

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

Years Ended December 31,	2017	2016	2015	(dollars in millions)			
				(Decrease)/Increase			
				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

Years Ended December 31,	2017	2016	2015	(dollars in millions)			
				Increase/(Decrease)			
				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:

Years Ended December 31,	(dollars in millions)		
	2017	2016	2015
Early debt redemption costs	\$ 1,983	\$ 1,822	\$ —

Interest Expense

Years Ended December 31,	(dollars in millions)					
				Increase/(Decrease)		
	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

Years Ended December 31,	(dollars in millions)					
				(Decrease)		
	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.

Years Ended December 31,	(dollars in millions)		
	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

Years Ended December 31,	2017	2016	2015	(dollars in millions, except ARPA and I-ARPA)			
				(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.

Operating Expenses

Years Ended December 31,	2017	2016	2015	(dollars in millions)			
				Increase/(Decrease)			
				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.

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.

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

Years Ended December 31,	2017	2016	2015	(dollars in millions)			
				(Decrease)/Increase			
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

Years Ended December 31,	(dollars in millions)						
	Increase/(Decrease)						
	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.

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)

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.

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

Years Ended December 31,	(dollars in millions)						
	Increase/(Decrease)						
	2017	2016	2015	2017 vs. 2016		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

Years Ended December 31,	(dollars in millions)		
	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 Eksportkreditnämnden 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:

Years Ended December 31,	2017	(dollars in millions)	
		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

Employee 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)

Contractual Obligations	Payments Due By Period				
	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.