth quarter of 2017, we began negotiating and executing new ISDA master agreements and CSAs with our counterparties. The newly executed CSAs contain rating based thresholds such that we or our counterparties may be required to hold or post collateral based upon changes in outstanding positions as compared to established thresholds and changes in credit ratings. We did not post any collateral at December 31, 2017. While we may be exposed to credit losses due to the nonperformance of our counterparties, we consider the risk remote and do not expect that any such nonperformance would result in a significant effect on our results of operations or financial condition due to our diversified pool of counterparties.

Note 9

Stock-Based Compensation

Verizon Long-Term Incentive Plan

In May 2017, Verizon’s shareholders approved the 2017 Long-Term Incentive Plan (the 2017 Plan) and terminated Verizon’s authority to grant new awards under the Verizon 2009 Long-Term Incentive Plan (the 2009 Plan). Consistent with the 2009 Plan, the 2017 Plan provides for broad-based equity grants to employees, including executive officers, and permits the granting of stock options, stock appreciation rights, restricted stock, restricted stock units, performance shares, performance stock units and other awards. Upon approval of the 2017 Plan, Verizon reserved the 91 million shares that were reserved but not issued under the 2009 Plan for future issuance under the 2017 Plan.

Restricted Stock Units

The 2009 Plan and 2017 Plan provide for grants of Restricted Stock Units (RSUs). For RSUs granted prior to 2017, vesting generally occurs at the end of the third year. For the 2017 grants, vesting generally occurs in three equal installments on each anniversary of the grant date. The RSUs are generally classified as equity awards because the RSUs will be paid in Verizon common stock upon vesting. The RSU equity awards are measured using the grant date fair value of Verizon common stock and are not remeasured at the end of each reporting period. Dividend equivalent units are also paid to participants at the time the RSU award is paid, and in the same proportion as the RSU award.

In connection with our acquisition of Yahoo’s operating business, on the closing date of the Transaction each unvested and outstanding Yahoo RSU award that was held by an employee who became an employee of Verizon was replaced with a Verizon RSU award, which is generally payable in cash upon the applicable vesting date. These awards are classified as liability awards and are measured at fair value at the end of each reporting period.

Performance Stock Units

The 2009 Plan and 2017 Plan also provide for grants of Performance Stock Units (PSUs) that generally vest at the end of the third year after the grant. As defined by the 2009 Plan and 2017 Plan, the Human Resources Committee of the Board of Directors determines the number of PSUs a participant earns based on the extent to which the corresponding performance goals have been achieved over the three-year performance cycle. The PSUs are classified as liability awards because the PSU awards are paid in cash upon vesting. The PSU award liability is measured at its fair value at the end of each reporting period and, therefore, will fluctuate based on the price of Verizon common stock as well as performance relative to the targets. Dividend equivalent units are also paid to participants at the time that the PSU award is determined and paid, and in the same proportion as the PSU award. The granted and cancelled activity for the PSU award includes adjustments for the performance goals achieved.

The following table summarizes Verizon's Restricted Stock Unit and Performance Stock Unit activity:

	Restricted Stock Units		Performance
(shares in thousands)	Equity Awards	Liability Awards	Stock Units
Outstanding January 1, 2015	15,007	—	19,966
Granted	4,958	—	7,044
Payments	(5,911)	—	(6,732)
Cancelled/Forfeited	(151)	—	(3,075)
Outstanding December 31, 2015	13,903	—	17,203
Granted	4,409	—	6,391
Payments	(4,890)	—	(4,702)
Cancelled/Forfeited	(114)	—	(1,143)
Outstanding Adjustments	—	—	170
Outstanding December 31, 2016	13,308	—	17,919
Granted	**4,216**	**25,168**	**6,564**
Payments	**(4,825)**	**(8,487)**	**(6,031)**
Cancelled/Forfeited	**(66)**	**(2,690)**	**(217)**
Outstanding December 31, 2017	**12,633**	**13,991**	**18,235**

As of December 31, 2017, unrecognized compensation expense related to the unvested portion of Verizon's RSUs and PSUs was approximately $1.0 billion and is expected to be recognized over approximately two years.

The RSUs granted in 2017 and 2016 have weighted-average grant date fair values of $49.93 and $51.86 per unit, respectively. During 2017, 2016 and 2015, we paid $0.8 billion, $0.4 billion and $0.4 billion, respectively, to settle RSUs and PSUs classified as liability awards.

Stock-Based Compensation Expense

After-tax compensation expense for stock-based compensation related to RSUs and PSUs described above included in Net income attributable to Verizon was $0.4 billion, $0.4 billion and $0.3 billion for 2017, 2016 and 2015, respectively.

Note 10

Employee Benefits

We maintain non-contributory defined benefit pension plans for certain employees. In addition, we maintain postretirement health care and life insurance plans for certain retirees and their dependents, which are both contributory and non-contributory, and include a limit on our share of the cost for certain recent and future retirees. In accordance with our accounting policy for pension and other postretirement benefits, operating expenses include pension and benefit related credits and/or charges based on actuarial assumptions, including projected discount rates, an estimated return on plan assets, and health care trend rates. These estimates are updated in the fourth quarter to reflect actual return on plan assets and updated actuarial assumptions or upon a remeasurement. The adjustment is recognized in the income statement during the fourth quarter or upon a remeasurement event pursuant to our accounting policy for the recognition of actuarial gains and losses.

Pension and Other Postretirement Benefits

Pension and other postretirement benefits for certain employees are subject to collective bargaining agreements. Modifications in benefits have been bargained from time to time, and we may also periodically amend the benefits in the management plans. The following tables summarize benefit costs, as well as the benefit obligations, plan assets, funded status and rate assumptions associated with pension and postretirement health care and life insurance benefit plans.

Obligations and Funded Status

			(dollars in millions)	
	Pension		Health Care and Life	
At December 31,	**2017**	2016	**2017**	2016
Change in Benefit Obligations				
Beginning of year	**$ 21,112**	$ 22,016	**$ 19,650**	$ 24,223
Service cost	**280**	322	**149**	193
Interest cost	**683**	677	**659**	746
Plan amendments	**—**	428	**(545)**	(5,142)
Actuarial loss, net	**1,377**	1,017	**627**	1,289
Benefits paid	**(1,932)**	(938)	**(1,080)**	(1,349)
Curtailment and termination benefits	**11**	4	**—**	—
Settlements paid	**—**	(1,270)	**—**	—
Divestiture (Note 2)	**—**	(1,144)	**—**	(310)
End of year	**$ 21,531**	$ 21,112	**$ 19,460**	$ 19,650
Change in Plan Assets				
Beginning of year	**$ 14,663**	$ 16,124	**$ 1,363**	$ 1,760
Actual return on plan assets	**2,342**	882	**134**	35
Company contributions	**4,141**	837	**702**	917
Benefits paid	**(1,932)**	(938)	**(1,080)**	(1,349)
Settlements paid	**—**	(1,270)	**—**	—
Divestiture (Note 2)	**(39)**	(972)	**—**	—
End of year	**$ 19,175**	$ 14,663	**$ 1,119**	$ 1,363
Funded Status				
End of year	**$ (2,356)**	$ (6,449)	**$ (18,341)**	$ (18,287)

As a result of the Access Line Sale, which closed on April 1, 2016, we derecognized $0.7 billion of defined benefit pension and other postretirement benefit plan obligations related to assets held for sale on our consolidated balance sheet as of December 31, 2016. See Note 2 for additional information.

			(dollars in millions)	
	Pension		Health Care and Life	
At December 31,	**2017**	2016	**2017**	2016
Amounts recognized on the balance sheet				
Noncurrent assets	**$ 21**	$ 2	**$ —**	$ —
Current liabilities	**(63)**	(88)	**(637)**	(639)
Noncurrent liabilities	**(2,314)**	(6,363)	**(17,704)**	(17,648)
Total	**$ (2,356)**	$ (6,449)	**$ (18,341)**	$ (18,287)
Amounts recognized in Accumulated Other Comprehensive Income (Pre-tax)				
Prior Service Cost (Benefit)	**$ 404**	$ 443	**$ (5,667)**	$ (6,072)
Total	**$ 404**	$ 443	**$ (5,667)**	$ (6,072)

The accumulated benefit obligation for all defined benefit pension plans was $21.5 billion and $21.1 billion at December 31, 2017 and 2016, respectively.

2017 Postretirement Plan Amendments

During 2017, amendments were made to certain postretirement plans related to retiree medical benefits for management and certain union represented employees and retirees. The impact of the plan amendments was a reduction in our postretirement benefit plan obligations of approximately $0.5 billion, which has been recorded as a net increase to Accumulated other comprehensive income of $0.3 billion (net of taxes of $0.2 billion). The impact of the amount recorded in Accumulated other comprehensive income that will be reclassified to net periodic benefit cost is insignificant.

2016 Collective Bargaining Negotiations

In the collective bargaining agreements ratified in June 2016, Verizon's annual postretirement benefit obligation for retiree healthcare remains capped at the levels established by the previous contracts ratified in 2012. Effective January 2016, prior to reaching these new collective bargaining agreements, certain retirees began to pay for the costs of retiree healthcare in accordance with the provisions relating to caps in the previous contracts. In reaching new collective bargaining agreements in 2016, there is a mutual understanding that the substantive postretirement benefit plans provide that Verizon's annual postretirement benefit obligation for retiree healthcare is capped and, accordingly, we began accounting for the contractual healthcare caps in June 2016. We also adopted changes to our defined benefit pension plans and other postretirement benefit plans to reflect the agreed upon terms and conditions of the collective bargaining agreements. The impact was a reduction in our postretirement benefit plan obligations of approximately $5.1 billion and an increase in our defined benefit pension plan obligations of approximately $0.4 billion, which have been recorded as a net increase to Accumulated other comprehensive income of $2.9 billion (net of taxes of $1.8 billion). The amount recorded in Accumulated other comprehensive income will be reclassified to net periodic benefit cost on a straight-line basis over the average remaining service period of the respective plans' participants, which, on a weighted-average basis, is 12.2 years for defined benefit pension plans and 7.8 years for other postretirement benefit plans. The above-noted reclassification resulted in a decrease to net periodic benefit cost and increase to pre-tax income of approximately $0.7 billion and $0.4 billion, respectively, during 2017 and 2016.

Information for pension plans with an accumulated benefit obligation in excess of plan assets follows:

(dollars in millions)

At December 31,	2017	2016
Projected benefit obligation	**$ 21,300**	$ 21,048
Accumulated benefit obligation	**21,242**	20,990
Fair value of plan assets	**18,923**	14,596

Net Periodic Cost

The following table summarizes the benefit cost (income) related to our pension and postretirement health care and life insurance plans:

(dollars in millions)

	Pension			**Health Care and Life**		
Years Ended December 31,	**2017**	2016	2015	**2017**	2016	2015
Service cost	**$ 280**	$ 322	$ 374	**$ 149**	$ 193	$ 324
Amortization of prior service cost (credit)	**39**	21	(5)	**(949)**	(657)	(287)
Expected return on plan assets	**(1,262)**	(1,045)	(1,270)	**(53)**	(54)	(101)
Interest cost	**683**	677	969	**659**	746	1,117
Remeasurement loss (gain), net	**337**	1,198	(209)	**546**	1,300	(2,659)
Net periodic benefit (income) cost	**77**	1,173	(141)	**352**	1,528	(1,606)
Curtailment and termination benefits	**11**	4	—	**—**	—	—
Total	**$ 88**	$ 1,177	$ (141)	**$ 352**	$ 1,528	$ (1,606)

Other pre-tax changes in plan assets and benefit obligations recognized in other comprehensive (income) loss are as follows:

(dollars in millions)

	Pension		**Health Care and Life**	
At December 31,	**2017**	2016	**2017**	2016
Prior service cost (benefit)	**$ —**	$ 428	**$ (544)**	$ (5,142)
Reversal of amortization items				
Prior service (benefit) cost	**(39)**	(21)	**949**	657
Amounts reclassified to net income	**—**	87	**—**	451
Total recognized in other comprehensive (income) loss (pre-tax)	**$ (39)**	$ 494	**$ 405**	$ (4,034)

Amounts reclassified to net income for the year ended December 31, 2016 includes the reclassification to Selling, general and administrative expense of a pre-tax pension and postretirement benefit curtailment gain of $0.5 billion ($0.3 billion net of taxes) due to the transfer of employees to Frontier, which caused the elimination of a significant amount of future service in three of our defined benefit pension plans and one of our other postretirement benefit plans requiring us to recognize a portion of the prior service credits. See Note 2 for additional information.

The estimated prior service cost for the defined benefit pension plans that will be amortized from Accumulated other comprehensive income into net periodic benefit (income) cost over the next fiscal year is not significant. The estimated prior service cost for the defined benefit postretirement plans that will be amortized from Accumulated other comprehensive income into net periodic benefit income over the next fiscal year is $1.0 billion.

Assumptions

The weighted-average assumptions used in determining benefit obligations follow:

	Pension		Health Care and Life	
At December 31,	**2017**	2016	**2017**	2016
Discount Rate	**3.70%**	4.30%	**3.60%**	4.20%
Rate of compensation increases	**3.00%**	3.00%	**N/A**	N/A

The weighted-average assumptions used in determining net periodic cost follow:

	Pension			Health Care and Life		
At December 31,	**2017**	2016	2015	**2017**	2016	2015
Discount rate in effect for determining service cost	**4.70%**	4.50%	4.20%	**4.60%**	4.50%	4.20%
Discount rate in effect for determining interest cost	**3.40**	3.20	4.20	**3.50**	3.40	4.20
Expected return on plan assets	**7.70**	7.00	7.25	**4.50**	3.80	4.80
Rate of compensation increases	**3.00**	3.00	3.00	**N/A**	N/A	N/A

Effective January 1, 2016, we changed the method we use to estimate the interest component of net periodic benefit cost for pension and other postretirement benefits. Historically, we estimated the interest cost component utilizing a single weighted-average discount rate derived from the yield curve used to measure the benefit obligation at the beginning of the period. We have elected to utilize a full yield curve approach in the estimation of interest cost by applying the specific spot rates along the yield curve used in the determination of the benefit obligation to the relevant projected cash flows. We have made this change to provide a more precise measurement of interest cost by improving the correlation between projected benefit cash flows to the corresponding spot yield curve rates. We have accounted for this change as a change in accounting estimate and accordingly accounted for it prospectively.

In determining our pension and other postretirement benefit obligations, we used a weighted-average discount rate of 3.70% and 3.60%, respectively. The rates were selected to approximate the composite interest rates available on a selection of high-quality bonds available in the market at December 31, 2017. The bonds selected had maturities that coincided with the time periods during which benefits payments are expected to occur, were non-callable and available in sufficient quantities to ensure marketability (at least $0.3 billion par outstanding).

In order to project the long-term target investment return for the total portfolio, estimates are prepared for the total return of each major asset class over the subsequent 10-year period. Those estimates are based on a combination of factors including the current market interest rates and valuation levels, consensus earnings expectations and historical long-term risk premiums. To determine the aggregate return for the pension trust, the projected return of each individual asset class is then weighted according to the allocation to that investment area in the trust's long-term asset allocation policy.

The assumed health care cost trend rates follow:

	Health Care and Life		
At December 31,	**2017**	2016	2015
Healthcare cost trend rate assumed for next year	**7.00%**	6.50%	6.00%
Rate to which cost trend rate gradually declines	**4.50**	4.50	4.50
Year the rate reaches the level it is assumed to remain thereafter	**2026**	2025	2024

A one-percentage point change in the assumed health care cost trend rate would have the following effects:

		(dollars in millions)
One-Percentage Point	**Increase**	**Decrease**
Effect on 2017 service and interest cost	$ 25	$ (24)
Effect on postretirement benefit obligation as of December 31, 2017	532	(516)

Plan Assets

The company's overall investment strategy is to achieve a mix of assets that allows us to meet projected benefit payments while taking into consideration risk and return. While target allocation percentages will vary over time, the current target allocation for plan assets is designed so that 60% of the assets have the objective of achieving a return in excess of the growth in liabilities (comprised of public equities, private equities, real estate, hedge funds and emerging debt) and 38% of the assets are invested as liability hedging assets (where cash flows from investments better match projected benefit payments, typically longer duration fixed income) and 2% is in cash. This allocation will shift as funded status improves to a higher allocation of liability hedging assets. Target policies will be revisited periodically to ensure they are in line with fund objectives. Both active and passive management approaches are used depending on perceived market efficiencies and various other factors. Due to our diversification and risk control processes, there are no significant concentrations of risk, in terms of sector, industry, geography or company names.

Pension and healthcare and life plans assets do not include significant amounts of Verizon common stock.

Pension Plans

The fair values for the pension plans by asset category at December 31, 2017 are as follows:

(dollars in millions)

Asset Category	Total	Level 1	Level 2	Level 3
Cash and cash equivalents	**$ 2,889**	**$ 2,874**	**$ 15**	**$ —**
Equity securities	**2,795**	**2,794**	**—**	**1**
Fixed income securities				
U.S. Treasuries and agencies	**1,382**	**1,234**	**148**	**—**
Corporate bonds	**2,961**	**139**	**2,718**	**104**
International bonds	**1,068**	**17**	**1,031**	**20**
Other	**396**	**4**	**392**	**—**
Real estate	**627**	**—**	**—**	**627**
Other				
Private equity	**580**	**—**	**—**	**580**
Hedge funds	**845**	**—**	**660**	**185**
Total investments at fair value	**13,543**	**7,062**	**4,964**	**1,517**
Investments measured at NAV	**5,632**			
Total	**$ 19,175**	**$ 7,062**	**$ 4,964**	**$ 1,517**

The fair values for the pension plans by asset category at December 31, 2016 are as follows:

(dollars in millions)

Asset Category	Total	Level 1	Level 2	Level 3
Cash and cash equivalents	$ 1,228	$ 1,219	$ 9	$ —
Equity securities	1,883	1,883	—	—
Fixed income securities				
U.S. Treasuries and agencies	1,251	880	371	—
Corporate bonds	2,375	152	2,126	97
International bonds	713	20	679	14
Real estate	655	—	—	655
Other				
Private equity	624	—	—	624
Hedge funds	526	—	522	4
Total investments at fair value	9,255	4,154	3,707	1,394
Investments measured at NAV	5,408			
Total	$ 14,663	$ 4,154	$ 3,707	$ 1,394

The following is a reconciliation of the beginning and ending balance of pension plan assets that are measured at fair value using significant unobservable inputs:

(dollars in millions)

	Equity Securities	Corporate Bonds	International Bonds	Real Estate	Private Equity	Hedge Funds	Total
Balance at January 1, 2016	$ 3	$ 128	$ 20	$ 873	$ 609	$ —	$ 1,633
Actual (loss) gain on plan assets	(1)	(9)	(2)	169	12	—	169
Purchases and sales	(2)	(22)	(4)	(387)	3	4	(408)
Balance at December 31, 2016	$ —	$ 97	$ 14	$ 655	$ 624	$ 4	$ 1,394
Actual (loss) gain on plan assets	**—**	**(1)**	**—**	**76**	**78**	**—**	**153**
Purchases (sales)	**119**	**27**	**22**	**(70)**	**(114)**	**183**	**167**
Transfers out	**(118)**	**(19)**	**(16)**	**(34)**	**(8)**	**(2)**	**(197)**
Balance at December 31, 2017	**$ 1**	**$ 104**	**$ 20**	**$ 627**	**$ 580**	**$ 185**	**$ 1,517**

Health Care and Life Plans

The fair values for the other postretirement benefit plans by asset category at December 31, 2017 are as follows:

(dollars in millions)

Asset Category	Total	Level 1	Level 2	Level 3
Cash and cash equivalents	$ 71	$ 1	$ 70	$ —
Equity securities	294	294	—	—
Fixed income securities				
U.S. Treasuries and agencies	23	22	1	—
Corporate bonds	141	141	—	—
International bonds	60	18	42	—
Total investments at fair value	589	476	113	—
Investments measured at NAV	530			
Total	$ 1,119	$ 476	$ 113	$ —

The fair values for the other postretirement benefit plans by asset category at December 31, 2016 are as follows:

(dollars in millions)

Asset Category	Total	Level 1	Level 2	Level 3
Cash and cash equivalents	$ 131	$ 1	$ 130	$ —
Equity securities	463	463	—	—
Fixed income securities				
U.S. Treasuries and agencies	23	22	1	—
Corporate bonds	170	145	25	—
International bonds	60	30	30	—
Total investments at fair value	847	661	186	—
Investments measured at NAV	516			
Total	$ 1,363	$ 661	$ 186	$ —

The following are general descriptions of asset categories, as well as the valuation methodologies and inputs used to determine the fair value of each major category of assets.

Cash and cash equivalents include short-term investment funds (less than 90 days to maturity), primarily in diversified portfolios of investment grade money market instruments and are valued using quoted market prices or other valuation methods. The carrying value of cash equivalents approximates fair value due to the short-term nature of these investments.

Investments in securities traded on national and foreign securities exchanges are valued by the trustee at the last reported sale prices on the last business day of the year or, if no sales were reported on that date, at the last reported bid prices. Government obligations, corporate bonds, international bonds and asset-backed debt are valued using matrix prices with input from independent third-party valuation sources. Over-the-counter securities are valued at the bid prices or the average of the bid and ask prices on the last business day of the year from published sources or, if not available, from other sources considered reliable such as multiple broker quotes.

Commingled funds not traded on national exchanges are priced by the custodian or fund's administrator at their net asset value (NAV). Commingled funds held by third-party custodians appointed by the fund managers provide the fund managers with a NAV. The fund managers have the responsibility for providing this information to the custodian of the respective plan.

The investment manager of the entity values venture capital, corporate finance, and natural resource limited partnership investments. Real estate investments are valued at amounts based upon appraisal reports prepared by either independent real estate appraisers or the investment manager using discounted cash flows or market comparable data. Loans secured by mortgages are carried at the lesser of the unpaid balance or appraised value of the underlying properties. The values assigned to these investments are based upon available and current market information and do not necessarily represent amounts that might ultimately be realized. Because of the inherent uncertainty of valuation, estimated fair values might differ significantly from the values that would have been used had a ready market for the securities existed. These differences could be material.

Forward currency contracts, futures, and options are valued by the trustee at the exchange rates and market prices prevailing on the last business day of the year. Both exchange rates and market prices are readily available from published sources. These securities are classified by the asset class of the underlying holdings.

Hedge funds are valued by the custodian at NAV based on statements received from the investment manager. These funds are valued in accordance with the terms of their corresponding offering or private placement memoranda.

Commingled funds, hedge funds, venture capital, corporate finance, natural resource and real estate limited partnership investments for which fair value is measured using the NAV per share as a practical expedient are not leveled within the fair value hierarchy and are included as a reconciling item to total investments.

Employer Contributions

In 2017, we contributed $4.0 billion to our qualified pension plans, which included $3.4 billion of discretionary contributions, $0.1 billion to our nonqualified pension plans and $1.3 billion to our other postretirement benefit plans. Nonqualified pension plans contributions are estimated to be $0.1 billion and contributions to our other postretirement benefit plans are estimated to be $0.8 billion in 2018.

Estimated Future Benefit Payments

The benefit payments to retirees are expected to be paid as follows:

(dollars in millions)

Year	Pension Benefits	Health Care and Life
2018	$ 2,401	$ 1,246
2019	2,098	1,249
2020	1,464	1,297
2021	1,212	1,318
2022	1,161	1,336
2023 to 2027	5,526	6,277

Savings Plan and Employee Stock Ownership Plans

We maintain four leveraged employee stock ownership plans (ESOP). We match a certain percentage of eligible employee contributions to certain savings plans with shares of our common stock from this ESOP. At December 31, 2017, the number of allocated shares of common stock in this ESOP was 53 million. There were no unallocated shares of common stock in this ESOP at December 31, 2017. All leveraged ESOP shares are included in earnings per share computations.

Total savings plan costs were $0.8 billion in 2017, $0.7 billion in 2016 and $0.9 billion in 2015.

Severance Benefits

The following table provides an analysis of our severance liability recorded in accordance with the accounting standard regarding employers' accounting for postemployment benefits:

(dollars in millions)

Year	Beginning of Year	Charged to Expense	Payments	Other	End of Year
2015	$ 875	$ 551	$ (619)	$ (7)	$ 800
2016	800	417	(583)	22	656
2017	**656**	**581**	**(564)**	**(46)**	**627**

Severance, Pension and Benefit Charges (Credits)

During 2017, we recorded net pre-tax severance, pension and benefit charges of $1.4 billion, exclusive of acquisition related severance charges, in accordance with our accounting policy to recognize actuarial gains and losses in the period in which they occur. The pension and benefit remeasurement charges of approximately $0.9 billion were primarily driven by a decrease in our discount rate assumption used to determine the current year liabilities of our pension and postretirement benefit plans from a weighted-average of 4.2% at December 31, 2016 to a weighted-average of 3.7% at December 31, 2017 ($2.6 billion). The charges were partially offset by the difference between our estimated return on assets of 7.0% and our actual return on assets of 14.0% ($1.2 billion), a change in mortality assumptions primarily driven by the use of updated actuarial tables (MP-2017) issued by the Society of Actuaries ($0.2 billion) and other assumption adjustments ($0.3 billion). As part of these charges, we also recorded severance costs of $0.5 billion under our existing separation plans.

During 2016, we recorded net pre-tax severance, pension and benefit charges of $2.9 billion in accordance with our accounting policy to recognize actuarial gains and losses in the period in which they occur. The pension and benefit remeasurement charges of $2.5 billion were primarily driven by a decrease in our discount rate assumption used to determine the current year liabilities of our pension and other postretirement benefit plans from a weighted-average of 4.6% at December 31, 2015 to a weighted-average of 4.2% at December 31, 2016 ($2.1 billion), updated health care trend cost assumptions ($0.9 billion), the difference between our estimated return on assets of 7.0% and our actual return on assets of 6.0% ($0.2 billion) and other assumption adjustments ($0.3 billion). These charges were partially offset by a change in mortality assumptions primarily driven by the use of updated actuarial tables (MP-2016) issued by the Society of Actuaries ($0.5 billion) and lower negotiated prescription drug pricing ($0.5 billion). As part of these charges, we also recorded severance costs of $0.4 billion under our existing separation plans.

The net pre-tax severance, pension and benefit charges during 2016 were comprised of a net pre-tax pension remeasurement charge of $0.2 billion measured as of March 31, 2016 related to settlements for employees who received lump-sum distributions in one of our defined benefit pension plans, a net pre-tax pension and benefit remeasurement charge of $0.8 billion measured as of April 1, 2016 related to curtailments in three of our defined benefit pension and one of our other postretirement plans, a net pre-tax pension and benefit remeasurement charge of $2.7 billion measured as of May 31, 2016 in two defined benefit pension plans and three other postretirement benefit plans as a result of our accounting for the contractual healthcare caps and bargained for changes, a net pre-tax pension remeasurement charge of $0.1 billion measured as of May 31, 2016 related to settlements for employees who received lump-sum distributions in three of our defined benefit pension plans, a net pre-tax pension remeasurement charge of $0.6 billion measured as of August 31, 2016 related to settlements for employees who received lump-sum distributions in five of our defined benefit pension plans, and a net pre-tax pension and benefit credit of $1.9 billion as a result of our fourth quarter remeasurement of our pension and other postretirement assets and liabilities based on updated actuarial assumptions.

During 2015, we recorded net pre-tax severance, pension and benefit credits of approximately $2.3 billion primarily for our pension and postretirement plans in accordance with our accounting policy to recognize actuarial gains and losses in the year in which they occur. The credits were primarily driven by an increase in our discount rate assumption used to determine the current year liabilities from a weighted-average of 4.2% at December 31, 2014 to a weighted-average of 4.6% at December 31, 2015 ($2.5 billion), the execution of a new prescription drug contract during 2015 ($1.0 billion) and a change in mortality assumptions primarily driven by the use of updated actuarial tables (MP-2015) issued by the Society of Actuaries ($0.9 billion), partially offset by the difference between our estimated return on assets of 7.25% at December 31, 2014 and our actual return on assets of 0.7% at December 31, 2015 ($1.2 billion), severance costs recorded under our existing separation plans ($0.6 billion) and other assumption adjustments ($0.3 billion).

Note 11

Taxes

The components of income before benefit (provision) for income taxes are as follows:

(dollars in millions)

Years Ended December 31,	**2017**	2016	2015
Domestic	**$ 19,645**	$ 20,047	$ 27,639
Foreign	**949**	939	601
Total	**$ 20,594**	$ 20,986	$ 28,240

The components of the (benefit) provision for income taxes are as follows:

(dollars in millions)

Years Ended December 31,	**2017**	2016	2015
Current			
Federal	**$ 3,630**	$ 7,451	$ 5,476
Foreign	**200**	148	70
State and Local	**677**	842	803
Total	**4,507**	8,441	6,349
Deferred			
Federal	**(14,360)**	(933)	3,377
Foreign	**(66)**	(2)	9
State and Local	**(37)**	(128)	130
Total	**(14,463)**	(1,063)	3,516
Total income tax (benefit) provision	**$ (9,956)**	$ 7,378	$ 9,865

The following table shows the principal reasons for the difference between the effective income tax rate and the statutory federal income tax rate:

Years Ended December 31,	**2017**	2016	2015
Statutory federal income tax rate	**35.0 %**	35.0 %	35.0 %
State and local income tax rate, net of federal tax benefits	**1.6**	2.2	2.1
Affordable housing credit	**(0.6)**	(0.7)	(0.5)
Employee benefits including ESOP dividend	**(0.5)**	(0.5)	(0.4)
Impact of tax reform re-measurement	**(81.6)**	—	—
Noncontrolling interests	**(0.6)**	(0.6)	(0.5)
Non-deductible goodwill	**1.0**	2.2	—
Other, net	**(2.6)**	(2.4)	(0.8)
Effective income tax rate	**(48.3)%**	35.2 %	34.9 %

The effective income tax rate for 2017 was (48.3)% compared to 35.2% for 2016. The decrease in the effective income tax rate and the provision for income taxes was due to a one-time, non-cash income tax benefit recorded in the current period as a result of the enactment of the TCJA on December 22, 2017. The TCJA significantly revised the U.S. federal corporate income tax by, among other things, lowering the corporate income tax rate to 21% beginning in 2018 and imposing a mandatory repatriation tax on accumulated foreign earnings. U.S. GAAP accounting for income taxes requires that Verizon record the impacts of any tax law change on our deferred income taxes in the quarter that the tax law change is enacted. Due to the complexities involved in accounting for the enactment of the TCJA, SEC Staff Accounting Bulletin (SAB) 118 allows us to provide a provisional estimate of the impacts of the legislation. Verizon has provisionally estimated, based on currently available information, that the enactment of the TCJA results in a one-time reduction in net deferred income tax liabilities of approximately $16.8 billion, primarily due to the re-measurement of U.S. deferred tax liabilities at the lower 21% U.S. federal corporate income tax rate, and no impact from the repatriation tax. This provisional estimate does not reflect the effects of any state tax law changes that may arise as a result of federal tax reform. Verizon will continue to analyze the effects of the TCJA on its financial statements and operations and include any adjustments to tax expense or benefit from continuing operations in the reporting periods that such adjustments are determined, consistent with the one-year measurement period set forth in SAB 118.

The effective income tax rate for 2016 was 35.2% compared to 34.9% for 2015. The increase in the effective income tax rate was primarily due to the impact of $527 million included in the provision for income taxes from goodwill not deductible for tax purposes in connection with the Access Line Sale on April 1, 2016. This increase was partially offset by the impact that lower income before income taxes in the current period has on each of the reconciling items specified in the table above. The decrease in the provision for income taxes was primarily due to lower income before income taxes due to severance, pension and benefit charges recorded 2016 in compared to severance, pension and benefit credits recorded in 2015.

The amounts of cash taxes paid by Verizon are as follows:

(dollars in millions)

Years Ended December 31,	**2017**	2016	2015
Income taxes, net of amounts refunded	**$ 4,432**	$ 9,577	$ 5,293
Employment taxes	**1,207**	1,196	1,284
Property and other taxes	**1,737**	1,796	1,868
Total	**$ 7,376**	$ 12,569	$ 8,445

The increase in cash taxes paid during 2016 compared to 2015 was due to a $3.2 billion increase in income taxes paid primarily as a result of the Access Line Sale.

Deferred taxes arise because of differences in the book and tax bases of certain assets and liabilities. Significant components of deferred tax assets and liabilities are as follows:

(dollars in millions)

At December 31,	**2017**	2016
Employee benefits	**$ 6,174**	$ 10,453
Tax loss and credit carry forwards	**4,176**	3,318
Other - assets	**1,938**	2,632
	12,288	16,403
Valuation allowances	**(3,293)**	(2,473)
Deferred tax assets	**8,995**	13,930
Spectrum and other intangible amortization	**21,148**	31,404
Depreciation	**14,767**	22,848
Other - liabilities	**4,281**	5,642
Deferred tax liabilities	**40,196**	59,894
Net deferred tax liability	**$ 31,201**	$ 45,964

The decrease in the net deferred tax liability during 2017 was primarily due to the $16.8 billion re-measurement of U.S. deferred taxes at the lower 21% U.S. federal corporate income tax rate.

At December 31, 2017, undistributed earnings of our foreign subsidiaries indefinitely invested outside the United States amounted to approximately $1.8 billion. Due to foreign legal restrictions that require minimum reserves be maintained in certain countries, not all of the foreign undistributed earnings are available for repatriation. No U.S. federal deferred income taxes on these undistributed earnings are required because, under the TCJA, such earnings have been subject to U.S. federal tax as a result of the mandatory repatriation provision. In addition, such earnings will not be subject to U.S. federal tax when actually distributed under the new 100% participation exemption as enacted under the TCJA.

At December 31, 2017, we had net after-tax loss and credit carry forwards for income tax purposes of approximately $4.2 billion that primarily relate to state and foreign taxes. Of these net after-tax loss and credit carry forwards, approximately $2.6 billion will expire between 2018 and 2037 and approximately $1.6 billion may be carried forward indefinitely.

During 2017, the valuation allowance increased approximately $0.8 billion. The balance of the valuation allowance at December 31, 2017 and the 2017 activity is primarily related to state and foreign taxes.

Unrecognized Tax Benefits

A reconciliation of the beginning and ending balance of unrecognized tax benefits is as follows:

(dollars in millions)	**2017**	2016	2015
Balance at January 1,	**$ 1,902**	$ 1,635	$ 1,823
Additions based on tax positions related to the current year	**219**	338	194
Additions for tax positions of prior years	**756**	188	330
Reductions for tax positions of prior years	**(419)**	(153)	(412)
Settlements	**(42)**	(18)	(79)
Lapses of statutes of limitations	**(61)**	(88)	(221)
Balance at December 31,	**$ 2,355**	$ 1,902	$ 1,635

Included in the total unrecognized tax benefits at December 31, 2017, 2016 and 2015 is $1.9 billion, $1.5 billion and $1.2 billion, respectively, that if recognized, would favorably affect the effective income tax rate.

We recognized the following net after-tax (expenses) benefits related to interest and penalties in the provision for income taxes:

Years Ended December 31,	(dollars in millions)
2017	**$ (77)**
2016	(25)
2015	43

The after-tax accruals for the payment of interest and penalties in the consolidated balance sheets are as follows:

At December 31,	(dollars in millions)
2017	**$ 269**
2016	142

The increase in unrecognized tax benefits during 2017 was primarily related to the acquisition of Yahoo's operating business.

Verizon and/or its subsidiaries file income tax returns in the U.S. federal jurisdiction, and various state, local and foreign jurisdictions. As a large taxpayer, we are under audit by the Internal Revenue Service (IRS) and multiple state and foreign jurisdictions for various open tax years. The IRS is currently examining the Company's U.S. income tax returns for tax years 2013-2014 and Cellco Partnership's U.S. income tax return for tax year 2013-2014. Tax controversies are ongoing for tax years as early as 2005. The amount of the liability for unrecognized tax benefits will change in the next twelve months due to the expiration of the statute of limitations in various jurisdictions and it is reasonably possible that various current tax examinations will conclude or require reevaluations of the Company's tax positions during this period. An estimate of the range of the possible change cannot be made until these tax matters are further developed or resolved.

Note 12

Segment Information

Reportable Segments

We have two reportable segments, Wireless and Wireline, which we operate and manage as strategic business units and organize by products and services, and customer groups, respectively. We measure and evaluate our reportable segments based on segment operating income, consistent with the chief operating decision maker's assessment of segment performance.

Our segments and their principal activities consist of the following:

Segment	Description
Wireless	Wireless' communications products and services include wireless voice and data services and equipment sales, which are provided to consumer, business and government customers across the U.S.
Wireline	Wireline's voice, data and video communications products and enhanced services include broadband video and data services, corporate networking solutions, security and managed network services and local and long distance voice services. We provide these products and services to consumers in the U.S., as well as to carriers, businesses and government customers both in the U.S. and around the world.

During the first quarter of 2017, Verizon reorganized the customer groups within its Wireline segment. Previously, the customer groups in the Wireline segment consisted of Mass Markets (which included Consumer Retail and Small Business subgroups), Global Enterprise and Global Wholesale. Pursuant to the reorganization, there are now four customer groups within the Wireline segment: Consumer Markets, which includes the customers previously included in Consumer Retail; Enterprise Solutions, which includes the large business customers, including multinational corporations, and federal government customers previously included in Global Enterprise; Partner Solutions, which includes the customers previously included in Global Wholesale; and Business Markets, a new customer group, which includes U.S.-based small business customers previously included in Mass Markets and U.S.-based medium business customers, state and local government customers and educational institutions previously included in Global Enterprise.

Corporate and other includes the results of our Media business, branded Oath, our telematics and other businesses, investments in unconsolidated businesses, unallocated corporate expenses, pension and other employee benefit related costs and lease financing. Corporate and other also includes the historical results of divested businesses and other adjustments and gains and losses that are not allocated in assessing segment performance due to their nature. Although such transactions are excluded from the business segment results, they are included in reported consolidated earnings. Gains and losses that are not individually significant are included in all segment results as these items are included in the chief operating decision maker's assessment of segment performance. We completed our acquisition of Yahoo's operating business on June 13, 2017.

On April 1, 2016, we completed the Access Line Sale. Additionally, on May 1, 2017, we completed the Data Center Sale. See Note 2 for additional information. The results of operations for these divestitures and other insignificant transactions are included within Corporate and other for all periods presented to reflect comparable segment operating results consistent with the information regularly reviewed by our chief operating decision maker.

In addition, Corporate and other includes the results of our telematics businesses for all periods presented, which were reclassified from our Wireline segment effective April 1, 2016. The impact of this reclassification was insignificant to our consolidated financial statements and our segment results of operations.

The reconciliation of segment operating revenues and expenses to consolidated operating revenues and expenses below includes the effects of special items that management does not consider in assessing segment performance, primarily because of their nature.

We have adjusted prior period consolidated and segment information, where applicable, to conform to the current year presentation.

The following table provides operating financial information for our two reportable segments:

2017	**Wireless**	**Wireline**	(dollars in millions) **Total Reportable Segments**
External Operating Revenues			
Service	**$ 62,972**	**$ —**	**$ 62,972**
Equipment	**18,889**	**—**	**18,889**
Other	**5,270**	**—**	**5,270**
Consumer Markets	**—**	**12,775**	**12,775**
Enterprise Solutions	**—**	**9,165**	**9,165**
Partner Solutions	**—**	**3,969**	**3,969**
Business Markets	**—**	**3,585**	**3,585**
Other	**—**	**234**	**234**
Intersegment revenues	**380**	**952**	**1,332**
Total operating revenues	**87,511**	**30,680**	**118,191**
Cost of services	**7,990**	**17,922**	**25,912**
Wireless cost of equipment	**22,147**	**—**	**22,147**
Selling, general and administrative expense	**18,772**	**6,274**	**25,046**
Depreciation and amortization expense	**9,395**	**6,104**	**15,499**
Total operating expenses	**58,304**	**30,300**	**88,604**
Operating income	**$ 29,207**	**$ 380**	**$ 29,587**
Assets	**$ 235,873**	**$ 75,282**	**$ 311,155**
Property, plant and equipment, net	**43,935**	**41,351**	**85,286**
Capital expenditures	**10,310**	**5,339**	**15,649**

2016	Wireless	Wireline	(dollars in millions) Total Reportable Segments
External Operating Revenues			
Service	$ 66,362	$ —	$ 66,362
Equipment	17,511	—	17,511
Other	4,915	—	4,915
Consumer Markets	—	12,751	12,751
Enterprise Solutions	—	9,162	9,162
Partner Solutions	—	3,976	3,976
Business Markets	—	3,356	3,356
Other	—	314	314
Intersegment revenues	398	951	1,349
Total operating revenues	89,186	30,510	119,696
Cost of services	7,988	18,353	26,341
Wireless cost of equipment	22,238	—	22,238
Selling, general and administrative expense	19,924	6,476	26,400
Depreciation and amortization expense	9,183	5,975	15,158
Total operating expenses	59,333	30,804	90,137
Operating income (loss)	$ 29,853	$ (294)	$ 29,559
Assets	$ 211,345	$ 66,679	$ 278,024
Property, plant and equipment, net	42,898	40,205	83,103
Capital expenditures	11,240	4,504	15,744

(dollars in millions)

2015	Wireless	Wireline	Total Reportable Segments
External Operating Revenues			
Service	$ 70,305	$ —	$ 70,305
Equipment	16,924	—	16,924
Other	4,294	—	4,294
Consumer Markets	—	12,696	12,696
Enterprise Solutions	—	9,376	9,376
Partner Solutions	—	4,228	4,228
Business Markets	—	3,553	3,553
Other	—	330	330
Intersegment revenues	157	967	1,124
Total operating revenues	91,680	31,150	122,830
Cost of services	7,803	18,483	26,286
Wireless cost of equipment	23,119	—	23,119
Selling, general and administrative expense	21,805	7,140	28,945
Depreciation and amortization expense	8,980	6,353	15,333
Total operating expenses	61,707	31,976	93,683
Operating income (loss)	$ 29,973	$ (826)	$ 29,147
Assets	$ 185,405	$ 78,305	$ 263,710
Property, plant and equipment, net	40,911	41,044	81,955
Capital expenditures	11,725	5,049	16,774

Reconciliation to Consolidated Financial Information

A reconciliation of the reportable segment operating revenues to consolidated operating revenues is as follows:

(dollars in millions)

Years Ended December 31,	**2017**	2016	2015
Operating Revenues			
Total reportable segments	**$ 118,191**	$ 119,696	$ 122,830
Corporate and other	**9,019**	5,663	3,738
Reconciling items:			
Operating results from divested businesses (Note 2)	**368**	2,115	6,224
Eliminations	**(1,544)**	(1,494)	(1,172)
Consolidated operating revenues	**$ 126,034**	$ 125,980	$ 131,620

Fios revenues are included within our Wireline segment and amounted to approximately $11.7 billion, $11.2 billion, and $10.7 billion for the years ended December 31, 2017, 2016 and 2015, respectively.

A reconciliation of the total of the reportable segments' operating income to consolidated income before provision for income taxes is as follows:

			(dollars in millions)
Years Ended December 31,	**2017**	2016	2015
Operating Income			
Total reportable segments	**$ 29,587**	$ 29,559	$ 29,147
Corporate and other	**(1,409)**	(1,721)	(1,720)
Reconciling items:			
Severance, pension and benefit (charges) credits (Note 10)	**(1,391)**	(2,923)	2,256
Net gain on sale of divested businesses (Note 2)	**1,774**	1,007	—
Acquisition and integration related charges (Note 2)	**(884)**	—	—
Gain on spectrum license transactions (Note 2)	**270**	142	254
Operating results from divested businesses	**149**	995	3,123
Product realignment	**(682)**	—	—
Consolidated operating income	**27,414**	27,059	33,060
Equity in losses of unconsolidated businesses	**(77)**	(98)	(86)
Other income (expense), net	**(2,010)**	(1,599)	186
Interest expense	**(4,733)**	(4,376)	(4,920)
Income Before Benefit (Provision) For Income Taxes	**$ 20,594**	$ 20,986	$ 28,240

A reconciliation of the total of the reportable segments' assets to consolidated assets is as follows:

		(dollars in millions)
At December 31,	**2017**	2016
Assets		
Total reportable segments	**$ 311,155**	$ 278,024
Corporate and other	**239,040**	213,787
Eliminations	**(293,052)**	(247,631)
Total consolidated	**$ 257,143**	$ 244,180

No single customer accounted for more than 10% of our total operating revenues during the years ended December 31, 2017, 2016 and 2015. International operating revenues and long-lived assets are not significant.

Note 13

Comprehensive Income

Comprehensive income consists of net income and other gains and losses affecting equity that, under U.S. GAAP, are excluded from net income. Significant changes in the components of Other comprehensive income, net of provision for income taxes are described below.

Accumulated Other Comprehensive Income

The changes in the balances of Accumulated other comprehensive income by component are as follows:

(dollars in millions)	Foreign currency translation adjustments	Unrealized gains (losses) on cash flow hedges	Unrealized losses on marketable securities	Defined benefit pension and postretirement plans	Total
Balance at January 1, 2015	$ (346)	$ (84)	$ 112	$ 1,429	$ 1,111
Other comprehensive loss	(208)	(1,063)	(5)	—	(1,276)
Amounts reclassified to net income	—	869	(6)	(148)	715
Net other comprehensive loss	(208)	(194)	(11)	(148)	(561)
Balance at December 31, 2015	(554)	(278)	101	1,281	550
Other comprehensive (loss) income	(159)	(225)	(13)	2,881	2,484
Amounts reclassified to net income	—	423	(42)	(742)	(361)
Net other comprehensive (loss) income	(159)	198	(55)	2,139	2,123
Balance at December 31, 2016	(713)	(80)	46	3,420	2,673
Other comprehensive income	**245**	**818**	**10**	**327**	**1,400**
Amounts reclassified to net income	**—**	**(849)**	**(24)**	**(541)**	**(1,414)**
Net other comprehensive income (loss)	**245**	**(31)**	**(14)**	**(214)**	**(14)**
Balance at December 31, 2017	**$ (468)**	**$ (111)**	**$ 32**	**$ 3,206**	**$ 2,659**

The amounts presented above in net other comprehensive income (loss) are net of taxes. The amounts reclassified to net income related to unrealized gain (loss) on cash flow hedges in the table above are included in Other income (expense), net and Interest expense on our consolidated statements of income. See Note 8 for additional information. The amounts reclassified to net income related to unrealized gain (loss) on marketable securities in the table above are included in Other income (expense), net on our consolidated statements of income. The amounts reclassified to net income related to defined benefit pension and postretirement plans in the table above are included in Cost of services and Selling, general and administrative expense on our consolidated statements of income. See Note 10 for additional information.

Note 14

Additional Financial Information

The tables that follow provide additional financial information related to our consolidated financial statements:

Income Statement Information

(dollars in millions)

Years Ended December 31,	**2017**	2016	2015
Depreciation expense	**$ 14,741**	$ 14,227	$ 14,323
Interest costs on debt balances	**5,256**	4,961	5,391
Net amortization of debt discount	**155**	119	113
Capitalized interest costs	**(678)**	(704)	(584)
Advertising expense	**2,643**	2,744	2,749

Balance Sheet Information

(dollars in millions)

At December 31,		2017		2016
Accounts Payable and Accrued Liabilities				
Accounts payable	**$**	**7,063**	$	7,084
Accrued expenses		**6,756**		5,717
Accrued vacation, salaries and wages		**4,521**		3,813
Interest payable		**1,409**		1,463
Taxes payable		**1,483**		1,516
	$	**21,232**	$	19,593
Other Current Liabilities				
Advance billings and customer deposits	**$**	**3,084**	$	2,914
Dividends payable		**2,429**		2,375
Other		**2,839**		2,813
	$	**8,352**	**$**	**8,102**

Cash Flow Information

(dollars in millions)

Years Ended December 31,		2017		2016		2015
Cash Paid						
Interest, net of amounts capitalized	**$**	**4,369**	$	4,085	$	4,491
Income taxes, net of amounts refunded		**4,432**		9,577		5,293
Other, net Cash Flows from Operating Activities						
Changes in device payment plan agreement receivables-non-current	**$**	**(579)**	$	(3,303)	$	(23)
Proceeds from Tower Monetization Transaction		**—**		—		2,346
Other, net		**1,251**		206		(3,637)
	$	**672**	$	(3,097)	$	(1,314)
Other, net Cash Flows from Financing Activities						
Net debt related costs	**$**	**(3,599)**	$	(1,991)	$	(422)
Proceeds from Tower Monetization Transaction		**—**		—		2,742
Other, net		**(1,253)**		(806)		(743)
	$	**(4,852)**	$	(2,797)	$	1,577

On March 3, 2017, the Verizon Board of Directors authorized a new share buyback program to repurchase up to 100 million shares of the company's common stock. The new program will terminate when the aggregate number of shares purchased reaches 100 million, or at the close of business on February 28, 2020, whichever is sooner. During the years ended December 31, 2017 and 2016, Verizon did not repurchase any shares of Verizon’s common stock under our authorized share buyback programs. During the year ended December 31, 2015, Verizon repurchased approximately 2.8 million shares of the Company's common stock under our previous share buyback program for approximately $0.1 billion. At December 31, 2017, the maximum number of shares that could be purchased by or on behalf of Verizon under our share buyback program was 100 million.

In addition to the previously authorized three-year share buyback program, in 2015, the Verizon Board of Directors authorized Verizon to enter into an accelerated share repurchase (ASR) agreement to repurchase $5.0 billion of the Company's common stock. On February 10, 2015, in exchange for an up-front payment totaling $5.0 billion, Verizon received an initial delivery of 86.2 million shares having a value of approximately $4.25 billion. On June 5, 2015, Verizon received an additional 15.4 million shares as final settlement of the transaction under the ASR agreement. In total, 101.6 million shares were delivered under the ASR at an average repurchase price of $49.21.

Common stock has been used from time to time to satisfy some of the funding requirements of employee and shareowner plans. During the year ended December 31, 2017, we issued 2.8 million common shares from Treasury stock, which had an insignificant aggregate value. During the year ended December 31, 2016, we issued 3.5 million common shares from Treasury stock, which had an insignificant aggregate value. During the year ended December 31, 2015, we issued 22.6 million common shares from Treasury stock, which had an aggregate value of $0.9 billion.

Note 15

Commitments and Contingencies

In the ordinary course of business, Verizon is involved in various commercial litigation and regulatory proceedings at the state and federal level. Where it is determined, in consultation with counsel based on litigation and settlement risks, that a loss is probable and estimable in a given matter, the Company establishes an accrual. In none of the currently pending matters is the amount of accrual material. An estimate of the reasonably possible loss or range of loss in excess of the amounts already accrued cannot be made at this time due to various factors typical in contested proceedings, including (1) uncertain damage theories and demands; (2) a less than complete factual record; (3) uncertainty concerning legal theories and their resolution by courts or regulators; and (4) the unpredictable nature of the opposing party and its demands. We continuously monitor these proceedings as they develop and adjust any accrual or disclosure as needed. We do not expect that the ultimate resolution of any pending regulatory or legal matter in future periods, including the Hicksville matter described below, will have a material effect on our financial condition, but it could have a material effect on our results of operations for a given reporting period.

Reserves have been established to cover environmental matters relating to discontinued businesses and past telecommunications activities. These reserves include funds to address contamination at the site of a former Sylvania facility in Hicksville NY, which had processed nuclear fuel rods in the 1950s and 1960s. In September 2005, the Army Corps of Engineers (ACE) accepted the site into its Formerly Utilized Sites Remedial Action Program. As a result, the ACE has taken primary responsibility for addressing the contamination at the site. An adjustment to the reserves may be made after a cost allocation is conducted with respect to the past and future expenses of all of the parties. Adjustments to the environmental reserve may also be made based upon the actual conditions found at other sites requiring remediation.

Verizon is currently involved in approximately 40 federal district court actions alleging that Verizon is infringing various patents. Most of these cases are brought by non-practicing entities and effectively seek only monetary damages; a small number are brought by companies that have sold products and could seek injunctive relief as well. These cases have progressed to various stages and a small number may go to trial in the coming 12 months if they are not otherwise resolved.

In connection with the execution of agreements for the sales of businesses and investments, Verizon ordinarily provides representations and warranties to the purchasers pertaining to a variety of nonfinancial matters, such as ownership of the securities being sold, as well as indemnity from certain financial losses. From time to time, counterparties may make claims under these provisions, and Verizon will seek to defend against those claims and resolve them in the ordinary course of business.

Subsequent to the sale of Verizon Information Services Canada in 2004, we continue to provide a guarantee to publish directories, which was issued when the directory business was purchased in 2001 and had a 30-year term (before extensions). The preexisting guarantee continues, without modification, despite the subsequent sale of Verizon Information Services Canada and the spin-off of our domestic print and Internet yellow pages directories business. The possible financial impact of the guarantee, which is not expected to be adverse, cannot be reasonably estimated as a variety of the potential outcomes available under the guarantee result in costs and revenues or benefits that may offset each other. We do not believe performance under the guarantee is likely.

As of December 31, 2017, letters of credit totaling approximately $0.6 billion, which were executed in the normal course of business and support several financing arrangements and payment obligations to third parties, were outstanding.

We have several commitments, totaling $21.0 billion, primarily to purchase programming and network services, equipment, software and marketing services, which will be used or sold in the ordinary course of business, from a variety of suppliers. Of this total amount, $7.6 billion is attributable to 2018, $9.0 billion is attributable to 2019 through 2020, $2.1 billion is attributable to 2021 through 2022 and $2.3 billion is attributable to years thereafter. These amounts do not represent our entire anticipated purchases in the future, but represent only those items that are the subject of contractual obligations. Our commitments are generally determined based on the noncancelable quantities or termination amounts. Purchases against our commitments totaled approximately $8.2 billion for 2017, $8.1 billion for 2016, and $10.2 billion for 2015. Since the commitments to purchase programming services from television networks and broadcast stations have no minimum volume requirement, we estimated our obligation based on number of subscribers at December 31, 2017, and applicable rates stipulated in the contracts in effect at that time. We also purchase products and services as needed with no firm commitment.

Note 16

Quarterly Financial Information (Unaudited)

(dollars in millions, except per share amounts)

Quarter Ended	Operating Revenues	Operating Income	Net Income attributable to Verizon [1] Amount	Per Share-Basic	Per Share-Diluted	Net Income
2017						
March 31	**$ 29,814**	**$ 7,181**	**$ 3,450**	**$ 0.85**	**$ 0.84**	**$ 3,553**
June 30	**30,548**	**8,232**	**4,362**	**1.07**	**1.07**	**4,478**
September 30	**31,717**	**7,208**	**3,620**	**0.89**	**0.89**	**3,736**
December 31	**33,955**	**4,793**	**18,669**	**4.57**	**4.56**	**18,783**
2016						
March 31	$ 32,171	$ 7,942	$ 4,310	$ 1.06	$ 1.06	$ 4,430
June 30	30,532	4,554	702	0.17	0.17	831
September 30	30,937	6,540	3,620	0.89	0.89	3,747
December 31	32,340	8,023	4,495	1.10	1.10	4,600

[1] Net income attributable to Verizon per common share is computed independently for each quarter and the sum of the quarters may not equal the annual amount.

- Results of operations for the first quarter of 2017 include after-tax charges attributable to Verizon of $0.5 billion related to early debt redemption costs, as well as after-tax credits attributable to Verizon of $0.1 billion related to a gain on spectrum license transactions.
- Results of operations for the second quarter of 2017 include after-tax charges attributable to Verizon of $0.1 billion related to severance, pension and benefit charges, and after-tax charges attributable to Verizon of $0.4 billion related to acquisition and integration related charges, as well as after-tax credits attributable to Verizon of $0.9 billion related to a net gain on sale of divested businesses.
- Results of operations for the third quarter of 2017 include after-tax charges attributable to Verizon of $0.3 billion related to early debt redemption costs and after-tax charges attributable to Verizon of $0.1 billion related to acquisition and integration related charges.
- Results of operations for the fourth quarter of 2017 include after-tax credits attributable to Verizon of $16.8 billion related to the impact of tax reform, after-tax charges attributable to Verizon of $0.7 billion related to severance, pension and benefit charges, after-tax charges attributable to Verizon of $0.5 billion related to product realignment costs, as well as after-tax charges attributable to Verizon of $0.4 billion related to early debt redemption costs. In addition, results of operations for the fourth quarter of 2017 include after-tax credits attributable to Verizon of $0.1 billion related to a gain on spectrum license transactions and after-tax charges attributable to Verizon of $0.1 billion related to acquisition and integration related charges.
- Results of operations for the first quarter of 2016 include after-tax charges attributable to Verizon of $0.1 billion related to a pension remeasurement, as well as after-tax credits attributable to Verizon of $0.1 billion related to a gain on spectrum license transactions.
- Results of operations for the second quarter of 2016 include after-tax charges attributable to Verizon of $2.2 billion related to pension and benefit remeasurements and after-tax charges attributable to Verizon of $1.1 billion related to early debt redemption costs, as well as after-tax credits attributable to Verizon of $0.1 billion related to a gain on the Access Line Sale.
- Results of operations for the third quarter of 2016 include after-tax charges attributable to Verizon of $0.5 billion related to a pension remeasurement and severance costs.
- Results of operations for the fourth quarter of 2016 include after-tax credits attributable to Verizon of $1.0 billion related to severance, pension and benefit credits.

EXHIBIT 21

Verizon Communications Inc. and Subsidiaries
Principal Subsidiaries of Registrant at December 31, 2017

Name	**State of Incorporation / Organization**
Verizon Delaware LLC	Delaware
Verizon Maryland LLC	Delaware
Verizon New England Inc.	New York
Verizon New Jersey Inc.	New Jersey
Verizon New York Inc.	New York
Verizon Pennsylvania LLC	Delaware
Verizon Virginia LLC	Virginia
Bell Atlantic Mobile Systems LLC	Delaware
Cellco Partnership (d/b/a Verizon Wireless)	Delaware
GTE LLC	Delaware
GTE Wireless LLC	Delaware
MCI Communications Corporation	Delaware
Verizon Americas Inc.	Delaware
Verizon Business Global LLC	Delaware

EXHIBIT 23

Consent of Independent Registered Public Accounting Firm and Report on Schedule

Consent

We consent to the incorporation by reference in the following Registration Statements:

Form S-4, No. 333-11573; Form S-8, No. 333-41593; Form S-8, No. 333-50146; Form S-4, No. 333-76171; Form S-8, No. 333-76171; Form S-8, No. 333-53830; Form S-8, No. 333-82690; Form S-4, No. 333-124008; Form S-8, No. 333-124008; Form S-4, No. 333-132651; Form S-8, No. 333-169267; Form S-8, No. 333-172501; Form S-8, No. 333-172999; Form S-8, No. 333-200398; Form S-3, No. 333-203745; Form S-3, No. 333-213439; Form S-8, No. 333-217717; and Form S-4, No. 333-218484;

of our reports dated February 23, 2018, with respect to the consolidated financial statements and the effectiveness of internal control over financial reporting of Verizon, incorporated by reference in this Annual Report (Form 10-K) of Verizon for the year ended December 31, 2017, and the financial statement schedule of Verizon, included below, filed with the Securities and Exchange Commission.

Report on Schedule

To the Board of Directors and Shareowners of Verizon Communications Inc.:

We have audited the consolidated financial statements of Verizon Communications Inc. (Verizon) as of December 31, 2017 and 2016, and for each of the three years in the period ended December 31, 2017, and have issued our report thereon dated February 23, 2018 incorporated by reference in this Annual Report (Form 10-K) of Verizon from the 2017 Annual Report to Shareholders of Verizon. Our audits of the consolidated financial statements included the financial statement schedule listed in Item 15(a) of this Annual Report (Form 10-K) (the “schedule”). This schedule is the responsibility of Verizon's management. Our responsibility is to express an opinion on Verizon’s schedule based on our audits.

In our opinion, the schedule presents fairly, in all material respects, the information set forth therein when considered in conjunction with the consolidated financial statements.

/s/ Ernst & Young LLP

Ernst & Young LLP
New York, New York

February 23, 2018

EXHIBIT 24

POWER OF ATTORNEY

WHEREAS, VERIZON COMMUNICATIONS INC., a Delaware corporation (hereinafter referred to as the “Company”), proposes to file with the Securities and Exchange Commission under the provisions of the Securities Exchange Act of 1934, as amended, an annual report on Form 10-K (the “Form 10-K”) for the fiscal year ended December 31, 2017.

NOW, THEREFORE, the undersigned hereby appoints Lowell C. McAdam, Matthew D. Ellis and Anthony T. Skiadas and each of them, her true and lawful attorneys-in-fact and agents with full power of substitution, for her and in her name, place and stead, in any and all capacities, to sign the Form 10-K and any and all amendments to the Form 10-K, and to file the same, with all exhibits thereto and all documents in connection therewith, making such changes in the Form 10-K as such person or persons so acting deems appropriate, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or his, her or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, the undersigned has executed this Power of Attorney this 1st day of February, 2018.

/s/ Shellye L. Archambeau

Shellye L. Archambeau

POWER OF ATTORNEY

WHEREAS, VERIZON COMMUNICATIONS INC., a Delaware corporation (hereinafter referred to as the "Company"), proposes to file with the Securities and Exchange Commission under the provisions of the Securities Exchange Act of 1934, as amended, an annual report on Form 10-K (the "Form 10-K") for the fiscal year ended December 31, 2017.

NOW, THEREFORE, the undersigned hereby appoints Lowell C. McAdam, Matthew D. Ellis and Anthony T. Skiadas and each of them, his true and lawful attorneys-in-fact and agents with full power of substitution, for him and in his name, place and stead, in any and all capacities, to sign the Form 10-K and any and all amendments to the Form 10-K, and to file the same, with all exhibits thereto and all documents in connection therewith, making such changes in the Form 10-K as such person or persons so acting deems appropriate, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or his, her or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, the undersigned has executed this Power of Attorney this 1st day of February, 2018.

/s/ Mark T. Bertolini

Mark T. Bertolini

POWER OF ATTORNEY

WHEREAS, VERIZON COMMUNICATIONS INC., a Delaware corporation (hereinafter referred to as the "Company"), proposes to file with the Securities and Exchange Commission under the provisions of the Securities Exchange Act of 1934, as amended, an annual report on Form 10-K (the "Form 10-K") for the fiscal year ended December 31, 2017.

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IN WITNESS WHEREOF, the undersigned has executed this Power of Attorney this 1st day of February, 2018.

/s/ Richard L. Carrión

Richard L. Carrión

POWER OF ATTORNEY

WHEREAS, VERIZON COMMUNICATIONS INC., a Delaware corporation (hereinafter referred to as the "Company"), proposes to file with the Securities and Exchange Commission under the provisions of the Securities Exchange Act of 1934, as amended, an annual report on Form 10-K (the "Form 10-K") for the fiscal year ended December 31, 2017.

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IN WITNESS WHEREOF, the undersigned has executed this Power of Attorney this 1st day of February, 2018.

/s/ Melanie L. Healey

Melanie L. Healey

POWER OF ATTORNEY

WHEREAS, VERIZON COMMUNICATIONS INC., a Delaware corporation (hereinafter referred to as the “Company”), proposes to file with the Securities and Exchange Commission under the provisions of the Securities Exchange Act of 1934, as amended, an annual report on Form 10-K (the “Form 10-K”) for the fiscal year ended December 31, 2017.

NOW, THEREFORE, the undersigned hereby appoints Lowell C. McAdam, Matthew D. Ellis and Anthony T. Skiadas and each of them, her true and lawful attorneys-in-fact and agents with full power of substitution, for her and in her name, place and stead, in any and all capacities, to sign the Form 10-K and any and all amendments to the Form 10-K, and to file the same, with all exhibits thereto and all documents in connection therewith, making such changes in the Form 10-K as such person or persons so acting deems appropriate, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or his, her or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, the undersigned has executed this Power of Attorney this 1st day of February, 2018.

/s/ M. Frances Keeth

M. Frances Keeth

POWER OF ATTORNEY

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IN WITNESS WHEREOF, the undersigned has executed this Power of Attorney this 1st day of February, 2018.

/s/ Karl-Ludwig Kley

Karl-Ludwig Kley

POWER OF ATTORNEY

WHEREAS, VERIZON COMMUNICATIONS INC., a Delaware corporation (hereinafter referred to as the "Company"), proposes to file with the Securities and Exchange Commission under the provisions of the Securities Exchange Act of 1934, as amended, an annual report on Form 10-K (the "Form 10-K") for the fiscal year ended December 31, 2017.

NOW, THEREFORE, the undersigned hereby appoints Matthew D. Ellis and Anthony T. Skiadas and each of them, his true and lawful attorneys-in-fact and agents with full power of substitution, for him and in his name, place and stead, in any and all capacities, to sign the Form 10-K and any and all amendments to the Form 10-K, and to file the same, with all exhibits thereto and all documents in connection therewith, making such changes in the Form 10-K as such person or persons so acting deems appropriate, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or his, her or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, the undersigned has executed this Power of Attorney this 1st day of February, 2018.

/s/ Lowell C. McAdam

Lowell C. McAdam

POWER OF ATTORNEY

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IN WITNESS WHEREOF, the undersigned has executed this Power of Attorney this 1st day of February, 2018.

/s/ Clarence Otis, Jr.

Clarence Otis, Jr.

POWER OF ATTORNEY

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IN WITNESS WHEREOF, the undersigned has executed this Power of Attorney this 1st day of February, 2018.

/s/ Rodney E. Slater

Rodney E. Slater

POWER OF ATTORNEY

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IN WITNESS WHEREOF, the undersigned has executed this Power of Attorney this 1st day of February, 2018.

/s/ Kathryn A. Tesija

Kathryn A. Tesija

POWER OF ATTORNEY

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IN WITNESS WHEREOF, the undersigned has executed this Power of Attorney this 1st day of February, 2018.

/s/ Gregory D. Wasson

Gregory D. Wasson

POWER OF ATTORNEY

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IN WITNESS WHEREOF, the undersigned has executed this Power of Attorney this 1st day of February, 2018.

/s/ Gregory G. Weaver

Gregory G. Weaver

POWER OF ATTORNEY

WHEREAS, VERIZON COMMUNICATIONS INC., a Delaware corporation (hereinafter referred to as the "Company"), proposes to file with the Securities and Exchange Commission under the provisions of the Securities Exchange Act of 1934, as amended, an annual report on Form 10-K (the "Form 10-K") for the fiscal year ended December 31, 2017.

NOW, THEREFORE, the undersigned hereby appoints Lowell C. McAdam and Anthony T. Skiadas and each of them, his true and lawful attorneys-in-fact and agents with full power of substitution, for him and in his name, place and stead, in any and all capacities, to sign the Form 10-K and any and all amendments to the Form 10-K, and to file the same, with all exhibits thereto and all documents in connection therewith, making such changes in the Form 10-K as such person or persons so acting deems appropriate, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or his, her or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, the undersigned has executed this Power of Attorney this 1st day of February, 2018.

/s/ Matthew D. Ellis

Matthew D. Ellis

POWER OF ATTORNEY

WHEREAS, VERIZON COMMUNICATIONS INC., a Delaware corporation (hereinafter referred to as the "Company"), proposes to file with the Securities and Exchange Commission under the provisions of the Securities Exchange Act of 1934, as amended, an annual report on Form 10-K (the "Form 10-K") for the fiscal year ended December 31, 2017.

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IN WITNESS WHEREOF, the undersigned has executed this Power of Attorney this 1st day of February, 2018.

/s/ Anthony T. Skiadas

Anthony T. Skiadas

EXHIBIT 31.1

I, Lowell C. McAdam, certify that:

1. I have reviewed this annual report on Form 10-K of Verizon Communications Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and

5. The registrant’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: February 23, 2018

/s/ Lowell C. McAdam

Lowell C. McAdam
Chairman and Chief Executive Officer

EXHIBIT 31.2

I, Matthew D. Ellis, certify that:

1. I have reviewed this annual report on Form 10-K of Verizon Communications Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 23, 2018

/s/ Matthew D. Ellis

Matthew D. Ellis

Executive Vice President
and Chief Financial Officer

EXHIBIT 32.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002, PURSUANT TO SECTION 1350 OF CHAPTER 63 OF TITLE 18 OF THE UNITED STATES CODE

I, Lowell C. McAdam, Chairman and Chief Executive Officer of Verizon Communications Inc. (the Company), certify that:

(1) the report of the Company on Form 10-K for the annual period ending December 31, 2017 (the Report) fully complies with the requirements of section 13(a) of the Securities Exchange Act of 1934 (the Exchange Act); and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods referred to in the Report.

Date: February 23, 2018

/s/ Lowell C. McAdam

Lowell C. McAdam

Chairman and Chief Executive Officer

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to Verizon Communications Inc. and will be retained by Verizon Communications Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

EXHIBIT 32.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002, PURSUANT TO SECTION 1350 OF CHAPTER 63 OF TITLE 18 OF THE UNITED STATES CODE

I, Matthew D. Ellis, Executive Vice President and Chief Financial Officer of Verizon Communications Inc. (the Company), certify that:

(1) the report of the Company on Form 10-K for the annual period ending December 31, 2017 (the Report) fully complies with the requirements of section 13(a) of the Securities Exchange Act of 1934 (the Exchange Act); and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods referred to in the Report.

Date: February 23, 2018	/s/ Matthew D. Ellis
	Matthew D. Ellis
	Executive Vice President and Chief Financial Officer

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to Verizon Communications Inc. and will be retained by Verizon Communications Inc. and furnished to the Securities and Exchange Commission or its staff upon request.