

Selected Financial Data

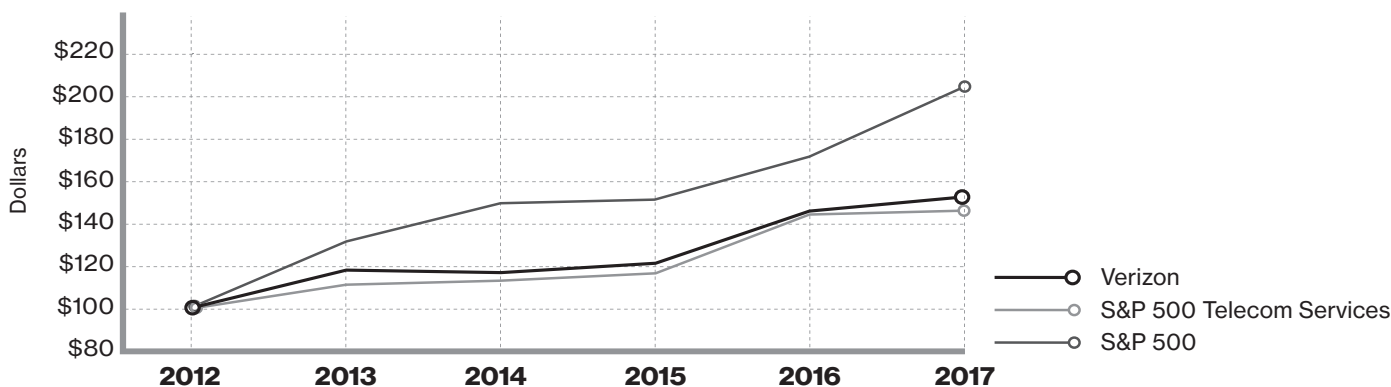
(dollars in millions, except per share amounts)

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

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

Stock Performance Graph

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



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

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

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

Overview

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

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

Highlights of our 2017 financial results include:

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

Business Overview

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

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

Wireless

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

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

Wireline

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

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

Corporate and Other

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

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

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

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

Capital Expenditures and Investments

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

Consolidated Results of Operations

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

Consolidated Revenues

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

Consolidated Operating Expenses

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

Years Ended December 31,	(dollars in millions)		
	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:

Years Ended December 31,	(dollars in millions)		
	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:

Years Ended December 31,				(dollars in millions)	
	2017	2016	2015	Increase/(Decrease)	
	2017	2016	2015	2017 vs. 2016	2016 vs. 2015
Interest income	\$ 82	\$ 59	\$ 115	\$ 23	39.0%
Other, net	(2,092)	(1,658)	71	(434)	(26.2)
Total	\$ (2,010)	\$ (1,599)	\$ 186	\$ (411)	(25.7)
				\$ (56)	(48.7)%
				(1,729)	nm
				\$ (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)						
	2017	2016	2015	Increase/(Decrease)			
				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)						
	2017	2016	2015	(Decrease)			
				2017 vs. 2016	2016 vs. 2015		
(Benefit) provision for income taxes	\$ (9,956)	\$ 7,378	\$ 9,865	\$ (17,334)	nm	\$ (2,487)	(25.2)%
Effective income tax rate	(48.3)%	35.2%	34.9%				

nm – not meaningful

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

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

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

Consolidated Net Income, Operating Income and EBITDA

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

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

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

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

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

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

Segment Results of Operations

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

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

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

Wireless**Operating Revenues and Selected Operating Statistics**

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

2017 Compared to 2016

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

2016 Compared to 2015

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

Business Markets

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

2017 Compared to 2016

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

2016 Compared to 2015

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

Operating Expenses

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

Cost of Services

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

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

Selling, General and Administrative Expense

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

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

Depreciation and Amortization Expense

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

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

Segment Operating Income (Loss) and EBITDA

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

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

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

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

Leasing Arrangements

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

Contractual Obligations

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

(dollars in millions)

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.

Report of Management on Internal Control Over Financial Reporting

We, the management of Verizon Communications Inc., are responsible for establishing and maintaining adequate internal control over financial reporting of the company. Management has evaluated internal control over financial reporting of the company using the criteria for effective internal control established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission in 2013.

Management has assessed the effectiveness of the company's internal control over financial reporting as of December 31, 2017. Based on this assessment, we believe that the internal control over financial reporting of the company is effective as of December 31, 2017. In connection with this assessment, there were no material weaknesses in the company's internal control over financial reporting identified by management. The company's financial statements included in this Annual Report have been audited by Ernst & Young LLP, independent registered public accounting firm. Ernst & Young LLP has also provided an attestation report on the company's internal control over financial reporting.



Lowell C. McAdam
Chairman and Chief Executive Officer



Matthew D. Ellis
Executive Vice President and
Chief Financial Officer



Anthony T. Skiadas
Senior Vice President and Controller

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareowners of Verizon Communications Inc.:

Opinion on Internal Control over Financial Reporting

We have audited Verizon Communications Inc. and subsidiaries' (Verizon) internal control over financial reporting as of December 31, 2017, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Verizon maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of Verizon as of December 31, 2017 and 2016, the related consolidated statements of income, comprehensive income, cash flows and changes in equity for each of the three years in the period ended December 31, 2017, and the related notes and our report dated February 23, 2018 expressed an unqualified opinion thereon.

Basis for Opinion

Verizon's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Report of Management on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on Verizon's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to Verizon in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

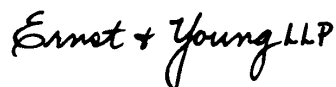
We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

The logo for Ernst & Young LLP, featuring the company name in a stylized, cursive script.

Ernst & Young LLP
New York, New York

February 23, 2018

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareowners of Verizon Communications Inc.:

Opinion on the Financial Statements

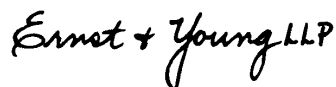
We have audited the accompanying consolidated balance sheets of Verizon Communications Inc. and subsidiaries (Verizon) as of December 31, 2017 and 2016, the related consolidated statements of income, comprehensive income, cash flows and changes in equity for each of the three years in the period ended December 31, 2017, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of Verizon at December 31, 2017 and 2016, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2017, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), Verizon's internal control over financial reporting as of December 31, 2017, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 23, 2018 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of Verizon's management. Our responsibility is to express an opinion on Verizon's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to Verizon in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

The logo for Ernst & Young LLP, featuring the company name in a stylized, cursive script.

Ernst & Young LLP

We have served as Verizon's auditor since 2000.
New York, New York

February 23, 2018

Consolidated Statements of Income

(dollars in millions, except per share amounts)

Years Ended December 31,	2017	2016	2015
Operating Revenues			
Service revenues and other	\$ 107,145	\$ 108,468	\$ 114,696
Wireless equipment revenues	18,889	17,512	16,924
Total Operating Revenues	126,034	125,980	131,620
Operating Expenses			
Cost of services (exclusive of items shown below)	29,409	29,186	29,438
Wireless cost of equipment	22,147	22,238	23,119
Selling, general and administrative expense (including net gain on sale of divested businesses of \$1,774, \$1,007 and \$0, respectively)	30,110	31,569	29,986
Depreciation and amortization expense	16,954	15,928	16,017
Total Operating Expenses	98,620	98,921	98,560
Operating Income	27,414	27,059	33,060
Equity in losses of unconsolidated businesses	(77)	(98)	(86)
Other income (expense), net	(2,010)	(1,599)	186
Interest expense	(4,733)	(4,376)	(4,920)
Income Before Benefit (Provision) For Income Taxes	20,594	20,986	28,240
Benefit (provision) for income taxes	9,956	(7,378)	(9,865)
Net Income	\$ 30,550	\$ 13,608	\$ 18,375
Net income attributable to noncontrolling interests	\$ 449	\$ 481	\$ 496
Net income attributable to Verizon	30,101	13,127	17,879
Net Income	\$ 30,550	\$ 13,608	\$ 18,375
Basic Earnings Per Common Share			
Net income attributable to Verizon	\$ 7.37	\$ 3.22	\$ 4.38
Weighted-average shares outstanding (in millions)	4,084	4,080	4,085
Diluted Earnings Per Common Share			
Net income attributable to Verizon	\$ 7.36	\$ 3.21	\$ 4.37
Weighted-average shares outstanding (in millions)	4,089	4,086	4,093

See Notes to Consolidated Financial Statements

Consolidated Statements of Comprehensive Income

Years Ended December 31,	(dollars in millions)		
	2017	2016	2015
Net Income	\$ 30,550	\$ 13,608	\$ 18,375
Other Comprehensive Income, net of tax expense (benefit)			
Foreign currency translation adjustments	245	(159)	(208)
Unrealized gains (losses) on cash flow hedges, net of tax of \$(20), \$168 and \$(160)	(31)	198	(194)
Unrealized losses on marketable securities, net of tax of \$(10), \$(26) and \$(4)	(14)	(55)	(11)
Defined benefit pension and postretirement plans, net of tax of \$(144), \$1,339 and \$(91)	(214)	2,139	(148)
Other comprehensive income (loss) attributable to Verizon	(14)	2,123	(561)
Total Comprehensive Income	\$ 30,536	\$ 15,731	\$ 17,814
Comprehensive income attributable to noncontrolling interests	449	481	496
Comprehensive income attributable to Verizon	30,087	15,250	17,318
Total Comprehensive Income	\$ 30,536	\$ 15,731	\$ 17,814

See Notes to Consolidated Financial Statements

Consolidated Balance Sheets

(dollars in millions, except per share amounts)

At December 31,

	2017	2016
Assets		
Current assets		
Cash and cash equivalents	\$ 2,079	\$ 2,880
Accounts receivable, net of allowances of \$939 and \$845	23,493	17,513
Inventories	1,034	1,202
Assets held for sale	–	882
Prepaid expenses and other	3,307	3,918
Total current assets	29,913	26,395
Property, plant and equipment	246,498	232,215
Less accumulated depreciation	157,930	147,464
Property, plant and equipment, net	88,568	84,751
Investments in unconsolidated businesses	1,039	1,110
Wireless licenses	88,417	86,673
Goodwill	29,172	27,205
Other intangible assets, net	10,247	8,897
Non-current assets held for sale	–	613
Other assets	9,787	8,536
Total assets	\$ 257,143	\$ 244,180
Liabilities and Equity		
Current liabilities		
Debt maturing within one year	\$ 3,453	\$ 2,645
Accounts payable and accrued liabilities	21,232	19,593
Other	8,352	8,102
Total current liabilities	33,037	30,340
Long-term debt	113,642	105,433
Employee benefit obligations	22,112	26,166
Deferred income taxes	31,232	45,964
Other liabilities	12,433	12,245
Total long-term liabilities	179,419	189,808
Commitments and Contingencies (Note 15)		
Equity		
Series preferred stock (\$.10 par value; 250,000,000 shares authorized; none issued)	–	–
Common stock (\$.10 par value; 6,250,000,000 shares authorized in each period; 4,242,374,240 shares issued in each period)	424	424
Additional paid in capital	11,101	11,182
Retained earnings	35,635	15,059
Accumulated other comprehensive income	2,659	2,673
Common stock in treasury, at cost (162,897,868 and 165,689,589 shares outstanding)	(7,139)	(7,263)
Deferred compensation – employee stock ownership plans and other	416	449
Noncontrolling interests	1,591	1,508
Total equity	44,687	24,032
Total liabilities and equity	\$ 257,143	\$ 244,180

See Notes to Consolidated Financial Statements

Consolidated Statements of Cash Flows

Years Ended December 31,	(dollars in millions)		
	2017	2016	2015
Cash Flows from Operating Activities			
Net Income	\$ 30,550	\$ 13,608	\$ 18,375
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization expense	16,954	15,928	16,017
Employee retirement benefits	440	2,705	(1,747)
Deferred income taxes	(14,463)	(1,063)	3,516
Provision for uncollectible accounts	1,167	1,420	1,610
Equity in losses of unconsolidated businesses, net of dividends received	117	138	127
Changes in current assets and liabilities, net of effects from acquisition/disposition of businesses			
Accounts receivable	(5,436)	(5,067)	(945)
Inventories	168	61	(99)
Other assets	656	449	942
Accounts payable and accrued liabilities	(335)	(1,079)	2,545
Discretionary contribution to qualified pension plans	(3,411)	(186)	–
Net gain on sale of divested businesses	(1,774)	(1,007)	–
Other, net	672	(3,097)	(1,314)
Net cash provided by operating activities	25,305	22,810	39,027
Cash Flows from Investing Activities			
Capital expenditures (including capitalized software)	(17,247)	(17,059)	(17,775)
Acquisitions of businesses, net of cash acquired	(5,928)	(3,765)	(3,545)
Acquisitions of wireless licenses	(583)	(534)	(9,942)
Proceeds from dispositions of businesses	3,614	9,882	48
Other, net	772	493	1,171
Net cash used in investing activities	(19,372)	(10,983)	(30,043)
Cash Flows from Financing Activities			
Proceeds from long-term borrowings	27,707	12,964	6,667
Proceeds from asset-backed long-term borrowings	4,290	4,986	–
Repayments of long-term borrowings and capital lease obligations	(23,837)	(19,159)	(9,340)
Repayments of asset-backed long-term borrowings	(400)	–	–
Decrease in short-term obligations, excluding current maturities	(170)	(149)	(344)
Dividends paid	(9,472)	(9,262)	(8,538)
Purchase of common stock for treasury	–	–	(5,134)
Other, net	(4,852)	(2,797)	1,577
Net cash used in financing activities	(6,734)	(13,417)	(15,112)
Decrease in cash and cash equivalents	(801)	(1,590)	(6,128)
Cash and cash equivalents, beginning of period	2,880	4,470	10,598
Cash and cash equivalents, end of period	\$ 2,079	\$ 2,880	\$ 4,470

See Notes to Consolidated Financial Statements

Consolidated Statements of Changes in Equity

(dollars in millions, except per share amounts, and shares in thousands)

Years Ended December 31,	2017		2016		2015	
	Shares	Amount	Shares	Amount	Shares	Amount
Common Stock						
Balance at beginning of year	4,242,374	\$ 424	4,242,374	\$ 424	4,242,374	\$ 424
Balance at end of year	4,242,374	424	4,242,374	424	4,242,374	424
Additional Paid In Capital						
Balance at beginning of year		11,182		11,196		11,155
Other		(81)		(14)		41
Balance at end of year		11,101		11,182		11,196
Retained Earnings						
Balance at beginning of year		15,059		11,246		2,447
Net income attributable to Verizon		30,101		13,127		17,879
Dividends declared (\$2.335, \$2.285, \$2.23) per share		(9,525)		(9,314)		(9,080)
Balance at end of year		35,635		15,059		11,246
Accumulated Other Comprehensive Income						
Balance at beginning of year attributable to Verizon		2,673		550		1,111
Foreign currency translation adjustments		245		(159)		(208)
Unrealized gains (losses) on cash flow hedges		(31)		198		(194)
Unrealized losses on marketable securities		(14)		(55)		(11)
Defined benefit pension and postretirement plans		(214)		2,139		(148)
Other comprehensive income (loss)		(14)		2,123		(561)
Balance at end of year attributable to Verizon		2,659		2,673		550
Treasury Stock						
Balance at beginning of year	(165,690)	(7,263)	(169,199)	(7,416)	(87,410)	(3,263)
Shares purchased	—	—	—	—	(104,402)	(5,134)
Employee plans (Note 14)	2,787	124	3,439	150	17,072	740
Shareowner plans (Note 14)	5	—	70	3	5,541	241
Balance at end of year	(162,898)	(7,139)	(165,690)	(7,263)	(169,199)	(7,416)
Deferred Compensation-ESOPs and Other						
Balance at beginning of year		449		428		424
Restricted stock equity grant		157		223		208
Amortization		(190)		(202)		(204)
Balance at end of year		416		449		428
Noncontrolling Interests						
Balance at beginning of year		1,508		1,414		1,378
Net income attributable to noncontrolling interests		449		481		496
Total comprehensive income		449		481		496
Distributions and other		(366)		(387)		(460)
Balance at end of year		1,591		1,508		1,414
Total Equity		\$ 44,687		\$ 24,032		\$ 17,842

See Notes to Consolidated Financial Statements

Notes to Consolidated Financial Statements

Note 1

Description of Business and Summary of Significant Accounting Policies

Description of Business

Verizon Communications Inc. (Verizon or the Company) is a holding company that, acting through its subsidiaries, is one of the world's leading providers of communications, information and entertainment products and services to consumers, businesses and governmental agencies with a presence around the world. We have two reportable segments, Wireless and Wireline. For additional information concerning our business segments, see Note 12.

The Wireless segment provides wireless communications products and services, including wireless voice and data services and equipment sales, across the United States (U.S.) using one of the most extensive and reliable wireless networks. We provide these services and equipment sales to consumer, business and government customers across the U.S. on a postpaid and prepaid basis.

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

Consolidation

The method of accounting applied to investments, whether consolidated, equity or cost, involves an evaluation of all significant terms of the investments that explicitly grant or suggest evidence of control or influence over the operations of the investee. The consolidated financial statements include our controlled subsidiaries, as well as variable interest entities (VIE) where we are deemed to be the primary beneficiary. For controlled subsidiaries that are not wholly-owned, the noncontrolling interests are included in Net income and Total equity. Investments in businesses that we do not control, but have the ability to exercise significant influence over operating and financial policies, are accounted for using the equity method. Investments in which we do not have the ability to exercise significant influence over operating and financial policies are accounted for under the cost method. Equity and cost method investments are included in Investments in unconsolidated businesses in our consolidated balance sheets. All significant intercompany accounts and transactions have been eliminated.

Basis of Presentation

We have reclassified certain prior year amounts to conform to the current year presentation.

Use of Estimates

We prepare our financial statements using U.S. generally accepted accounting principles (GAAP), which requires management to make estimates and assumptions that affect reported amounts and disclosures. Actual results could differ from those estimates.

Examples of significant estimates include the allowance for doubtful accounts, the recoverability of property, plant and equipment, the recoverability of intangible assets and other long-lived assets, fair values of financial instruments, unrecognized tax benefits, valuation allowances on tax assets, accrued expenses, pension and postretirement benefit obligations, contingencies and the identification and valuation of assets acquired and liabilities assumed in connection with business combinations.

Revenue Recognition

Multiple Deliverable Arrangements

We offer products and services to our wireless and wireline customers through bundled arrangements. These arrangements involve multiple deliverables, which may include products, services or a combination of products and services.

Wireless

Our Wireless segment earns revenue primarily by providing access to and usage of its network, as well as the sale of equipment. In general, access revenue is billed one month in advance and recognized when earned. Usage revenue is generally billed in arrears and recognized when service is rendered. Equipment sales revenue associated with the sale of wireless devices and accessories is generally recognized when the products are delivered to and accepted by the customer, as this is considered to be a separate earnings process from providing wireless services. For agreements involving the resale of third-party services in which we are considered the primary obligor in the arrangements, we record the revenue gross at the time of the sale.

Under the Verizon device payment program, our eligible wireless customers purchase wireless devices under a device payment plan agreement. We may offer certain promotions that allow a customer to trade in his or her owned device in connection with the purchase of a new device.

Under these types of promotions, the customer receives a credit for the value of the trade-in device. In addition, we may provide the customer with additional future credits that will be applied against the customer's monthly bill as long as service is maintained. We recognize a liability for the trade-in device measured at fair value, which is approximated by considering several factors, including the weighted-average selling prices obtained in recent resales of devices eligible for trade-in. Future credits are recognized when earned by the customer.

From time to time, we offer certain marketing promotions that allow our customers to upgrade to a new device after paying down a certain specified portion of their required device payment plan agreement amount and trading in their device in good working order. When a customer enters into a device payment plan agreement with the right to upgrade to a new device, we account for this trade-in right as a guarantee obligation. The full amount of the trade-in right's fair value (not an allocated value) is recognized as a guarantee liability and the remaining allocable consideration is allocated to the device. The value of the guarantee liability effectively results in a reduction to the revenue recognized for the sale of the device.

In multiple element arrangements that bundle devices and monthly wireless service, revenue is allocated to each unit of accounting using a relative selling price method. At the inception of the arrangement, the amount allocable to the delivered units of accounting is limited to the amount that is not contingent upon the delivery of the monthly wireless service (the noncontingent amount). We effectively recognize revenue on the delivered device at the lesser of the amount allocated based on the relative selling price of the device or the noncontingent amount owed when the device is sold.

Wireline

Our Wireline segment earns revenue based upon usage of its network and facilities and contract fees. In general, fixed monthly fees for voice, video, data and certain other services are billed one month in advance and recognized when earned. Revenue from services that are not fixed in amount and are based on usage is generally billed in arrears and recognized when service is rendered.

We sell each of the services we offer on a bundled basis (i.e., voice, video and data) and separately. Therefore, each of our products and services has a standalone selling price. Revenue from the sale of each product or service is allocated to each deliverable using a relative selling price method. Under this method, arrangement consideration is allocated to each separate deliverable based on our standalone selling price for each product or service. These services include Fios services, individually or in bundles, and high-speed Internet.

When we bundle equipment with maintenance and monitoring services, we recognize equipment revenue when the equipment is installed in accordance with contractual specifications and ready for the customer's use. The maintenance and monitoring services are recognized monthly over the term of the contract as we provide the services.

Installation-related fees, along with the associated costs up to but not exceeding these fees, are deferred and amortized over the estimated customer relationship period.

Other

Advertising revenues are generated through display advertising and search advertising. Display advertising revenue is generated by the display of graphical advertisements and other performance-based advertising. Search advertising revenue is generated when a consumer clicks on a text-based advertisement on their screen. Agreements for advertising typically take the forms of impression-based contracts, time-based contracts or performance-based contracts. Advertising revenues derived from impression-based contracts under which we provide impressions in exchange for a fixed fee, are generally recognized as the impressions are delivered. Advertising revenues derived from time-based contracts under which we provide promotions over a specified time period for a fixed fee, are recognized on a straight-line basis over the term of the contract, provided that we meet and continue to meet our obligations under the contract. Advertising revenues derived from contracts under which we are compensated based on certain performance criteria are recognized as we complete the contractually specified performance.

We are considered the principal in our programmatic advertising contracts as we are the primary obligor. We present all revenues from these contracts on a gross basis.

We report taxes imposed by governmental authorities on revenue-producing transactions between us and our customers, net of taxes we pass through to our customers.

Maintenance and Repairs

We charge the cost of maintenance and repairs, including the cost of replacing minor items not constituting substantial betterments, principally to Cost of services as these costs are incurred.

Advertising Costs

Costs for advertising products and services, as well as other promotional and sponsorship costs, are charged to Selling, general and administrative expense in the periods in which they are incurred. See Note 14 for additional information.

Earnings Per Common Share

Basic earnings per common share are based on the weighted-average number of shares outstanding during the period. Where appropriate, diluted earnings per common share include the dilutive effect of shares issuable under our stock-based compensation plans.

There were a total of approximately 5 million, 6 million and 8 million outstanding dilutive securities, primarily consisting of restricted stock units, included in the computation of diluted earnings per common share for the years ended December 31, 2017, 2016 and 2015, respectively.

Cash and Cash Equivalents

We consider all highly liquid investments with a maturity of 90 days or less when purchased to be cash equivalents. Cash equivalents are stated at cost, which approximates quoted market value and includes amounts held in money market funds.

Marketable Securities

We have investments in marketable securities, which are considered “available-for-sale” under the provisions of the accounting standard for certain debt and equity securities and are included in the accompanying consolidated balance sheets in Other assets. We continually evaluate our investments in marketable securities for impairment due to declines in market value considered to be other-than-temporary. That evaluation includes, in addition to persistent, declining stock prices, general economic and company-specific evaluations. In the event of a determination that a decline in market value is other-than-temporary, a charge to earnings is recorded for the loss and a new cost basis in the investment is established.

Allowance for Doubtful Accounts

Accounts receivable are recorded in the consolidated financial statements at cost net of an allowance for credit losses, with the exception of device payment plan agreement receivables, which are initially recorded at fair value based on a number of factors including historical write-off experience, credit quality of the customer base and other factors such as macroeconomic conditions. We maintain allowances for uncollectible accounts receivable, including our device payment plan agreement receivables, for estimated losses resulting from the failure or inability of our customers to make required payments. Our allowance for uncollectible accounts receivable is based on management’s assessment of the collectability of specific customer accounts and includes consideration of the credit worthiness and financial condition of those customers. We record an allowance to reduce the receivables to the amount that is reasonably believed to be collectible. We also record an allowance for all other receivables based on multiple factors, including historical experience with bad debts, the general economic environment and the aging of such receivables. Due to the device payment plan agreement being incorporated in the standard Verizon Wireless bill, the collection and risk strategies continue to follow historical practices. We monitor the aging of our accounts with device payment plan agreement receivables and write-off account balances if collection efforts are unsuccessful and future collection is unlikely.

Inventories

Inventory consists of wireless and wireline equipment held for sale, which is carried at the lower of cost (determined principally on either an average cost or first-in, first-out basis) or market.

Plant and Depreciation

We record property, plant and equipment at cost. Property, plant and equipment are generally depreciated on a straight-line basis.

Leasehold improvements are amortized over the shorter of the estimated life of the improvement or the remaining term of the related lease, calculated from the time the asset was placed in service.

When depreciable assets are retired or otherwise disposed of, the related cost and accumulated depreciation are deducted from the plant accounts and any gains or losses on disposition are recognized in income.

We capitalize and depreciate network software purchased or developed along with related plant assets. We also capitalize interest associated with the acquisition or construction of network-related assets. Capitalized interest is reported as a reduction in interest expense and depreciated as part of the cost of the network-related assets.

In connection with our ongoing review of the estimated useful lives of property, plant and equipment during 2016, we determined that the average useful lives of certain leasehold improvements would be increased from 5 to 7 years. This change resulted in a decrease to depreciation expense of \$0.2 billion in 2016. We determined that changes were also necessary to the remaining estimated useful lives of certain assets as a result of technology upgrades, enhancements and planned retirements. These changes resulted in an increase in depreciation expense of \$0.3 billion, \$0.3 billion and \$0.4 billion in 2017, 2016 and 2015, respectively. While the timing and extent of current deployment plans are subject to ongoing analysis and modification, we believe that the current estimates of useful lives are reasonable.

Computer Software Costs

We capitalize the cost of internal-use network and non-network software that has a useful life in excess of one year. Subsequent additions, modifications or upgrades to internal-use network and non-network software are capitalized only to the extent that they allow the software to perform a task it previously did not perform. Planning, software maintenance and training costs are expensed in the period in which they are incurred. Also, we capitalize interest associated with the development of internal-use network and non-network software. Capitalized non-network internal-use software costs are amortized using the straight-line method over a period of 3 to 7 years and are included in Other intangible assets, net in our consolidated balance sheets. For a discussion of our impairment policy for capitalized software costs, see “Goodwill and Other Intangible Assets” below. Also, see Note 3 for additional information of internal-use non-network software reflected in our consolidated balance sheets.

Goodwill and Other Intangible Assets

Goodwill

Goodwill is the excess of the acquisition cost of businesses over the fair value of the identifiable net assets acquired. Impairment testing for goodwill is performed annually in the fourth fiscal quarter or more frequently if impairment indicators are present. To determine if goodwill is potentially impaired, we have the option to perform a qualitative assessment. However, we may elect to bypass the qualitative assessment and perform an impairment test even if no indications of a potential impairment exist. The impairment test for goodwill is performed at the reporting unit level and compares the fair value of the reporting unit (calculated using a combination of a market approach and a discounted cash flow method) to its carrying value. The market approach includes the use of comparative multiples to corroborate discounted cash flow results. The discounted cash flow method is based on the present value of two components, a projected cash flows and a terminal value. The terminal value represents the expected normalized future cash flows of the reporting unit beyond the cash flows from the discrete projection period. The fair value of the reporting unit is calculated based on the sum of the present value of the cash flows from the discrete period and the present value of the terminal value. The discount rate represented our estimate of the weighted-average cost of capital, or expected return, that a marketplace participant would have required as of the valuation date. If the carrying value exceeds the fair value, an impairment charge is booked for the excess carrying value over fair value, limited to the total amount of goodwill of that reporting unit. Our assessments in 2017, 2016 and 2015 indicated that the fair value of each of our Wireless, Wireline, Media and Telematics reporting units exceeded their carrying value and therefore did not result in an impairment.

Intangible Assets Not Subject to Amortization

A significant portion of our intangible assets are wireless licenses that provide our wireless operations with the exclusive right to utilize designated radio frequency spectrum to provide wireless communication services. While licenses are issued for only a fixed time, generally ten years, such licenses are subject to renewal by the Federal Communications Commission (FCC). License renewals have occurred routinely and at nominal cost. Moreover, we have determined that there are currently no legal, regulatory, contractual, competitive, economic or other factors that limit the useful life of our wireless licenses. As a result, we treat the wireless licenses as an indefinite-lived intangible asset. We re-evaluate the useful life determination for wireless licenses each year to determine whether events and circumstances continue to support an indefinite useful life. We aggregate our wireless licenses into one single unit of accounting, as we utilize our wireless licenses on an integrated basis as part of our nationwide wireless network.

We test our wireless licenses for potential impairment annually or more frequently if impairment indicators are present. We have the option to first perform a qualitative assessment to determine whether it is necessary to perform a quantitative impairment test. However, we may elect to bypass the qualitative assessment in any period and proceed directly to performing the quantitative impairment test. In 2017 and 2016, we performed a qualitative assessment to determine whether it is more likely than not that the fair value of our wireless licenses was less than the carrying amount. As part of our assessment, we considered several qualitative factors including the business enterprise value of our Wireless segment, macroeconomic conditions (including changes in interest rates and discount rates), industry and market considerations (including industry revenue and EBITDA (Earnings before interest, taxes, depreciation and amortization)), margin projections, the projected financial performance of our Wireless segment, as well as other factors. The most recent quantitative assessments of our wireless licenses occurred in 2015. Our quantitative assessment consisted of comparing the estimated fair value of our aggregate wireless licenses to the aggregated carrying amount as of the test date. Using a quantitative assessment, we estimated the fair value of our aggregate wireless licenses using the Greenfield approach. The Greenfield approach is an income based valuation approach that values the wireless licenses by calculating the cash flow generating potential of a hypothetical start-up company that goes into business with no assets except the wireless licenses to be valued. A discounted cash flow analysis is used to estimate what a marketplace participant would be willing to pay to purchase the aggregated wireless licenses as of the valuation date. If the estimated fair value of the aggregated wireless licenses is less than the aggregated carrying amount of the wireless licenses, then an impairment charge is recognized. Our assessments in 2017, 2016 and 2015 indicated that the fair value of our wireless licenses exceeded the carrying value and, therefore, did not result in an impairment.

Interest expense incurred while qualifying activities are performed to ready wireless licenses for their intended use is capitalized as part of wireless licenses. The capitalization period ends when the development is discontinued or substantially completed and the license is ready for its intended use.

Intangible Assets Subject to Amortization and Long-Lived Assets

Our intangible assets that do not have indefinite lives (primarily customer lists and non-network internal-use software) are amortized over their estimated useful lives. All of our intangible assets subject to amortization, and long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable. If any indications of impairment are present, we would test for recoverability by comparing the carrying amount of the asset group to the net undiscounted cash flows expected to be generated from the asset group. If those net undiscounted cash flows do not exceed the carrying amount, we would perform the next step, which is to determine the fair value of the asset and record an impairment, if any. We re-evaluate the useful life determinations for these intangible assets each year to determine whether events and circumstances warrant a revision to their remaining useful lives.

For information related to the carrying amount of goodwill, wireless licenses and other intangible assets, as well as the major components and average useful lives of our other acquired intangible assets, see Note 3.

Fair Value Measurements

Fair value of financial and non-financial assets and liabilities is defined as an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. The three-tier hierarchy for inputs used in measuring fair value, which prioritizes the inputs used in the methodologies of measuring fair value for assets and liabilities, is as follows:

- Level 1 – Quoted prices in active markets for identical assets or liabilities
- Level 2 – Observable inputs other than quoted prices in active markets for identical assets and liabilities
- Level 3 – No observable pricing inputs in the market

Financial assets and financial liabilities are classified in their entirety based on the lowest level of input that is significant to the fair value measurements. Our assessment of the significance of a particular input to the fair value measurements requires judgment and may affect the valuation of the assets and liabilities being measured and their categorization within the fair value hierarchy.

Income Taxes

Our effective tax rate is based on pre-tax income, statutory tax rates, tax laws and regulations and tax planning strategies available to us in the various jurisdictions in which we operate.

Deferred income taxes are provided for temporary differences in the basis between financial statement and income tax assets and liabilities. Deferred income taxes are recalculated annually at tax rates in effect. We record valuation allowances to reduce our deferred tax assets to the amount that is more likely than not to be realized.

We use a two-step approach for recognizing and measuring tax benefits taken or expected to be taken in a tax return. The first step is recognition: we determine whether it is more likely than not that a tax position will be sustained upon examination, including resolution of any related appeals or litigation processes, based on the technical merits of the position. In evaluating whether a tax position has met the more-likely-than-not recognition threshold, we presume that the position will be examined by the appropriate taxing authority that has full knowledge of all relevant information. The second step is measurement: a tax position that meets the more-likely-than-not recognition threshold is measured to determine the amount of benefit to recognize in the financial statements. The tax position is measured at the largest amount of benefit that is greater than 50 percent likely of being realized upon ultimate settlement. Differences between tax positions taken in a tax return and amounts recognized in the financial statements will generally result in one or more of the following: an increase in a liability for income taxes payable, a reduction of an income tax refund receivable, a reduction in a deferred tax asset or an increase in a deferred tax liability.

Significant management judgment is required in evaluating our tax positions and in determining our effective tax rate.

We recorded provisional amounts in the consolidated financial statements for the income tax effects of the Tax Cuts and Jobs Act (TCJA) based upon currently available information.

Stock-Based Compensation

We measure and recognize compensation expense for all stock-based compensation awards made to employees and directors based on estimated fair values. See Note 9 for additional information.

Foreign Currency Translation

The functional currency of our foreign operations is generally the local currency. For these foreign entities, we translate income statement amounts at average exchange rates for the period, and we translate assets and liabilities at end-of-period exchange rates. We record these translation adjustments in Accumulated other comprehensive income, a separate component of Equity, in our consolidated balance sheets. We report exchange gains and losses on intercompany foreign currency transactions of a long-term nature in Accumulated other comprehensive income. Other exchange gains and losses are reported in income.

Employee Benefit Plans

Pension and postretirement health care and life insurance benefits earned during the year, as well as interest on projected benefit obligations, are accrued currently. Prior service costs and credits resulting from changes in plan benefits are generally amortized over the average remaining service period of the employees expected to receive benefits. Expected return on plan assets is determined by applying the return on assets assumption to the actual fair value of plan assets. Actuarial gains and losses are recognized in operating results in the year in which they occur. These gains and losses are measured annually as of December 31 or upon a remeasurement event. Verizon management employees no longer earn pension benefits or earn service towards the company retiree medical subsidy. See Note 10 for additional information.

We recognize a pension or a postretirement plan's funded status as either an asset or liability on the consolidated balance sheets. Also, we measure any unrecognized prior service costs and credits that arise during the period as a component of Accumulated other comprehensive income, net of applicable income tax.

Derivative Instruments

We enter into derivative transactions primarily to manage our exposure to fluctuations in foreign currency exchange rates and interest rates. We employ risk management strategies, which may include the use of a variety of derivatives including cross currency swaps, forward interest rate swaps, interest rate swaps and interest rate caps. We do not hold derivatives for trading purposes. See Note 8 for additional information.

We measure all derivatives at fair value and recognize them as either assets or liabilities on our consolidated balance sheets. Our derivative instruments are valued primarily using models based on readily observable market parameters for all substantial terms of our derivative contracts and thus are classified as Level 2. Changes in the fair values of derivative instruments not qualifying for hedge accounting are recognized in earnings in the current period. For fair value hedges, the change in the fair value of the derivative instruments is recognized in earnings, along with the change in the fair value of the hedged item. For cash flow hedges, the change in the fair value of the derivative instruments, along with the change in the fair value of the hedged item, are reported in Other comprehensive income (loss) and recognized in earnings when the hedged item is recognized in earnings. For net investment hedges of certain of our foreign operations, the change in the fair value of the derivative instruments is reported in Other comprehensive income (loss) as part of the cumulative translation adjustment and partially offset the impact of foreign currency changes on the value of our net investment.

Variable Interest Entities

VIEs are entities that lack sufficient equity to permit the entity to finance its activities without additional subordinated financial support from other parties, have equity investors that do not have the ability to make significant decisions relating to the entity's operations through voting rights, do not have the obligation to absorb the expected losses, or do not have the right to receive the residual returns of the entity. We consolidate the assets and liabilities of VIEs when we are deemed to be the primary beneficiary. The primary beneficiary is the party that has the power to make the decisions that most significantly affect the economic performance of the VIE and has the obligation to absorb losses or the right to receive benefits that could potentially be significant to the VIE.

Recently Adopted Accounting Standards

During the first quarter of 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2016-09, "Compensation – Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting." This standard update intends to simplify several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. This standard update was effective as of the first quarter of 2017. The adoption of this standard update did not have a significant impact on our consolidated financial statements.

During the first quarter of 2017, the FASB issued ASU 2017-04, "Intangibles – Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment." The amendments in this update eliminate the requirement to perform step two of the goodwill impairment test, which requires a hypothetical purchase price allocation when an impairment is determined to have occurred. A goodwill impairment will now be the amount by which a reporting unit's carrying value exceeds its fair value, not to exceed the carrying amount of goodwill. This standard update is effective as of the first quarter of 2020; however, early adoption is permitted for any interim or annual impairment tests performed after January 1, 2017. Verizon early adopted this standard on January 1, 2017. The adoption of this standard update did not have a significant impact on our consolidated financial statements.

During the first quarter of 2017, the FASB issued ASU 2017-01, “Business Combinations (Topic 805): Clarifying the Definition of a Business.” The amendments in this update provide a framework – the “screen” – in which to evaluate whether a set of transferred assets and activities is a business. The screen requires that such set is not a business when substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or a group of similar identifiable assets. The standard also aligns the definition of outputs with how outputs are described in Accounting Standards Codification (ASC) 606, Revenue from Contracts with Customers. This standard is effective as of the first quarter of 2018; however, early adoption is permitted. Verizon early adopted this standard, on a prospective basis, in the fourth quarter of 2017. The adoption of this standard update did not have a significant impact on our consolidated financial statements.

During the third quarter of 2017, the FASB issued ASU 2017-12, “Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities.” The amendments in this update simplify the application of hedge accounting and increase the transparency of hedge results. The updated standard also amends the presentation and disclosure requirements and changes how companies can assess the effectiveness of their hedging relationships. Companies will now have until the end of the first quarter in which a hedge is entered into to perform an initial assessment of a hedge’s effectiveness. After initial qualification, the new guidance permits a qualitative effectiveness assessment for certain hedges instead of a quantitative test if the company can reasonably support an expectation of high effectiveness throughout the term of the hedge. An initial quantitative test to establish that the hedge relationship is highly effective is still required. For cash flow hedges, if the hedge is highly effective, all changes in the fair value of the derivative hedging instrument will be recorded in Other comprehensive income (loss). These changes in fair value will be reclassified to earnings when the hedged item impacts earnings. The standard update is effective as of the first quarter of 2019; however, early adoption is permitted within an interim period. Verizon early adopted this standard in the fourth quarter of 2017. The adoption of this standard update did not have a significant impact on our consolidated financial statements.

Recently Issued Accounting Standards

In February 2018, the FASB issued ASU 2018-02, “Income Statement – Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income.” This standard update allows entities, as an accounting policy election, the option to reclassify from accumulated other comprehensive income to retained earnings stranded tax effects resulting from the newly enacted federal corporate income tax rate in TCJA. It also allows entities to elect to reclassify other stranded tax effects that relate to TCJA but do not directly relate to the change in the federal rate such as state taxes. The tax effects that are stranded in accumulated other comprehensive income for other reasons such as a change in valuation allowance may not be reclassified. This standard update is effective as of the first quarter of 2019; however, early adoption is permitted. The standard update can be applied on a retrospective basis to each period in which the effect of the change in the federal income tax rate in TCJA the Act is recognized or applied it in the reporting period of adoption. We are currently evaluating the impact that this standard update will have on our consolidated financial statements.

In March 2017, the FASB issued ASU 2017-07, “Compensation – Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost.” The amendments in this update require an employer to report the service cost component in the same line item or items as other compensation costs arising from services rendered by the pertinent employees during the period. The other components of net benefit cost, including the recognition of prior service credits, will be presented in the income statement separately from the service cost component and outside a subtotal of income from operations. The amendments in this update also allow only the service cost component of pension and other postretirement benefit costs to be eligible for capitalization when applicable. The amendments in this update would be applied retrospectively for the presentation of the service cost component and other components of net periodic benefit cost in the income statement and prospectively, on and after the effective date, for the capitalization of the service cost component of net periodic benefit cost in assets. Disclosures of the nature of and reason for the change in accounting principle would be required in the first interim and annual reporting periods of adoption. This standard update is effective as of the first quarter of 2018; however, early adoption is permitted as of the beginning of an annual period for which financial statements have not been issued. We will adopt this standard in the first quarter of 2018. The impact of the retrospective adoption of this standard update will be an increase to consolidated operating income of approximately \$2.2 billion for the year ended December 31, 2016. There will be an insignificant impact to consolidated operating income for the year ended December 31, 2017 and no impact to consolidated net income for the years ended December 31, 2017 and 2016.

In February 2017, the FASB issued ASU 2017-05, "Other Income – Gains and Losses From the Derecognition of Nonfinancial Assets (Subtopic 610-20): Clarifying the Scope of Asset Derecognition Guidance and Accounting for Partial Sales of Nonfinancial Assets." The new guidance defines an "in substance nonfinancial asset" as an asset or group of assets for which substantially all of the fair value consists of nonfinancial assets and the group or subsidiary is not a business. The standard requires entities to derecognize nonfinancial assets or in substance nonfinancial assets when the entity no longer has (or ceases to have) a controlling financial interest in the legal entity that holds the asset and the entity transfers control of the asset. The standard update also unifies guidance related to partial sales of nonfinancial assets to be more consistent with the sale of a business. This standard update is effective as of the first quarter of 2018; however, early adoption is permitted. We do not expect that this standard update will have a significant impact on our consolidated financial statements.

In November 2016, the FASB issued ASU 2016-18, "Statement of Cash Flows (Topic 230): Restricted Cash." The amendments in this update require that cash and cash equivalent balances in a statement of cash flows include those amounts deemed to be restricted cash and restricted cash equivalents. This standard update is effective as of the first quarter of 2018; however, early adoption is permitted. We do not expect the adoption of this standard will have a significant impact on our consolidated financial statements.

In August 2016, the FASB issued ASU 2016-15, "Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments." This standard update addresses eight specific cash flow issues with the objective of reducing the existing diversity in practice for these issues. Among the updates, this standard update requires cash receipts from payments on a transferor's beneficial interests in securitized trade receivables to be classified as cash inflows from investing activities. This standard update is effective as of the first quarter of 2018; however, early adoption is permitted. We expect the amendment relating to beneficial interests in securitization transactions will have an impact on our presentation of collections of the deferred purchase price from sales of wireless device payment plan agreement receivables in our consolidated statements of cash flows. Upon adoption of this standard update in the first quarter of 2018, we expect to retrospectively reclassify approximately \$0.6 billion of collections of deferred purchase price related to collections from customers from Cash flows from operating activities to Cash flows from investing activities in our consolidated statement of cash flows for the year ended December 31, 2017 and \$1.1 billion for the year ended December 31, 2016.

In June 2016, the FASB issued ASU 2016-13, "Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments." This standard update requires that certain financial assets be measured at amortized cost net of an allowance for estimated credit losses such that the net receivable represents the present value of expected cash collection. In addition, this standard update requires that certain financial assets be measured at amortized cost reflecting an allowance for estimated credit losses expected to occur over the life of the assets. The estimate of credit losses must be based on all relevant information including historical information, current conditions and reasonable and supportable forecasts that affect the collectability of the amounts. This standard update is effective as of the first quarter of 2020; however, early adoption is permitted. We intend to adopt this standard update in the first quarter of 2020. We are currently evaluating the impact that this standard update will have on our consolidated financial statements upon adoption.

In February 2016, the FASB issued ASU 2016-02, "Leases (Topic 842)." This standard update intends to increase transparency and improve comparability by requiring entities to recognize assets and liabilities on the balance sheet for all leases, with certain exceptions. In addition, through improved disclosure requirements, the standard update will enable users of financial statements to further understand the amount, timing, and uncertainty of cash flows arising from leases. This standard update is effective as of the first quarter of 2019; however, early adoption is permitted. Verizon's current operating lease portfolio is primarily comprised of network, real estate, and equipment leases. Upon adoption of this standard, we expect our balance sheet to include a right-of-use asset and liability related to substantially all operating lease arrangements. We have established a cross-functional coordinated implementation team to implement the standard update related to leases. We are in the process of determining the scope of arrangements that will be subject to this standard as well as assessing the impact to our systems, processes and internal controls to meet the standard update's reporting and disclosure requirements.

In May 2014, the FASB issued ASU 2014-09, "Revenue from Contracts with Customers (Topic 606)." This standard, along with subsequently issued updates, clarifies the principles for recognizing revenue and develops a common revenue standard for U.S. generally accepted accounting principles (GAAP). The standard provides a more robust framework for addressing revenue issues; improves comparability of revenue recognition practices across entities, industries, jurisdictions, and capital markets; and provides more useful information to users of financial statements through improved disclosure requirements. The standard also amends current guidance for the recognition of costs to obtain and fulfill contracts with customers such that incremental costs of obtaining and direct costs of fulfilling contracts with customers will be deferred and amortized consistent with the transfer of the related good or service. The two permitted transition methods under the new standard are the full retrospective method, in which case the standard would be applied to each prior reporting period presented and the cumulative effect of applying the standard would be recognized at the earliest period shown, or the modified retrospective method, in which case the standard is applied only to the most current period presented and the cumulative effect of applying the standard would be recognized at the date of initial application. In August 2015, an accounting standard update was issued that delayed the effective date of this standard until the first quarter of 2018, at which time we will adopt the standard using the modified retrospective approach applied to open contracts. We have a cross-functional coordinated team working on the implementation of this standard. Summarized below are the key impacts and areas requiring significant judgment arising from the initial adoption of Topic 606.

The ultimate impact on revenue resulting from the application of the new standard is subject to assessments that are dependent on many variables, including, but not limited to, the terms of our contractual arrangements and mix of business. The allocation of revenue between equipment and service for our wireless subsidy contracts will result in more revenue allocated to equipment and recognized upon delivery, and less service revenue recognized over the contract term than under current GAAP. Total revenue over the full contract term will be unchanged and there will be no change to customer billing, the timing of cash flows or the presentation of cash flows.

Additionally, the new standard requires the deferral of incremental costs to obtain a customer contract, which are then amortized to expense, as part of Selling, general and administrative expense, over the respective periods of expected benefit. As a result, a significant amount of our sales commission costs, which would have historically been expensed as incurred by our Wireless and Wireline businesses under our previous accounting, will be deferred and amortized.

Based on currently available information, we expect the cumulative effect of initially applying the new standard to result in an increase to the opening balance of retained earnings ranging from approximately \$4.0 billion to \$4.6 billion on a pre-tax basis.

We also evaluated the impact of Topic 606 as it relates to gross versus net revenue presentation for our programmatic advertising services and the treatment of financing component inherent in our Wireless direct channel contracts. We concluded that we are the principal in our programmatic advertising contracts with our customers and, therefore, we will continue to present all revenues from these contracts on a gross basis. With respect to our direct channel wireless contracts, we have concluded that our contracts currently do not contain a significant financing component for our classes of customers. These conclusions will be reassessed periodically based on current facts and circumstances.

We have identified and implemented changes to our systems, processes and internal controls to meet the standard's reporting and disclosure requirements.

Note 2 Acquisitions and Divestitures

Wireless

Spectrum License Transactions

Since 2015, we have entered into several strategic spectrum transactions including:

- In January 2015, the FCC completed an auction of 65MHz of spectrum, which it identified as the Advanced Wireless Services (AWS)-3 band. Verizon participated in that auction and was the high bidder on 181 spectrum licenses, for which we paid cash of approximately \$10.4 billion. During the fourth quarter of 2014, we made a deposit of \$0.9 billion related to our participation in this auction. During the first quarter of 2015, we submitted an application to the FCC and paid the remaining \$9.5 billion to the FCC to complete payment for these licenses. The cash payment of \$9.5 billion is classified within Acquisitions of wireless licenses on our consolidated statement of cash flows for the year ended December 31, 2015. The FCC granted us these spectrum licenses in April 2015.
- During the fourth quarter of 2015, we completed a license exchange transaction with an affiliate of T-Mobile USA, Inc. (T-Mobile USA) to exchange certain AWS and Personal Communication Services (PCS) spectrum licenses. As a result, we received \$0.4 billion of AWS and PCS spectrum licenses at fair value and recorded a pre-tax gain of approximately \$0.3 billion in Selling, general and administrative expense on our consolidated statement of income for the year ended December 31, 2015.

- During the fourth quarter of 2015, we entered into a license exchange agreement with affiliates of AT&T Inc. (AT&T) to exchange certain AWS and PCS spectrum licenses. This non-cash exchange was completed in March 2016. As a result, we received \$0.4 billion of AWS and PCS spectrum licenses at fair value and recorded a pre-tax gain of \$0.1 billion in Selling, general and administrative expense on our consolidated statement of income for the year ended December 31, 2016.
- During the first quarter of 2016, we entered into a license exchange agreement with affiliates of Sprint Corporation to exchange certain AWS and PCS spectrum licenses. This non-cash exchange was completed in September 2016. As a result, we received \$0.3 billion of AWS and PCS spectrum licenses at fair value and recorded an insignificant gain in Selling, general and administrative expense on our consolidated statement of income for the year ended December 31, 2016.
- During the fourth quarter of 2016, we entered into a license exchange agreement with affiliates of AT&T to exchange certain AWS and PCS spectrum licenses. This non-cash exchange was completed in February 2017. As a result, we received \$1.0 billion of AWS and PCS spectrum licenses at fair value and recorded a pre-tax gain of \$0.1 billion in Selling, general and administrative expense on our consolidated statement of income for the year ended December 31, 2017.
- During the first quarter of 2017, we entered into a license exchange agreement with affiliates of Sprint Corporation to exchange certain PCS spectrum licenses. This non-cash exchange was completed in May 2017. As a result, we received \$0.1 billion of PCS spectrum licenses at fair value and recorded an insignificant gain in Selling, general and administrative expense on our consolidated statement of income for the year ended December 31, 2017.
- During the third quarter of 2017, we entered into a license exchange agreement with affiliates of T-Mobile USA to exchange certain AWS and PCS spectrum licenses. This non-cash exchange was completed in December 2017. As a result, we received \$0.4 billion of AWS and PCS spectrum licenses at fair value and recorded a pre-tax gain of \$0.1 billion in Selling, general and administrative expense on our consolidated statement of income for the year ended December 31, 2017.

Tower Monetization Transaction

In March 2015, we completed a transaction with American Tower Corporation (American Tower) pursuant to which American Tower acquired the exclusive rights to lease and operate approximately 11,300 of our wireless towers for an upfront payment of \$5.0 billion. Under the terms of the leases, American Tower has exclusive rights to lease and operate the towers over an average term of approximately 28 years. As the leases expire, American Tower has fixed-price purchase options to acquire these towers based on their anticipated fair market values at the end of the lease terms. As part of this transaction, we also sold 162 towers for \$0.1 billion. We have subleased capacity on the towers from American Tower for a minimum of 10 years at current market rates, with options to renew. The upfront payment, including the towers sold, which is primarily included within Other liabilities on our consolidated balance sheets, was accounted for as deferred rent and as a financing obligation. The \$2.4 billion accounted for as deferred rent, which is presented within Other, net cash flows provided by operating activities, relates to the portion of the towers for which the right-of-use has passed to the tower operator. The \$2.7 billion accounted for as a financing obligation, which is presented within Other, net cash flows used in financing activities, relates to the portion of the towers that we continue to occupy and use for network operations. See Note 5 for additional information.

Straight Path

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

Other

During 2017, 2016 and 2015, we entered into and completed various other wireless license transactions for an insignificant amount of cash consideration.

Wireline

Access Line Sale

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

The transaction resulted in Frontier acquiring approximately 3.3 million voice connections, 1.6 million Fios Internet subscribers, 1.2 million Fios video subscribers and the related ILEC businesses from Verizon. For the years ended December 31, 2016 and 2015, these businesses generated revenues of approximately \$1.3 billion and \$5.3 billion, respectively, and operating income of \$0.7 billion and \$2.8 billion, respectively, for Verizon. The operating results of these businesses are excluded from our Wireline segment for all periods presented to reflect comparable segment operating results consistent with the information regularly reviewed by our chief operating decision maker.

During April 2016, Verizon used the net cash proceeds received of \$9.9 billion to reduce its consolidated indebtedness. See Note 6 for additional information. The assets and liabilities that were sold were included in Verizon's continuing operations and classified as assets held for sale and liabilities related to assets held for sale on our consolidated balance sheets through the completion of the transaction on April 1, 2016. As a result of the closing of the transaction, we derecognized property, plant and equipment of \$9.0 billion, goodwill of \$1.3 billion, \$0.7 billion of defined benefit pension and other postretirement benefit plan obligations and \$0.6 billion of indebtedness assumed by Frontier.

We recorded a pre-tax gain of approximately \$1.0 billion in Selling, general and administrative expense on our consolidated statement of income for the year ended December 31, 2016. The pre-tax gain included a \$0.5 billion pension and postretirement benefit curtailment gain due to the elimination of the accrual of pension and other postretirement benefits for some or all future services of a significant number of employees covered by three of our defined benefit pension plans and one of our other postretirement benefit plans.

XO Holdings

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

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

The consolidated financial statements include the results of XO's operations from the date the acquisition closed. If the acquisition of XO had been completed as of January 1, 2016, the results of operations of Verizon would not have been significantly different than our previously reported results of operations.

The acquisition of XO was accounted for as a business combination. The consideration was allocated to the assets acquired and liabilities assumed based on their fair values as of the close of the acquisition. We recorded approximately \$1.2 billion of plant, property and equipment, \$0.2 billion of goodwill and \$0.2 billion of other intangible assets. Goodwill is calculated as the difference between the acquisition date fair value of the consideration transferred and the fair value of the net assets acquired. The goodwill recorded as a result of the XO transaction represents future economic benefits we expect to achieve as a result of the acquisition. The goodwill related to this acquisition is included within our Wireline segment. See Note 3 for additional information.

Data Center Sale

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

For the years ended December 31, 2017 and 2016, these sites generated an insignificant amount of revenues and earnings. As a result of the closing of the transaction, we derecognized assets with a carrying value of \$1.4 billion, primarily consisting of goodwill, property, plant and equipment and other intangible assets. The liabilities associated with the sale were insignificant.

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

WideOpenWest, Inc.

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

Other

Acquisition of AOL Inc.

In May 2015, we entered into an Agreement and Plan of Merger (the Merger Agreement) with AOL Inc. (AOL) pursuant to which we commenced a tender offer to acquire all of the outstanding shares of common stock of AOL at a price of \$50.00 per share, net to the seller in cash, without interest and less any applicable withholding taxes.

On June 23, 2015, we completed the tender offer and merger, and AOL became a wholly-owned subsidiary of Verizon. The aggregate cash consideration paid by Verizon at the closing of these transactions was approximately \$3.8 billion. Holders of approximately 6.6 million shares exercised appraisal rights under Delaware law. If they had not exercised these rights, Verizon would have paid an additional \$330 million for such shares at the closing.

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

The acquisition of AOL has been accounted for as a business combination. The fair values of the assets acquired and liabilities assumed were determined using the income, cost and market approaches. The fair value measurements were primarily based on significant inputs that are not observable in the market and thus represent a Level 3 measurement as defined in ASC 820, other than long-term debt assumed in the acquisition. The income approach was primarily used to value the intangible assets, consisting primarily of acquired technology and customer relationships. The income approach indicates value for an asset based on the present value of cash flow projected to be generated by the asset. Projected cash flow is discounted at a required rate of return that reflects the relative risk of achieving the cash flow and the time value of money. The cost approach, which estimates value by determining the current cost of replacing an asset with another of equivalent economic utility, was used, as appropriate, for property, plant and equipment. The cost to replace a given asset reflects the estimated reproduction or replacement cost for the property, less an allowance for loss in value due to depreciation.

The following table summarizes the consideration to AOL's shareholders and the identification of the assets acquired, including cash acquired of \$0.5 billion, and liabilities assumed as of the close of the acquisition, as well as the fair value at the acquisition date of AOL's noncontrolling interests:

	(dollars in millions)
	As of June 23, 2015
Cash payment to AOL's equity holders	\$ 3,764
Estimated liabilities to be paid ⁽¹⁾	377
Total consideration	<u>\$ 4,141</u>
Assets acquired:	
Goodwill	\$ 1,938
Intangible assets subject to amortization	2,504
Other	1,551
Total assets acquired	<u>5,993</u>
Liabilities assumed:	
Total liabilities assumed	1,851
Net assets acquired:	4,142
Noncontrolling interest	(1)
Total consideration	<u>\$ 4,141</u>

⁽¹⁾ During the years ended December 31, 2017 and 2016, we made cash payments of \$1 million and \$179 million, respectively, in respect of acquisition-date estimated liabilities to be paid. As of December 31, 2017, the remaining balance of estimated liabilities to be paid was \$197 million.

Goodwill is calculated as the difference between the acquisition date fair value of the consideration transferred and the fair value of the net assets acquired. The goodwill recorded as a result of the AOL transaction represents future economic benefits we expect to achieve as a result of combining the operations of AOL and Verizon as well as assets acquired that could not be individually identified and separately recognized. The goodwill related to this acquisition is included within Corporate and other. See Note 3 for additional information.

Acquisition of Yahoo! Inc.'s Operating Business

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

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

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

In June 2017, we completed the Transaction. The aggregate purchase consideration of the Transaction was approximately \$4.7 billion, including cash acquired of \$0.2 billion.

Prior to the closing of the Transaction, pursuant to a related reorganization agreement, Yahoo transferred all of the assets and liabilities constituting Yahoo's operating business to the subsidiaries that we acquired in the Transaction. The assets that we acquired did not include Yahoo's ownership interests in Alibaba, Yahoo! Japan and certain other investments, certain undeveloped land recently divested by Yahoo, certain non-core intellectual property or its cash, other than the cash from its operating business we acquired. We received for our benefit and that of our current and certain future affiliates a non-exclusive, worldwide, perpetual, royalty-free license to all of Yahoo's intellectual property that was not conveyed with the business.

In October 2017, based upon information that we received in connection with our integration of Yahoo's operating business, we disclosed that we believe that the August 2013 data breach previously disclosed by Yahoo affected all of its accounts.

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

The acquisition of Yahoo's operating business has been accounted for as a business combination. We are currently assessing the identification and measurement of the assets acquired and liabilities assumed. The preliminary results, which are summarized below, will be finalized within 12 months following the close of the acquisition. The preliminary results do not include any amount for potential liability arising from certain user security and data breaches since a reasonable estimate of loss, if any, cannot be determined at this time. We will continue to evaluate the accounting for these contingencies in conjunction with finalizing our accounting for this business combination and thereafter. When the valuations are finalized, any changes to the preliminary valuation of assets acquired and liabilities assumed may result in adjustments to the preliminary fair value of the net identifiable assets acquired and goodwill.

The fair values of the assets acquired and liabilities assumed were determined using the income, cost, market and multiple period excess earnings approaches. The fair value measurements were primarily based on significant inputs that are not observable in the market and thus represent a Level 3 measurement as defined in ASC 820 other than long-term debt assumed in the acquisition. The income approach was primarily used to value the intangible assets, consisting primarily of acquired technology and customer relationships. The income approach indicates value for an asset based on the present value of cash flow projected to be generated by the asset. Projected cash flow is discounted at a required rate of return that reflects the relative risk of achieving the cash flow and the time value of money. The cost approach, which estimates value by determining the current cost of replacing an asset with another of equivalent economic utility, was used, as appropriate, for property, plant and equipment. The cost to replace a given asset reflects the estimated reproduction or replacement cost for the property, less an allowance for loss in value due to depreciation.

The following table summarizes the consideration to Yahoo's shareholders and the preliminary identification of the assets acquired, including cash acquired of \$0.2 billion, and liabilities assumed as of the close of the acquisition, as well as the fair value at the acquisition date of Yahoo's noncontrolling interests:

	(dollars in millions)		
	As of June 13, 2017	Measurement- period adjustments ⁽¹⁾	As of December 31, 2017
Cash payment to Yahoo's equity holders	\$ 4,723	\$ (50)	\$ 4,673
Estimated liabilities to be paid	38	-	38
Total consideration	\$ 4,761	\$ (50)	\$ 4,711
Assets acquired:			
Goodwill	\$ 874	\$ 1,055	\$ 1,929
Intangible assets subject to amortization	2,586	(713)	1,873
Property, plant, and equipment	1,796	9	1,805
Other	1,362	(30)	1,332
Total assets acquired	6,618	321	6,939
Liabilities assumed:			
Total liabilities assumed	1,824	354	2,178
Net assets acquired:			
Noncontrolling interest	(33)	(17)	(50)
Total consideration	\$ 4,761	\$ (50)	\$ 4,711

⁽¹⁾ Adjustments to preliminary fair value measurements to reflect new information obtained about facts and circumstances that existed as of the acquisition date that, if known, would have affected the measurement of the amounts recognized as of that date.

On the closing date of the Transaction, each unvested and outstanding Yahoo restricted stock unit award that was held by an employee who became an employee of Verizon was replaced with a Verizon restricted stock unit award, which is generally payable in cash upon the applicable vesting date. The value of those outstanding restricted stock units on the acquisition date was approximately \$1.0 billion.

Goodwill is calculated as the difference between the acquisition date fair value of the consideration transferred and the fair value of the net assets acquired. The goodwill is primarily attributable to increased synergies that are expected to be achieved from the integration of Yahoo's operating business into our Media business. The preliminary goodwill related to this acquisition is included within Corporate and other. See Note 3 for additional information.

The consolidated financial statements include the results of Yahoo's operating business from the date the acquisition closed. If the acquisition of Yahoo's operating business had been completed as of January 1, 2016, the results of operations of Verizon would not have been significantly different than our previously reported results of operations.

Acquisition and Integration Related Charges

In connection with the Yahoo Transaction, we recognized \$0.8 billion of acquisition and integration related charges during the year ended December 31, 2017, of which \$0.5 billion, \$0.1 billion and \$0.2 billion related to Severance, Transaction costs and Integration costs, respectively. These charges were recorded in Selling, general and administrative expense on our consolidated statements of income.

Fleetmatics Group PLC

In July 2016, we entered into an agreement to acquire Fleetmatics Group PLC, a public limited company incorporated in Ireland (Fleetmatics). Fleetmatics was a leading global provider of fleet and mobile workforce management solutions. Pursuant to the terms of the agreement, we acquired Fleetmatics for \$60.00 per ordinary share in cash. The aggregate merger consideration was approximately \$2.5 billion, including cash acquired of \$0.1 billion. We completed the acquisition on November 7, 2016. As a result of the transaction, Fleetmatics became a wholly-owned subsidiary of Verizon.

The consolidated financial statements include the results of Fleetmatics' operations from the date the acquisition closed. Had this acquisition been completed on January 1, 2016 or 2015, the results of operations of Verizon would not have been significantly different than our previously reported results of operations. Upon closing, we recorded approximately \$1.4 billion of goodwill and \$1.1 billion of other intangibles.

The acquisition of Fleetmatics was accounted for as a business combination. The consideration was allocated to the assets acquired and liabilities assumed based on their fair values as of the close of the acquisition.

Goodwill is calculated as the difference between the acquisition date fair value of the consideration transferred and the fair value of the net assets acquired. The goodwill recorded as a result of the Fleetmatics transaction represents future economic benefits we expect to achieve as a result of the acquisition. The goodwill related to this acquisition is included within Corporate and other. See Note 3 for additional information.

Other

In July 2016, we acquired Telogis, Inc., a global cloud-based mobile enterprise management software business, for \$0.9 billion of cash consideration. Upon closing, we recorded \$0.5 billion of goodwill that is included within Corporate and other.

During 2017, 2016 and 2015, we entered into and completed various other transactions for an insignificant amount of cash consideration.

Real Estate Transaction

On May 19, 2015, we consummated a sale-leaseback transaction with a financial services firm for the buildings and real estate at our Basking Ridge, New Jersey location. We received total gross proceeds of \$0.7 billion resulting in a deferred gain of \$0.4 billion, which will be amortized over the initial leaseback term of twenty years. The leaseback of the buildings and real estate is accounted for as an operating lease. The proceeds received as a result of this transaction have been classified within Cash flows used in investing activities on our consolidated statement of cash flows for the year ended December 31, 2015.

Goodwill

Changes in the carrying amount of Goodwill are as follows:

	(dollars in millions)			
	Wireless	Wireline	Other	Total
Balance at January 1, 2016	\$ 18,393	\$ 4,331	\$ 2,607	\$ 25,331
Acquisitions (Note 2)	—	—	2,310	2,310
Reclassifications, adjustments and other	—	(547)	111	(436)
Balance at December 31, 2016	\$ 18,393	\$ 3,784	\$ 5,028	\$ 27,205
Acquisitions (Note 2)	4	208	1,956	2,168
Reclassifications, adjustments and other	—	1	(202)	(201)
Balance at December 31, 2017	\$ 18,397	\$ 3,993	\$ 6,782	\$ 29,172

During 2016, we allocated \$0.1 billion of goodwill on a relative fair value basis from Wireline to Other as a result of the reclassification of our telematics businesses. See Note 12 for additional information. In addition, during 2016, we allocated \$0.4 billion of goodwill on a relative fair value basis from Wireline to Non-current assets held for sale on our consolidated balance sheet as of December 31, 2016 as a result of our agreement to sell 23 data center sites. See Note 2 for additional information. As a result of acquisitions completed during 2016, we recognized preliminary goodwill of \$2.3 billion, which is included within Other. See Note 2 for additional information.

Note 3 Wireless Licenses, Goodwill and Other Intangible Assets

Wireless Licenses

The carrying amounts of Wireless licenses are as follows:

At December 31,	(dollars in millions)	
	2017	2016
Wireless licenses	\$ 88,417	\$86,673

At December 31, 2017 and 2016, approximately \$8.8 billion and \$10.0 billion, respectively, of wireless licenses were under development for commercial service for which we were capitalizing interest costs. We recorded approximately \$0.5 billion of capitalized interest on wireless licenses for the years ended December 31, 2017 and 2016.

The average remaining renewal period of our wireless license portfolio was 5.4 years as of December 31, 2017. See Note 1 for additional information.

See Note 2 for additional information regarding spectrum license transactions.

During 2017, we recognized preliminary goodwill of \$1.9 billion within Other as a result of the acquisition of Yahoo's operating business and \$0.2 billion in Wireline as a result of the acquisition of XO. See Note 2 for additional information.

Other Intangible Assets

The following table displays the composition of Other intangible assets, net:

At December 31,	2017			2016		
	Gross Amount	Accumulated Amortization	Net Amount	Gross Amount	Accumulated Amortization	Net Amount
Customer lists (5 to 13 years)	\$ 3,621	\$ (691)	\$ 2,930	\$ 2,884	\$ (480)	\$ 2,404
Non-network internal-use software (3 to 7 years)	18,010	(12,374)	5,636	16,135	(10,913)	5,222
Other (2 to 25 years)	2,474	(793)	1,681	1,854	(583)	1,271
Total	\$ 24,105	\$(13,858)	\$ 10,247	\$ 20,873	\$(11,976)	\$ 8,897

At December 31, 2017, we recognized preliminary other intangible assets of \$1.9 billion in Corporate and other as a result of the acquisition of Yahoo's operating business and \$0.2 billion in Wireline as a result of the acquisition of XO. See Note 2 for additional information.

The amortization expense for Other intangible assets was as follows:

Years	(dollars in millions)
2017	\$ 2,213
2016	1,701
2015	1,694

Estimated annual amortization expense for Other intangible assets is as follows:

Years	(dollars in millions)
2018	\$2,079
2019	1,787
2020	1,478
2021	1,227
2022	1,024

Note 4 Property, Plant and Equipment

The following table displays the details of Property, plant and equipment, which is stated at cost:

At December 31,	Lives (years)	(dollars in millions)	
		2017	2016
Land	–	\$ 806	\$ 667
Buildings and equipment	7-45	28,914	27,117
Central office and other network equipment	3-50	145,093	136,737
Cable, poles and conduit	7-50	47,972	45,639
Leasehold improvements	5-20	8,394	7,627
Work in progress	–	6,139	5,710
Furniture, vehicles and other	3-20	9,180	8,718
		246,498	232,215
Less accumulated depreciation		157,930	147,464
Property, plant and equipment, net		\$ 88,568	\$ 84,751

Note 5 Leasing Arrangements

As Lessee

We lease certain facilities and equipment for use in our operations under both capital and operating leases. Total rent expense under operating leases amounted to \$3.8 billion in 2017, \$3.6 billion in 2016, and \$3.2 billion in 2015.

Amortization of capital leases is included in Depreciation and amortization expense in the consolidated statements of income. Capital lease amounts included in Property, plant and equipment are as follows:

At December 31,	(dollars in millions)	
	2017	2016
Capital leases	\$ 1,463	\$ 1,277
Less accumulated amortization	(692)	(524)
Total	\$ 771	\$ 753

The aggregate minimum rental commitments under noncancelable leases for the periods shown at December 31, 2017, are as follows:

Years	(dollars in millions)	
	Capital Leases	Operating Leases
2018	\$ 413	\$ 3,290
2019	268	3,046
2020	179	2,683
2021	87	2,301
2022	50	1,952
Thereafter	135	7,462
Total minimum rental commitments	1,132	\$ 20,734
Less interest and executory costs	112	
Present value of minimum lease payments	1,020	
Less current installments	382	
Long-term obligation at December 31, 2017	\$ 638	

Tower Monetization Transaction

During March 2015, we completed a transaction with American Tower pursuant to which American Tower acquired the exclusive rights to lease and operate approximately 11,300 of our wireless towers for an upfront payment of \$5.0 billion. We have subleased capacity on the towers from American Tower for a minimum of 10 years at current market rates, with options to renew. Under this agreement, total rent payments amounted to \$0.3 billion for both the years ended December 31, 2017 and 2016. We expect to make minimum future lease payments of approximately \$2.1 billion. We continue to include the towers in Property, plant and equipment, net in our consolidated balance sheets and depreciate them accordingly. At December 31, 2017 and 2016, \$0.4 billion and \$0.5 billion of towers related to this transaction were included in Property, plant and equipment, net, respectively. See Note 2 for additional information.

Note 6

Debt

Changes to debt during 2017 are as follows:

(dollars in millions)

	Debt Maturing within One Year	Long-term Debt	Total
Balance at January 1, 2017	\$ 2,645	\$ 105,433	\$ 108,078
Proceeds from long-term borrowings	103	27,604	27,707
Proceeds from asset-backed long-term borrowings	–	4,290	4,290
Repayments of long-term borrowings and capital leases obligations	(8,191)	(15,646)	(23,837)
Repayments of asset-backed long-term borrowings	(400)	–	(400)
Decrease in short-term obligations, excluding current maturities	(170)	–	(170)
Reclassifications of long-term debt	9,255	(9,255)	–
Other	211	1,216	1,427
Balance at December 31, 2017	\$ 3,453	\$ 113,642	\$ 117,095

Debt maturing within one year is as follows:

(dollars in millions)

At December 31,	2017	2016
Long-term debt maturing within one year	\$ 3,303	\$ 2,477
Short-term notes payable	150	168
Total debt maturing within one year	\$ 3,453	\$ 2,645

Credit facilities

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

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

In July 2017, we entered into credit facilities insured by various export credit agencies with the ability to borrow up to \$4.0 billion to finance equipment-related purchases. The facilities have borrowings available, portions of which extend through October 2019, contingent upon the amount of eligible equipment-related purchases made by Verizon. At December 31, 2017, we had not drawn on these facilities. In January 2018, we drew down \$0.5 billion.

Long-Term Debt

Outstanding long-term debt obligations are as follows:

			(dollars in millions)	
At December 31,	Interest Rates %	Maturities	2017	2016
Verizon – notes payable and other	1.38 – 3.96	2018 – 2047	\$ 31,370	\$ 28,491
	4.09 – 5.51	2020 – 2055	67,906	53,909
	5.82 – 6.90	2026 – 2054	5,835	11,295
	7.35 – 8.95	2029 – 2039	1,106	1,860
	Floating	2018 – 2025	6,684	9,750
Verizon Wireless – Alltel assumed notes	6.80 – 7.88	2029 – 2032	234	525
Telephone subsidiaries – debentures	5.13 – 6.50	2028 – 2033	226	319
	7.38 – 7.88	2022 – 2032	341	561
	8.00 – 8.75	2022 – 2031	229	328
Other subsidiaries – notes payable, debentures and other	6.70 – 8.75	2018 – 2028	748	1,102
Verizon Wireless and other subsidiaries – asset-backed debt	1.42 – 2.65	2021 – 2022	6,293	2,485
	Floating	2021 – 2022	2,620	2,520
Capital lease obligations (average rate of 3.6% and 3.5% in 2017 and 2016, respectively)			1,020	950
Unamortized discount, net of premium			(7,133)	(5,716)
Unamortized debt issuance costs			(534)	(469)
Total long-term debt, including current maturities			116,945	107,910
Less long-term debt maturing within one year			3,303	2,477
Total long-term debt			\$ 113,642	\$ 105,433

2017**February Exchange Offers and Cash Offers**

In February 2017, we completed private exchange and tender offers for 18 series of notes issued by Verizon (February Old Notes) for (i) new notes issued by Verizon (and, for certain series, cash) (February Exchange Offers) or (ii) cash (February Cash Offers). The February Old Notes had coupon rates ranging from 1.375% to 8.950% and maturity dates ranging from 2018 to 2043. In connection with the February Exchange Offers, we issued \$3.2 billion aggregate principal amount of Verizon 2.946% Notes due 2022, \$1.7 billion aggregate principal amount of Verizon 4.812% Notes due 2039 and \$4.1 billion aggregate principal amount of Verizon 5.012% Notes due 2049, plus applicable cash of \$0.6 billion, in exchange for \$8.3 billion aggregate principal amount of February Old Notes. In connection with the February Cash Offers, we paid \$0.5 billion cash to purchase \$0.5 billion aggregate principal amount of February Old Notes. We subsequently purchased an additional \$0.1 billion aggregate principal amount of February Old Notes for \$0.1 billion cash, from certain holders whose tenders of notes in the February Cash Offers had been rejected. In addition to the exchange or purchase price, any accrued and unpaid interest on Old February Notes was paid at settlement.

Term Loan Credit Agreements

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

In March 2017, we prepaid \$1.7 billion of the outstanding \$3.3 billion term loan that had an original maturity date of July 2019. During April 2017, we repaid the remaining outstanding amount under the term loan agreement.

March Tender Offers

In March 2017, we completed tender offers for 30 series of notes issued by Verizon and certain of its subsidiaries with coupon rates ranging from 5.125% to 8.950% and maturity dates ranging from 2018 to 2043 (March Tender Offers). In connection with the March Tender Offers, we purchased \$2.8 billion aggregate principal amount of Verizon notes, \$0.2 billion aggregate principal amount of our operating telephone company subsidiary notes and \$0.1 billion aggregate principal amount of GTE LLC notes for total cash consideration of \$3.8 billion. In addition to the purchase price, any accrued and unpaid interest on the purchased notes was paid to the date of purchase.

August Exchange Offers and Cash Offers

In August 2017, we completed private exchange and tender offers for 17 series of notes issued by Verizon and GTE LLC (August Old Notes) for (i) new notes issued by Verizon (and, for certain series, cash) or (ii) cash (August Exchange Offers and Cash Offers). The August Old Notes had coupon rates ranging from 1.375% to 8.750%, and maturity dates ranging from 2018 to 2023. In connection with the August Exchange Offers and Cash Offers, we issued \$4.0 billion of Verizon 3.376% Notes due 2025, in exchange for \$4.0 billion aggregate principal amount of August Old Notes and paid \$3.0 billion cash to purchase \$3.0 billion aggregate principal amount of August Old Notes. In addition to the exchange or purchase price, any accrued and unpaid interest on the August Old Notes accepted for exchange or purchase was paid at settlement.

August Tender Offers

In August 2017, we completed tender offers for 29 series of notes issued by Verizon and certain of its subsidiaries with coupon rates ranging from 5.050% to 8.950% and maturity dates ranging from 2022 to 2043 (August Tender Offers). In connection with the August Tender Offers, we purchased \$1.5 billion aggregate principal amount of Verizon notes, \$0.1 billion aggregate principal amount of our operating telephone company subsidiary notes, \$0.2 billion aggregate principal amount of Alltel Corporation notes, and an insignificant amount of GTE LLC notes for total cash consideration of \$2.1 billion. In addition to the purchase price, any accrued and unpaid interest on the purchased notes was paid to the date of purchase.

October Tender Offers

In October 2017, we completed tender offers for 5 series of Euro and British Pound Sterling-denominated notes issued by Verizon with coupon rates ranging from 0.500% to 4.750% and maturity dates ranging from 2022 to 2034 (October Tender Offers). In connection with the October Tender Offers, we purchased €2.1 billion and £0.7 billion aggregate principal amount of Verizon notes for total cash consideration of \$3.6 billion. In addition to the purchase price, any accrued and unpaid interest on the purchased notes was paid to the date of purchase.

December Tender Offers

In December 2017, we completed tender offers for 31 series of notes issued by Verizon and certain of its subsidiaries with coupon rates ranging from 5.050% to 8.950% and maturity dates ranging from 2018 to 2043 (December Tender Offers). In connection with the December Tender Offers, we purchased \$0.2 billion aggregate principal amount of Verizon notes and an insignificant amount of GTE LLC notes, operating telephone company subsidiary notes, and Alltel Corporation notes for total cash consideration of \$0.3 billion. In addition to the purchase price, any accrued and unpaid interest on the purchased notes was paid to the date of purchase.

December Exchange Offers

In December 2017, we completed private exchange offers and consent solicitations for 18 series of notes issued by certain subsidiaries of Verizon (December Old Notes) for new notes issued by Verizon (and, for certain series, cash) or, in lieu of new notes in certain circumstances, cash (December Exchange offers). The December Old Notes had coupon rates ranging from 5.125% to 8.750% and maturity dates ranging from 2021 to 2033. In connection with the December Exchange Offers, we issued \$0.1 billion of Verizon 6.800% Notes due 2029 and \$0.1 billion of Verizon 7.875% Notes due 2032, and paid an insignificant amount of cash, in exchange for \$0.2 billion aggregate principal amount of December Old Notes. In addition to the exchange or purchase price, any accrued and unpaid interest on December Old Notes accepted for exchange or purchase was paid at settlement.

Debt Issuances and Redemptions

During February 2017, we redeemed \$0.2 billion of the \$0.6 billion 6.940% GTE LLC Notes due 2028 at 124.8% of the principal amount of the notes repurchased.

During February 2017, we issued approximately \$1.5 billion aggregate principal amount of 4.950% Notes due 2047. The issuance of these notes resulted in cash proceeds of approximately \$1.5 billion, net of discounts and issuance costs and after reimbursement of certain expenses. The net proceeds were used for general corporate purposes.

During March 2017, we issued \$11.0 billion aggregate principal amount of fixed and floating rate notes. The issuance of these notes resulted in cash proceeds of approximately \$10.9 billion, net of discounts and issuance costs and after reimbursement of certain expenses. The issuance consisted of the following series of notes: \$1.4 billion aggregate principal amount of Floating Rate Notes due 2022, \$1.85 billion aggregate principal amount of 3.125% Notes due 2022, \$3.25 billion aggregate principal amount of 4.125% Notes due 2027, \$3.0 billion aggregate principal amount of 5.250% Notes due 2037, and \$1.5 billion aggregate principal amount of 5.500% Notes due 2047. The floating rate notes bear interest at a rate equal to the three-month London Interbank Offered Rate (LIBOR) plus 1.000%, which rate will be reset quarterly. The net proceeds were primarily used for the March Tender Offers and general corporate purposes, including discretionary contributions to our qualified pension plans of \$3.4 billion. We also used certain of the net proceeds to finance our acquisition of Yahoo's operating business.

During April 2017, we redeemed in whole \$0.5 billion aggregate principal amount of Verizon 6.100% Notes due 2018 at 104.485% of the principal amount of such notes and \$0.5 billion aggregate principal amount of Verizon 5.500% Notes due 2018 at 103.323% of the principal amount of such notes, plus accrued and unpaid interest to the date of redemption.

During May 2017, we issued \$1.5 billion aggregate principal amount of Floating Rate Notes due 2020. The issuance of these notes resulted in cash proceeds of approximately \$1.5 billion, net of discounts and issuance costs. The floating rate notes bear interest at a rate equal to three-month LIBOR plus 0.550%, which will be reset quarterly. The net proceeds were primarily used for general corporate purposes, which included the repayment of outstanding indebtedness. In addition we issued CHF 0.6 billion aggregate principal amount of 0.375% Bonds due 2023, and CHF 0.4 billion aggregate principal amount of 1.000% Bonds due 2027. The issuance of these bonds resulted in cash proceeds of approximately \$1.0 billion, net of discounts and issuance costs. The net proceeds were primarily used for general corporate purposes including the repayment of debt.

During May 2017, we initiated a retail notes program in connection with the issuance and sale from time to time of our notes that are due nine months or more from the date of issue. As of December 31, 2017 we have issued \$0.9 billion of retail notes with interest rates ranging from 2.600% to 4.900% and maturity dates ranging from 2022 to 2047.

During June 2017, \$1.3 billion of Verizon floating rate notes matured and were repaid.

During June 2017, we redeemed in whole \$0.5 billion aggregate principal amount of Verizon 1.100% Notes due 2017 at 100.003% of the principal amount of such notes, plus accrued and unpaid interest to the date of redemption.

During August 2017, we issued \$3.0 billion aggregate principal amount of 4.500% Notes due 2033 resulting in cash proceeds of approximately \$3.0 billion, net of discounts and issuance costs. In addition, we issued the following four series of Australian Dollar (AUD) denominated notes resulting in cash proceeds of \$1.7 billion net of discounts and issuance costs: AUD 0.55 billion aggregate principal amount of 3.500% Notes due 2023, AUD 0.45 billion aggregate principal amount of 4.050% Notes due 2025, AUD 0.7 billion aggregate principal amount of 4.500% Notes due 2027 and AUD 0.5 billion aggregate principal amount of Floating Rate Notes due 2023. The floating rate notes bear interest at a rate equal to the three-month Bank Bill Swap Reference Rate plus 1.220% which will be reset quarterly. In addition, we issued \$1.0 billion aggregate principal amount of 5.150% Notes due 2050 resulting in cash proceeds of approximately \$0.9 billion, net of discounts, issuance costs and reimbursement of certain expenses. The proceeds of the notes issued during August 2017 were used for general corporate purposes including the repayment of debt.

During September 2017, we redeemed in whole \$1.3 billion aggregate principal amount of Verizon 3.650% Notes due 2018, at 101.961% of the principal amount of such notes, plus accrued and unpaid interest to the date of redemption.

During October 2017, we issued €3.5 billion and £1.0 billion aggregate principal amount of fixed rate notes. The issuance of these notes resulted in cash proceeds of approximately \$5.4 billion, net of discounts and issuance costs and after reimbursement of certain expenses. The issuance consisted of the following series of notes: €1.25 billion aggregate principal amount of 1.375% Notes due 2026, €0.75 billion aggregate principal amount of 1.875% Notes due 2029, €1.5 billion aggregate principal amount of 2.875% Notes due 2038, and £1.0 billion aggregate principal amount of 3.375% Notes due 2036. The net proceeds were primarily used for the October Tender Offers and general corporate purposes.

During November 2017, we redeemed in whole \$3.5 billion aggregate principal amount of Verizon 4.500% Notes due 2020, at 106.164% of the principal amount of such notes, plus accrued and unpaid interest to the date of redemption.

2016

April Tender Offers

In April 2016, we completed three concurrent, but separate, tender offers for 34 series of notes issued by Verizon and certain of its subsidiaries with coupon rates ranging from 2.000% to 8.950% and maturity dates ranging from 2016 to 2043 (April Tender Offers).

In connection with the April Tender Offers, we purchased \$6.8 billion aggregate principal amount of Verizon notes, \$1.2 billion aggregate principal amount of our operating telephone company subsidiary notes, \$0.3 billion aggregate principal amount of GTE LLC notes, and \$0.2 billion Alltel Corporation notes for total cash consideration of \$10.2 billion, inclusive of accrued interest of \$0.1 billion.

Debt Issuances and Redemptions

During April 2016, we redeemed in whole \$0.9 billion aggregate principal amount of Verizon 2.500% Notes due 2016 at 100.773% of the principal amount of such notes, \$0.5 billion aggregate principal amount of Verizon 2.000% Notes due 2016 at 100.775% of the principal amount of such notes, and \$0.8 billion aggregate principal amount of Verizon 6.350% Notes due 2019 at 113.521% of the principal amount of such notes (April Redemptions). These notes were purchased and canceled for \$2.3 billion, inclusive of an insignificant amount of accrued interest.

During August 2016, we issued \$6.2 billion aggregate principal amount of fixed and floating rate notes. The issuance of these Notes resulted in cash proceeds of approximately \$6.1 billion, net of discounts and issuance costs and after reimbursement of certain expenses. The issuance consisted of the following series of notes: \$0.4 billion aggregate principal amount of Floating Rate Notes due 2019, \$1.0 billion aggregate principal amount of 1.375% Notes due 2019, \$1.0 billion aggregate principal amount of 1.750% Notes due 2021, \$2.3 billion aggregate principal amount of 2.625% Notes due 2026, and \$1.5 billion aggregate principal amount of 4.125% Notes due 2046. The floating rate notes bear interest at a rate equal to the three-month LIBOR plus 0.370%, which rate will be reset quarterly. The net proceeds were used for general corporate purposes, including to repay at maturity on September 15, 2016, \$2.3 billion aggregate principal amount of our floating rate notes, plus accrued interest on the notes.

During September 2016, we issued \$2.1 billion aggregate principal amount of 4.200% Notes due 2046. The issuance of these Notes resulted in cash proceeds of approximately \$2.0 billion, net of discounts and issuance costs and after reimbursement of certain expenses. The net proceeds were used to redeem in whole \$0.9 billion aggregate principal amount of Verizon 4.800% Notes due 2044 at 100% of the principal amount of such notes, plus any accrued and unpaid interest to the date of redemption, for an insignificant loss. Proceeds not used for the redemption of these notes were used for general corporate purposes.

During October 2016, we issued €1.0 billion aggregate principal amount of 0.500% Notes due 2022, €1.0 billion aggregate principal amount of 0.875% Notes due 2025, €1.25 billion aggregate principal amount of 1.375% Notes due 2028, and £0.45 billion aggregate principal amount of 3.125% Notes due 2035. The issuance of these notes resulted in cash proceeds of approximately \$4.1 billion, net of discounts and issuance costs and after reimbursement of certain expenses. The net proceeds from the sale of the notes were used for general corporate purposes, including the financing of our acquisition of Fleetmatics and the repayment of outstanding indebtedness.

During December 2016, we redeemed in whole \$2.0 billion aggregate principal amount of Verizon 1.350% Notes due 2017 at 100.321% of the principal amount of such notes, plus any accrued and unpaid interest to the date of redemption, for an insignificant loss. Also in December 2016, we repurchased \$2.5 billion aggregate principal amount of eight-year Verizon notes at 100% of the aggregate principal amount of such notes plus accrued and unpaid interest to the date of redemption.

Asset-Backed Debt

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

Our asset-backed debt is secured by the transferred device payment plan agreement receivables and future collections on such receivables. The device payment plan agreement receivables transferred to the ABS Entities and related assets, consisting primarily of restricted cash, will only be available for payment of asset-backed debt and expenses related thereto, payments to the Originators in respect of additional transfers of device payment plan agreement receivables, and other obligations arising from our asset-backed debt transactions, and will not be available to pay other obligations or claims of Verizon's creditors until the associated asset-backed debt and other obligations are satisfied. The Investors or Banks, as applicable, which hold our asset-backed debt have legal recourse to the assets securing the debt, but do not have any recourse to Verizon with respect to the payment of principal and interest on the debt. Under a parent support agreement, Verizon has agreed to guarantee certain of the payment obligations of Cellco Partnership and the Originators to the ABS Entities.

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

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

Asset-Backed Notes

In October 2017, we issued approximately \$1.4 billion aggregate principal amount of senior and junior Asset-Backed Notes through an ABS Entity. The Class A-1a senior Asset-Backed Notes had an expected weighted-average life to maturity of 2.48 years at issuance and bear interest at 2.060% per annum, the Class A-1b senior Asset-Backed Notes had an expected weighted-average life to maturity of 2.48 years at issuance and bear interest at one-month LIBOR + 0.270%, which rate will be reset monthly, the Class B junior Asset-Backed Notes had an expected weighted-average life to maturity of 3.12 years at issuance and bear interest at 2.380% per annum and the Class C junior Asset-Backed Notes had an expected weighted-average life to maturity of 3.35 years at issuance and bear interest at 2.530% per annum.

In June 2017, we issued approximately \$1.3 billion aggregate principal amount of senior and junior Asset-Backed Notes through an ABS Entity. The Class A senior Asset-Backed Notes had an expected weighted-average life to maturity of 2.47 years at issuance and bear interest at 1.920% per annum, the Class B junior Asset-Backed Notes had an expected weighted-average life to maturity of 3.11 years at issuance and bear interest at 2.220% per annum and the Class C junior Asset-Backed Notes had an expected weighted-average life to maturity of 3.34 years at issuance and bear interest at 2.380% per annum.

In March 2017, we issued approximately \$1.3 billion aggregate principal amount of senior and junior Asset-Backed Notes through an ABS Entity. The Class A senior Asset-Backed Notes had an expected weighted-average life to maturity of 2.6 years at issuance and bear interest at 2.060% per annum, the Class B junior Asset-Backed Notes had an expected weighted-average life to maturity of 3.38 years at issuance and bear interest at 2.450% per annum and the Class C junior Asset-Backed Notes had an expected weighted-average life to maturity of 3.64 years at issuance and bear interest at 2.650% per annum.

In November 2016, we issued approximately \$1.4 billion aggregate principal amount of senior and junior Asset-Backed Notes through an ABS Entity. The Class A senior Asset-Backed Notes had an expected weighted-average life to maturity of about 2.55 years at issuance and bear interest at 1.680% per annum. The Class B junior Asset-Backed Notes had an expected weighted-average life to maturity of about 3.32 years at issuance and bear interest at 2.150% per annum and the Class C junior Asset-Backed Notes had an expected weighted-average life to maturity of 3.59 years at issuance and bear interest at 2.360% per annum.

In July 2016, we issued approximately \$1.2 billion aggregate principal amount of senior and junior Asset-Backed Notes through an ABS Entity, of which \$1.1 billion of notes were sold to Investors. The Class A senior Asset-Backed Notes had an expected weighted-average life to maturity of about 2.52 years at issuance and bear interest at 1.420% per annum. The Class B junior Asset-Backed Notes had an expected weighted-average life to maturity of about 3.24 years at issuance and bear interest at 1.460% per annum and the Class C junior Asset-Backed Notes had an expected weighted-average life to maturity of 3.51 years at issuance and bear interest at 1.610% per annum.

Under the terms of each series of Asset-Backed Notes, there is a two year revolving period during which we may transfer additional receivables to the ABS Entity.

ABS Financing Facility

During September 2016, we entered into a loan agreement through an ABS Entity with a number of financial institutions. Under the terms of the loan agreement, such counterparties made advances under asset-backed loans backed by device payment plan agreement receivables for proceeds of \$1.5 billion. We had the option of requesting an additional \$1.5 billion of committed funding by December 31, 2016 and during December 2016, we received additional funding of \$1.0 billion under this option. In May 2017, we received additional funding of \$0.3 billion pursuant to an additional loan agreement with similar terms. These loans have an expected weighted-average life of about 2.4 years at issuance and bear interest at floating rates. There is a two year revolving period, beginning from September 2016, which may be extended, during which we may transfer additional receivables to the ABS Entity. Subject to certain conditions, we may also remove receivables from the ABS Entity.

Under these loan agreements, we have the right to prepay all or a portion of the loans at any time without penalty, but in certain cases, with breakage costs. In December 2017, we prepaid \$0.4 billion. The amount prepaid is available for further drawdowns until September 2018, except in certain circumstances. As of December 31, 2017, outstanding borrowings under the loans were \$2.4 billion.

Variable Interest Entities (VIEs)

The ABS Entities meet the definition of a VIE for which we have determined we are the primary beneficiary as we have both the power to direct the activities of the entity that most significantly impact the entity's performance and the obligation to absorb losses or the right to receive benefits of the entity. Therefore, the assets, liabilities and activities of the ABS Entities are consolidated in our financial results and are included in amounts presented on the face of our consolidated balance sheets.

The assets and liabilities related to our asset-backed debt arrangements included on our consolidated balance sheets were as follows:

At December 31,	(dollars in millions)	
	2017	2016
Assets		
Account receivable, net	\$ 8,101	\$ 3,383
Prepaid expenses and other	636	236
Other Assets	2,680	2,383
Liabilities		
Accounts payable and accrued liabilities	5	4
Short-term portion of long-term debt	1,932	–
Long-term debt	6,955	4,988

See Note 7 for additional information on device payment plan agreement receivables used to secure asset-backed debt.

Early Debt Redemption and Other Costs

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

We recognize losses on early debt redemptions in Other income (expense), net on our consolidated statements of income and within our Net cash used in financing activities on our consolidated statements of cash flows.

Additional Financing Activities (Non-Cash Transactions)

During both the years ended December 31, 2017 and 2016, we financed, primarily through vendor financing arrangements, the purchase of approximately \$0.5 billion of long-lived assets consisting primarily of network equipment. At December 31, 2017, \$1.2 billion relating to these financing arrangements, including those entered into in prior years and liabilities assumed through acquisitions, remained outstanding. These purchases are non-cash financing activities and therefore not reflected within Capital expenditures on our consolidated statements of cash flows.

Guarantees

We guarantee the debentures of our operating telephone company subsidiaries. As of December 31, 2017, \$0.8 billion aggregate principal amount of these obligations remained outstanding. Each guarantee will remain in place for the life of the obligation unless terminated pursuant to its terms, including the operating telephone company no longer being a wholly-owned subsidiary of Verizon.

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

We also guarantee the debt obligations of GTE LLC as successor in interest to GTE Corporation that were issued and outstanding prior to July 1, 2003. As of December 31, 2017, \$0.7 billion aggregate principal amount of these obligations remain outstanding.

Debt Covenants

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

Maturities of Long-Term Debt

Maturities of long-term debt outstanding, excluding unamortized debt issuance costs, at December 31, 2017 are as follows:

Years	(dollars in millions)
2018	\$ 3,308
2019	6,306
2020	6,587
2021	6,403
2022	9,520
Thereafter	85,355

**Note 7
Wireless Device Payment Plans**

Under the Verizon device payment program, our eligible wireless customers purchase wireless devices under a device payment plan agreement. Customers that activate service on devices purchased under the device payment program pay lower service fees as compared to those under our fixed-term service plans, and their device payment plan charge is included on their standard wireless monthly bill. As of January 2017, we no longer offer consumers new fixed-term service plans for phones. However we continue to service existing plans and provide these plans to business customers.

Wireless Device Payment Plan Agreement Receivables

The following table displays device payment plan agreement receivables, net, that continue to be recognized in our consolidated balance sheets:

At December 31,	(dollars in millions)	
	2017	2016
Device payment plan agreement receivables, gross	\$ 17,770	\$ 11,797
Unamortized imputed interest	(821)	(511)
Device payment plan agreement receivables, net of unamortized imputed interest	16,949	11,286
Allowance for credit losses	(848)	(688)
Device payment plan agreement receivables, net	\$ 16,101	\$ 10,598
Classified on our consolidated balance sheets:		
Accounts receivable, net	\$ 11,064	\$ 6,140
Other assets	5,037	4,458
Device payment plan agreement receivables, net	\$ 16,101	\$ 10,598

Included in our device payment plan agreement receivables, net at December 31, 2017, are net device payment plan agreement receivables of \$10.7 billion that have been transferred to ABS Entities and continue to be reported in our consolidated balance sheet. See Note 6 for additional information.

We may offer certain promotions that allow a customer to trade in his or her owned device in connection with the purchase of a new device. Under these types of promotions, the customer receives a credit for the value of the trade-in device. In addition, we may provide the customer with additional future credits that will be applied against the customer's monthly bill as long as service is maintained. We recognize a liability for the trade-in device measured at fair value, which is determined by considering several factors, including the weighted-average selling prices obtained in recent resales of similar devices eligible for trade-in. Future credits are recognized when earned by the customer. Device payment plan agreement receivables, net does not reflect the trade-in device liability. At December 31, 2017, the amount of trade-in liability was insignificant.

From time to time, we offer certain marketing promotions that allow our customers to upgrade to a new device after paying down a certain specified portion of the required device payment plan agreement amount as well as trading in their device in good working order. When a customer enters into a device payment plan agreement with the right to upgrade to a new device, we account for this trade-in right as a guarantee obligation.

At the time of the sale of a device, we impute risk adjusted interest on the device payment plan agreement receivables. We record the imputed interest as a reduction to the related accounts receivable. Interest income, which is included within Service revenues and other on our consolidated statements of income, is recognized over the financed device payment term.

When originating device payment plan agreements, we use internal and external data sources to create a credit risk score to measure the credit quality of a customer and to determine eligibility for the device payment program. If a customer is either new to Verizon Wireless or has less than 210 days of customer tenure with Verizon Wireless (a new customer), the credit decision process relies more heavily on external data sources. If the customer has 210 days or more of customer tenure with Verizon Wireless (an existing customer), the credit decision process relies on internal data sources. Verizon Wireless' experience has been that the payment attributes of longer tenured customers are highly predictive for estimating their ability to pay in the future. External data sources include obtaining a credit report from a national consumer credit reporting agency, if available. Verizon Wireless uses its internal data and/or credit data obtained from the credit reporting agencies to create a custom credit risk score. The custom credit risk score is generated automatically (except with respect to a small number of applications where the information needs manual intervention) from the applicant's credit data using Verizon Wireless' proprietary custom credit models, which are empirically derived, demonstrably and statistically sound. The credit risk score measures the likelihood that the potential customer will become severely delinquent and be disconnected for non-payment. For a small portion of new customer applications, a traditional credit report is not available from one of the national credit reporting agencies because the potential customer does not have sufficient credit history. In those instances, alternate credit data is used for the risk assessment.

Based on the custom credit risk score, we assign each customer to a credit class, each of which has a specified required down payment percentage, which ranges from zero to 100%, and specified credit limits. Device payment plan agreement receivables originated from customers assigned to credit classes requiring no down payment represent the lowest risk. Device payment plan agreement receivables originated from customers assigned to credit classes requiring a down payment represent a higher risk.

Subsequent to origination, Verizon Wireless monitors delinquency and write-off experience as key credit quality indicators for its portfolio of device payment plan agreements and fixed-term service plans. The extent of our collection efforts with respect to a particular customer are based on the results of proprietary custom empirically derived internal behavioral scoring models that analyze the customer's past performance to predict the likelihood of the customer falling further delinquent. These customer scoring models assess a number of variables, including origination characteristics, customer account history and payment patterns. Based on the score derived from these models, accounts are grouped by risk category to determine the collection strategy to be applied to such accounts. We continuously monitor collection performance results and the credit quality of our device payment plan agreement receivables based on a variety of metrics, including aging. Verizon Wireless considers an account to be delinquent and in default status if there are unpaid charges remaining on the account on the day after the bill's due date.

The balance and aging of the device payment plan agreement receivables on a gross basis was as follows:

	(dollars in millions)	
At December 31,	2017	2016
Unbilled	\$ 16,591	\$ 11,089
Billed:		
Current	975	557
Past due	204	151
Device payment plan agreement receivables, gross	\$ 17,770	\$ 11,797

Activity in the allowance for credit losses for the device payment plan agreement receivables was as follows:

	(dollars in millions)	
	2017	2016
Balance at January 1,	\$ 688	\$ 444
Bad debt expense	718	692
Write-offs	(558)	(479)
Allowance related to receivables sold	-	28
Other	-	3
Balance at December 31,	\$ 848	\$ 688

Sales of Wireless Device Payment Plan Agreement Receivables

In 2015 and 2016, we established programs pursuant to a Receivables Purchase Agreement, or RPA, to sell from time to time, on an uncommitted basis, eligible device payment plan agreement receivables to a group of primarily relationship banks (Purchasers) on both a revolving (Revolving Program) and non-revolving (Non-Revolving Program) basis. In December 2017, the RPA and all other related transaction documents were terminated. Under the Programs, eligible device payment plan agreement receivables were transferred to the Purchasers for upfront cash proceeds and additional consideration upon settlement of the receivables, referred to as the deferred purchase price.

There were no sales of device payment plan agreement receivables under the Programs during 2017. During 2016, we sold \$3.3 billion of receivables, net of allowance and imputed interest, under the Revolving Program. We received cash proceeds from new transfers of \$2.0 billion and cash proceeds from reinvested collections of \$0.9 billion and recorded a deferred purchase price of \$0.4 billion. During 2015, we sold \$6.1 billion of receivables, net of allowances and imputed interest, under the Non-Revolving Program. In connection with this sale, we received cash proceeds from new transfers of \$4.5 billion and recorded a deferred purchase price of \$1.7 billion. During 2015, we also sold \$3.3 billion of receivables, net of allowances and imputed interest, under the Revolving Program. In connection with this sale, we received cash proceeds from new transfers of \$2.7 billion and recorded a deferred purchase price of \$0.6 billion.

The sales of receivables under the RPA did not have a significant impact on our consolidated statements of income. The cash proceeds received from the Purchasers were recorded within Cash flows provided by operating activities on our consolidated statements of cash flows.

Deferred Purchase Price

During 2017, 2016 and 2015, we collected \$0.6 billion, \$1.1 billion and an insignificant amount, respectively, which was returned as deferred purchase price and recorded within Cash flows provided by operating activities on our consolidated statements of cash flows. Collections, recorded within Cash flows used in investing activities on our consolidated statements of cash flows were \$0.8 billion during 2017 and insignificant during 2016. During 2017, we repurchased all outstanding receivables previously sold to the Purchasers in exchange for the obligation to pay the associated deferred purchase price to the wholly-owned subsidiaries that are bankruptcy remote special purpose entities (Sellers). At December 31, 2017, our deferred purchase price receivable was fully satisfied. At December 31, 2016, our deferred purchase price receivable, which was held by the Sellers, was comprised of \$1.2 billion included within Prepaid expenses and other and \$0.4 billion included within Other assets in our consolidated balance sheet. The deferred purchase price was initially recorded at fair value, based on the remaining device payment amounts expected to be collected, adjusted, as applicable, for the time value of money and by the timing and estimated value of the device trade-in in connection with upgrades. The estimated value of the device trade-in considered prices expected to be offered to us by independent third parties. This estimate contemplated changes in value after the launch of a device. The fair value measurements were considered to be Level 3 measurements within the fair value hierarchy. The collection of the deferred purchase price was contingent on collections from customers.

Variable Interest Entities (VIEs)

Under the RPA, the Sellers' sole business consists of the acquisition of the receivables from Cellco Partnership and certain other affiliates of Verizon and the resale of the receivables to the Purchasers. The assets of the Sellers are not available to be used to satisfy obligations of any Verizon entities other than the Sellers. We determined that the Sellers are VIEs as they lack sufficient equity to finance their activities. Given that we have the power to direct the activities of the Sellers that most significantly impact the Sellers' economic performance, we are deemed to be the primary beneficiary of the Sellers. As a result, we consolidate the assets and liabilities of the Sellers into our consolidated financial statements.

Continuing Involvement

At December 31, 2017 and 2016, the total portfolio of device payment plan agreement receivables, including derecognized device payment plan agreement receivables, that we were servicing was \$17.8 billion and \$16.1 billion, respectively. There were no derecognized device payment plan agreement receivables outstanding at December 31, 2017. The outstanding portfolio of device payment plan agreement receivables derecognized from our consolidated balance sheet, but which we continued to service, was \$4.3 billion at December 31, 2016. To date, we have collected and remitted approximately \$10.1 billion, net of fees. At December 31, 2017, no amounts remained to be remitted to the Purchasers.

Verizon had continuing involvement with the sold receivables as it serviced the receivables. We continued to service the customer and their related receivables on behalf of the Purchasers, including facilitating customer payment collection, in exchange for a monthly servicing fee. While servicing the receivables, the same policies and procedures were applied to the sold receivables that applied to owned receivables, and we continued to maintain normal relationships with our customers. The credit quality of the customers we continued to service was consistent throughout the periods presented.

In addition, we had continuing involvement related to the sold receivables as we were responsible for absorbing additional credit losses pursuant to the agreements. Credit losses on receivables sold were \$0.1 billion during 2017 and \$0.2 billion during 2016.

**Note 8
Fair Value Measurements and Financial Instruments****Recurring Fair Value Measurements**

The following table presents the balances of assets and liabilities measured at fair value on a recurring basis as of December 31, 2017:

(dollars in millions)

	Level 1 ⁽¹⁾	Level 2 ⁽²⁾	Level 3 ⁽³⁾	Total
Assets:				
Other assets:				
Equity securities	\$ 74	\$ -	\$ -	\$ 74
Fixed income securities	-	366	-	366
Interest rate swaps	-	54	-	54
Cross currency swaps	-	450	-	450
Interest rate caps	-	6	-	6
Total	\$ 74	\$ 876	\$ -	\$ 950
Liabilities:				
Other liabilities:				
Interest rate swaps	\$ -	\$ 413	\$ -	\$ 413
Cross currency swaps	-	46	-	46
Total	\$ -	\$ 459	\$ -	\$ 459

The following table presents the balances of assets and liabilities measured at fair value on a recurring basis as of December 31, 2016:

	(dollars in millions)			
	Level 1 ⁽¹⁾	Level 2 ⁽²⁾	Level 3 ⁽³⁾	Total
Assets:				
Other assets:				
Equity securities	\$ 123	\$ –	\$ –	\$ 123
Fixed income securities	10	566	–	576
Interest rate swaps	–	71	–	71
Cross currency swaps	–	45	–	45
Interest rate caps	–	10	–	10
Total	\$ 133	\$ 692	\$ –	\$ 825
Liabilities:				
Other liabilities:				
Interest rate swaps	\$ –	\$ 236	\$ –	\$ 236
Cross currency swaps	–	1,803	–	1,803
Total	\$ –	\$ 2,039	\$ –	\$ 2,039

- (1) quoted prices in active markets for identical assets or liabilities
(2) observable inputs other than quoted prices in active markets for identical assets and liabilities
(3) no observable pricing inputs in the market

Fair Value of Short-term and Long-term Debt

The fair value of our debt is determined using various methods, including quoted prices for identical terms and maturities, which is a Level 1 measurement, as well as quoted prices for similar terms and maturities in inactive markets and future cash flows discounted at current rates, which are Level 2 measurements. The fair value of our short-term and long-term debt, excluding capital leases, was as follows:

At December 31,	(dollars in millions)			
	2017		2016	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
Short- and long-term debt, excluding capital leases	\$116,075	\$128,658	\$107,128	\$117,584

Derivative Instruments

The following table sets forth the notional amounts of our outstanding derivative instruments:

	(dollars in millions)	
At December 31,	2017	2016
Interest rate swaps	\$ 20,173	\$ 13,099
Cross currency swaps	16,638	12,890
Interest rate caps	2,840	2,540

Equity securities consist of investments in common stock of domestic and international corporations measured using quoted prices in active markets.

Fixed income securities consist primarily of investments in municipal bonds as well as U.S. Treasury securities. We used quoted prices in active markets for the majority of our U.S. Treasury securities, therefore these securities were classified as Level 1. For fixed income securities that do not have quoted prices in active markets, we use alternative matrix pricing resulting in these debt securities being classified as Level 2.

Derivative contracts are valued using models based on readily observable market parameters for all substantial terms of our derivative contracts and thus are classified within Level 2. We use mid-market pricing for fair value measurements of our derivative instruments. Our derivative instruments are recorded on a gross basis.

We recognize transfers between levels of the fair value hierarchy as of the end of the reporting period. There were no transfers between Level 1 and Level 2 during 2017 and 2016.

Interest Rate Swaps

We enter into interest rate swaps to achieve a targeted mix of fixed and variable rate debt. We principally receive fixed rates and pay variable rates based on the LIBOR, resulting in a net increase or decrease to Interest expense. These swaps are designated as fair value hedges and hedge against interest rate risk exposure of designated debt issuances. We record the interest rate swaps at fair value on our consolidated balance sheets as assets and liabilities. Changes in the fair value of the interest rate swaps are recorded to Interest expense, which are offset by changes in the fair value of the hedged debt due to changes in interest rates.

During 2017, we entered into interest rate swaps with a total notional value of \$7.5 billion and settled interest rate swaps with a total notional value of \$0.5 billion. During 2016, we entered into interest rate swaps with a total notional value of \$6.3 billion and settled interest rate swaps with a total notional value of \$0.9 billion.

The ineffective portion of these interest rate swaps was insignificant for the years ended December 31, 2017 and 2016.

As of December 31, 2017 and 2016, the following amounts were recorded on the balance sheets related to cumulative basis adjustments for fair value hedges:

Line item in balance sheets in which hedged item is included	(dollars in millions)			
	Carrying amount of hedged liabilities		Cumulative amount of fair value hedging adjustment included in the carrying amount of the hedged liabilities	
	2017	2016	2017	2016
Long-term debt	\$ 22,011	\$13,013	\$316	\$113

Forward Interest Rate Swaps

In order to manage our exposure to future interest rate changes, we have entered into forward interest rate swaps. We designated these contracts as cash flow hedges. During 2016, we entered into forward interest rate swaps with a total notional value of \$1.3 billion and subsequently settled all outstanding forward interest rate swaps. During 2016, a pre-tax loss of \$0.2 billion was recognized in Other comprehensive income (loss).

Cross Currency Swaps

We have entered into cross currency swaps designated as cash flow hedges to exchange our British Pound Sterling, Euro, Swiss Franc and Australian Dollar-denominated cash flows into U.S. dollars and to fix our cash payments in U.S. dollars, as well as to mitigate the impact of foreign currency transaction gains or losses.

During 2017, we entered into cross currency swaps with a total notional value of \$14.0 billion and settled \$10.2 billion notional amount of cross currency swaps. A pre-tax gain of \$1.4 billion was recognized in Other comprehensive income (loss) with respect to these swaps.

During 2016, we entered into cross currency swaps with a total notional value of \$3.3 billion and settled \$0.1 billion notional amount of cross currency swaps upon redemption of the related debt. A pre-tax loss of \$0.1 billion was recognized in Other comprehensive income (loss) with respect to these swaps.

A portion of the gains and losses recognized in Other comprehensive income (loss) was reclassified to Other income (expense), net to offset the related pre-tax foreign currency transaction gain or loss on the underlying hedged item.

Net Investment Hedges

We have designated certain foreign currency instruments as net investment hedges to mitigate foreign exchange exposure related to non-U.S. dollar net investments in certain foreign subsidiaries against changes in foreign exchange rates. The notional amount of the Euro-denominated debt as a net investment hedge was \$0.9 billion and \$0.8 billion at December 31, 2017 and 2016, respectively.

Undesignated Derivatives

We also have the following derivative contracts which we use as an economic hedge but for which we have elected not to apply hedge accounting.

Interest Rate Caps

We enter into interest rate caps to mitigate our interest exposure to interest rate increases on our ABS Financing Facility and Asset-Backed Notes. During 2017, we entered into interest rate caps with a notional value of \$0.3 billion. During 2016, we entered into such interest rate caps with a notional value of \$2.5 billion. During 2017 and 2016, we recognized an insignificant increase and reduction in Interest expense, respectively.

Concentrations of Credit Risk

Financial instruments that subject us to concentrations of credit risk consist primarily of temporary cash investments, short-term and long-term investments, trade receivables, including device payment plan agreement receivables, certain notes receivable, including lease receivables and derivative contracts.

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

Note 9 Stock-Based Compensation

Verizon Long-Term Incentive Plan

In May 2017, Verizon's shareholders approved the 2017 Long-Term Incentive Plan (the 2017 Plan) and terminated Verizon's authority to grant new awards under the Verizon 2009 Long-Term Incentive Plan (the 2009 Plan). Consistent with the 2009 Plan, the 2017 Plan provides for broad-based equity grants to employees, including executive officers, and permits the granting of stock options, stock appreciation rights, restricted stock, restricted stock units, performance shares, performance stock units and other awards. Upon approval of the 2017 Plan, Verizon reserved the 91 million shares that were reserved but not issued under the 2009 Plan for future issuance under the 2017 Plan.

Restricted Stock Units

The 2009 Plan and 2017 Plan provide for grants of Restricted Stock Units (RSUs). For RSUs granted prior to 2017, vesting generally occurs at the end of the third year. For the 2017 grants, vesting generally occurs in three equal installments on each anniversary of the grant date. The RSUs are generally classified as equity awards because the RSUs will be paid in Verizon common stock upon vesting. The RSU equity awards are measured using the grant date fair value of Verizon common stock and are not remeasured at the end of each reporting period. Dividend equivalent units are also paid to participants at the time the RSU award is paid, and in the same proportion as the RSU award.

In connection with our acquisition of Yahoo's operating business, on the closing date of the Transaction each unvested and outstanding Yahoo RSU award that was held by an employee who became an employee of Verizon was replaced with a Verizon RSU award, which is generally payable in cash upon the applicable vesting date. These awards are classified as liability awards and are measured at fair value at the end of each reporting period.

Performance Stock Units

The 2009 Plan and 2017 Plan also provide for grants of Performance Stock Units (PSUs) that generally vest at the end of the third year after the grant. As defined by the 2009 Plan and 2017 Plan, the Human Resources Committee of the Board of Directors determines the number of PSUs a participant earns based on the extent to which the corresponding performance goals have been achieved over the three-year performance cycle. The PSUs are classified as liability awards because the PSU awards are paid in cash upon vesting. The PSU award liability is measured at its fair value at the end of each reporting period and, therefore, will fluctuate based on the price of Verizon common stock as well as performance relative to the targets. Dividend equivalent units are also paid to participants at the time that the PSU award is determined and paid, and in the same proportion as the PSU award. The granted and cancelled activity for the PSU award includes adjustments for the performance goals achieved.

The following table summarizes Verizon's Restricted Stock Unit and Performance Stock Unit activity:

(shares in thousands)	Restricted Stock Units		Performance Stock Units
	Equity Awards	Liability Awards	
Outstanding January 1, 2015	15,007	—	19,966
Granted	4,958	—	7,044
Payments	(5,911)	—	(6,732)
Cancelled/Forfeited	(151)	—	(3,075)
Outstanding December 31, 2015	13,903	—	17,203
Granted	4,409	—	6,391
Payments	(4,890)	—	(4,702)
Cancelled/Forfeited	(114)	—	(1,143)
Outstanding Adjustments	—	—	170
Outstanding December 31, 2016	13,308	—	17,919
Granted	4,216	25,168	6,564
Payments	(4,825)	(8,487)	(6,031)
Cancelled/Forfeited	(66)	(2,690)	(217)
Outstanding December 31, 2017	12,633	13,991	18,235

As of December 31, 2017, unrecognized compensation expense related to the unvested portion of Verizon's RSUs and PSUs was approximately \$1.0 billion and is expected to be recognized over approximately two years.

The RSUs granted in 2017 and 2016 have weighted-average grant date fair values of \$49.93 and \$51.86 per unit, respectively. During 2017, 2016 and 2015, we paid \$0.8 billion, \$0.4 billion and \$0.4 billion, respectively, to settle RSUs and PSUs classified as liability awards.

Stock-Based Compensation Expense

After-tax compensation expense for stock-based compensation related to RSUs and PSUs described above included in Net income attributable to Verizon was \$0.4 billion, \$0.4 billion and \$0.3 billion for 2017, 2016 and 2015, respectively.

Note 10 Employee Benefits

We maintain non-contributory defined benefit pension plans for certain employees. In addition, we maintain postretirement health care and life insurance plans for certain retirees and their dependents, which are both contributory and non-contributory, and include a limit on our share of the cost for certain recent and future retirees. In accordance with our accounting policy for pension and other postretirement benefits, operating expenses include pension and benefit related credits and/or charges based on actuarial assumptions, including projected discount rates, an estimated return on plan assets, and health care trend rates. These estimates are updated in the fourth quarter to reflect actual return on plan assets and updated actuarial assumptions or upon a remeasurement. The adjustment is recognized in the income statement during the fourth quarter or upon a remeasurement event pursuant to our accounting policy for the recognition of actuarial gains and losses.

Pension and Other Postretirement Benefits

Pension and other postretirement benefits for certain employees are subject to collective bargaining agreements. Modifications in benefits have been bargained from time to time, and we may also periodically amend the benefits in the management plans. The following tables summarize benefit costs, as well as the benefit obligations, plan assets, funded status and rate assumptions associated with pension and postretirement health care and life insurance benefit plans.

Obligations and Funded Status

At December 31,	Pension		Health Care and Life	
	2017	2016	2017	2016
(dollars in millions)				
Change in Benefit Obligations				
Beginning of year	\$ 21,112	\$ 22,016	\$ 19,650	\$ 24,223
Service cost	280	322	149	193
Interest cost	683	677	659	746
Plan amendments	–	428	(545)	(5,142)
Actuarial loss, net	1,377	1,017	627	1,289
Benefits paid	(1,932)	(938)	(1,080)	(1,349)
Curtailed and termination benefits	11	4	–	–
Settlements paid	–	(1,270)	–	–
Divestiture (Note 2)	–	(1,144)	–	(310)
End of year	\$ 21,531	\$ 21,112	\$ 19,460	\$ 19,650
Change in Plan Assets				
Beginning of year	\$ 14,663	\$ 16,124	\$ 1,363	\$ 1,760
Actual return on plan assets	2,342	882	134	35
Company contributions	4,141	837	702	917
Benefits paid	(1,932)	(938)	(1,080)	(1,349)
Settlements paid	–	(1,270)	–	–
Divestiture (Note 2)	(39)	(972)	–	–
End of year	\$ 19,175	\$ 14,663	\$ 1,119	\$ 1,363
Funded Status				
End of year	\$ (2,356)	\$ (6,449)	\$ (18,341)	\$ (18,287)

As a result of the Access Line Sale, which closed on April 1, 2016, we derecognized \$0.7 billion of defined benefit pension and other postretirement benefit plan obligations related to assets held for sale on our consolidated balance sheet as of December 31, 2016. See Note 2 for additional information.

At December 31,	Pension		Health Care and Life	
	2017	2016	2017	2016
(dollars in millions)				
Amounts recognized on the balance sheet				
Noncurrent assets	\$ 21	\$ 2	\$ –	\$ –
Current liabilities	(63)	(88)	(637)	(639)
Noncurrent liabilities	(2,314)	(6,363)	(17,704)	(17,648)
Total	\$(2,356)	\$(6,449)	\$(18,341)	\$(18,287)
Amounts recognized in Accumulated Other Comprehensive Income (Pre-tax)				
Prior Service Cost (Benefit)	\$ 404	\$ 443	\$ (5,667)	\$ (6,072)
Total	\$ 404	\$ 443	\$ (5,667)	\$ (6,072)

The accumulated benefit obligation for all defined benefit pension plans was \$21.5 billion and \$21.1 billion at December 31, 2017 and 2016, respectively.

2017 Postretirement Plan Amendments

During 2017, amendments were made to certain postretirement plans related to retiree medical benefits for management and certain union represented employees and retirees. The impact of the plan amendments was a reduction in our postretirement benefit plan obligations of approximately \$0.5 billion, which has been recorded as a net increase to Accumulated other comprehensive income of \$0.3 billion (net of taxes of \$0.2 billion). The impact of the amount recorded in Accumulated other comprehensive income that will be reclassified to net periodic benefit cost is insignificant.

2016 Collective Bargaining Negotiations

In the collective bargaining agreements ratified in June 2016, Verizon's annual postretirement benefit obligation for retiree healthcare remains capped at the levels established by the previous contracts ratified in 2012. Effective January 2016, prior to reaching these new collective bargaining agreements, certain retirees began to pay for the costs of retiree healthcare in accordance with the provisions relating to caps in the previous contracts. In reaching new collective bargaining agreements in 2016, there is a mutual understanding that the substantive postretirement benefit plans provide that Verizon's annual postretirement benefit obligation for retiree healthcare is capped and, accordingly, we began accounting for the contractual healthcare caps in June 2016. We also adopted changes to our defined benefit pension plans and other postretirement benefit plans to reflect the agreed upon terms and conditions of the collective bargaining agreements. The impact was a reduction in our postretirement benefit plan obligations of approximately \$5.1 billion and an increase in our defined benefit pension plan obligations of approximately \$0.4 billion, which have been recorded as a net increase to Accumulated other comprehensive income of \$2.9 billion (net of taxes of \$1.8 billion). The amount recorded in Accumulated other comprehensive income will be reclassified to net periodic benefit cost on a straight-line basis over the average remaining service period of the respective plans' participants, which, on a weighted-average basis, is 12.2 years for defined benefit pension plans and 7.8 years for other postretirement benefit plans. The above-noted reclassification resulted in a decrease to net periodic benefit cost and increase to pre-tax income of approximately \$0.7 billion and \$0.4 billion, respectively, during 2017 and 2016.

Information for pension plans with an accumulated benefit obligation in excess of plan assets follows:

At December 31,	(dollars in millions)	
	2017	2016
Projected benefit obligation	\$ 21,300	\$ 21,048
Accumulated benefit obligation	21,242	20,990
Fair value of plan assets	18,923	14,596

Net Periodic Cost

The following table summarizes the benefit cost (income) related to our pension and postretirement health care and life insurance plans:

Years Ended December 31,	Pension			Health Care and Life		
	2017	2016	2015	2017	2016	2015
Service cost	\$ 280	\$ 322	\$ 374	\$ 149	\$ 193	\$ 324
Amortization of prior service cost (credit)	39	21	(5)	(949)	(657)	(287)
Expected return on plan assets	(1,262)	(1,045)	(1,270)	(53)	(54)	(101)
Interest cost	683	677	969	659	746	1,117
Remeasurement loss (gain), net	337	1,198	(209)	546	1,300	(2,659)
Net periodic benefit (income) cost	77	1,173	(141)	352	1,528	(1,606)
Curtailment and termination benefits	11	4	—	—	—	—
Total	\$ 88	\$ 1,177	\$ (141)	\$ 352	\$ 1,528	\$ (1,606)

Other pre-tax changes in plan assets and benefit obligations recognized in other comprehensive (income) loss are as follows:

At December 31,	(dollars in millions)			
	Pension		Health Care and Life	
	2017	2016	2017	2016
Prior service cost (benefit)	\$ —	\$ 428	\$ (544)	\$ (5,142)
Reversal of amortization items				
Prior service (benefit) cost	(39)	(21)	949	657
Amounts reclassified to net income	—	87	—	451
Total recognized in other comprehensive (income) loss (pre-tax)	\$ (39)	\$ 494	\$ 405	\$ (4,034)

Amounts reclassified to net income for the year ended December 31, 2016 includes the reclassification to Selling, general and administrative expense of a pre-tax pension and postretirement benefit curtailment gain of \$0.5 billion (\$0.3 billion net of taxes) due to the transfer of employees to Frontier, which caused the elimination of a significant amount of future service in three of our defined benefit pension plans and one of our other postretirement benefit plans requiring us to recognize a portion of the prior service credits. See Note 2 for additional information.

The estimated prior service cost for the defined benefit pension plans that will be amortized from Accumulated other comprehensive income into net periodic benefit (income) cost over the next fiscal year is not significant. The estimated prior service cost for the defined benefit postretirement plans that will be amortized from Accumulated other comprehensive income into net periodic benefit income over the next fiscal year is \$1.0 billion.

Assumptions

The weighted-average assumptions used in determining benefit obligations follow:

At December 31,	Pension		Health Care and Life	
	2017	2016	2017	2016
Discount Rate	3.70%	4.30%	3.60%	4.20%
Rate of compensation increases	3.00%	3.00%	N/A	N/A

The weighted-average assumptions used in determining net periodic cost follow:

At December 31,	Pension			Health Care and Life		
	2017	2016	2015	2017	2016	2015
Discount rate in effect for determining service cost	4.70%	4.50%	4.20%	4.60%	4.50%	4.20%
Discount rate in effect for determining interest cost	3.40	3.20	4.20	3.50	3.40	4.20
Expected return on plan assets	7.70	7.00	7.25	4.50	3.80	4.80
Rate of compensation increases	3.00	3.00	3.00	N/A	N/A	N/A

Effective January 1, 2016, we changed the method we use to estimate the interest component of net periodic benefit cost for pension and other postretirement benefits. Historically, we estimated the interest cost component utilizing a single weighted-average discount rate derived from the yield curve used to measure the benefit obligation at the beginning of the period. We have elected to utilize a full yield curve approach in the estimation of interest cost by applying the specific spot rates along the yield curve used in the determination of the benefit obligation to the relevant projected cash flows. We have made this change to provide a more precise measurement of interest cost by improving the correlation between projected benefit cash flows to the corresponding spot yield curve rates. We have accounted for this change as a change in accounting estimate and accordingly accounted for it prospectively.

In determining our pension and other postretirement benefit obligations, we used a weighted-average discount rate of 3.70% and 3.60%, respectively. The rates were selected to approximate the composite interest rates available on a selection of high-quality bonds available in the market at December 31, 2017. The bonds selected had maturities that coincided with the time periods during which benefits payments are expected to occur, were non-callable and available in sufficient quantities to ensure marketability (at least \$0.3 billion par outstanding).

In order to project the long-term target investment return for the total portfolio, estimates are prepared for the total return of each major asset class over the subsequent 10-year period. Those estimates are based on a combination of factors including the current market interest rates and valuation levels, consensus earnings expectations and historical long-term risk premiums. To determine the aggregate return for the pension trust, the projected return of each individual asset class is then weighted according to the allocation to that investment area in the trust's long-term asset allocation policy.

The assumed health care cost trend rates follow:

At December 31,	Health Care and Life		
	2017	2016	2015
Healthcare cost trend rate assumed for next year	7.00%	6.50%	6.00%
Rate to which cost trend rate gradually declines	4.50	4.50	4.50
Year the rate reaches the level it is assumed to remain thereafter	2026	2025	2024

A one-percentage point change in the assumed health care cost trend rate would have the following effects:

One-Percentage Point	(dollars in millions)	
	Increase	Decrease
Effect on 2017 service and interest cost	\$ 25	\$ (24)
Effect on postretirement benefit obligation as of December 31, 2017	532	(516)

Plan Assets

The company's overall investment strategy is to achieve a mix of assets that allows us to meet projected benefit payments while taking into consideration risk and return. While target allocation percentages will vary over time, the current target allocation for plan assets is designed so that 60% of the assets have the objective of achieving a return in excess of the growth in liabilities (comprised of public equities, private equities, real estate, hedge funds and emerging debt) and 38% of the assets are invested as liability hedging assets (where cash flows from investments better match projected benefit payments, typically longer duration fixed income) and 2% is in cash. This allocation will shift as funded status improves to a higher allocation of liability hedging assets. Target policies will be revisited periodically to ensure they are in line with fund objectives. Both active and passive management approaches are used depending on perceived market efficiencies and various other factors. Due to our diversification and risk control processes, there are no significant concentrations of risk, in terms of sector, industry, geography or company names.

Pension and healthcare and life plans assets do not include significant amounts of Verizon common stock.

Pension Plans

The fair values for the pension plans by asset category at December 31, 2017 are as follows:

Asset Category	(dollars in millions)			
	Total	Level 1	Level 2	Level 3
Cash and cash equivalents	\$ 2,889	\$ 2,874	\$ 15	\$ –
Equity securities	2,795	2,794	–	1
Fixed income securities				
U.S. Treasuries and agencies	1,382	1,234	148	–
Corporate bonds	2,961	139	2,718	104
International bonds	1,068	17	1,031	20
Other	396	4	392	–
Real estate	627	–	–	627
Other				
Private equity	580	–	–	580
Hedge funds	845	–	660	185
Total investments at fair value	13,543	7,062	4,964	1,517
Investments measured at NAV	5,632			
Total	\$ 19,175	\$ 7,062	\$ 4,964	\$ 1,517

The fair values for the pension plans by asset category at December 31, 2016 are as follows:

Asset Category	(dollars in millions)			
	Total	Level 1	Level 2	Level 3
Cash and cash equivalents	\$ 1,228	\$ 1,219	\$ 9	\$ –
Equity securities	1,883	1,883	–	–
Fixed income securities				
U.S. Treasuries and agencies	1,251	880	371	–
Corporate bonds	2,375	152	2,126	97
International bonds	713	20	679	14
Real estate	655	–	–	655
Other				
Private equity	624	–	–	624
Hedge funds	526	–	522	4
Total investments at fair value	9,255	4,154	3,707	1,394
Investments measured at NAV	5,408			
Total	\$ 14,663	\$ 4,154	\$ 3,707	\$ 1,394

The following is a reconciliation of the beginning and ending balance of pension plan assets that are measured at fair value using significant unobservable inputs:

	(dollars in millions)						
	Equity Securities	Corporate Bonds	International Bonds	Real Estate	Private Equity	Hedge Funds	Total
Balance at January 1, 2016	\$ 3	\$ 128	\$ 20	\$ 873	\$ 609	\$ –	\$ 1,633
Actual (loss) gain on plan assets	(1)	(9)	(2)	169	12	–	169
Purchases and sales	(2)	(22)	(4)	(387)	3	4	(408)
Balance at December 31, 2016	\$ –	\$ 97	\$ 14	\$ 655	\$ 624	\$ 4	\$ 1,394
Actual (loss) gain on plan assets	–	(1)	–	76	78	–	153
Purchases (sales)	119	27	22	(70)	(114)	183	167
Transfers out	(118)	(19)	(16)	(34)	(8)	(2)	(197)
Balance at December 31, 2017	\$ 1	\$ 104	\$ 20	\$ 627	\$ 580	\$ 185	\$ 1,517

Health Care and Life Plans

The fair values for the other postretirement benefit plans by asset category at December 31, 2017 are as follows:

Asset Category	(dollars in millions)			
	Total	Level 1	Level 2	Level 3
Cash and cash equivalents	\$ 71	\$ 1	\$ 70	\$ –
Equity securities	294	294	–	–
Fixed income securities				
U.S. Treasuries and agencies	23	22	1	–
Corporate bonds	141	141	–	–
International bonds	60	18	42	–
Total investments at fair value	589	476	113	–
Investments measured at NAV	530			
Total	\$ 1,119	\$ 476	\$ 113	\$ –

The fair values for the other postretirement benefit plans by asset category at December 31, 2016 are as follows:

Asset Category	(dollars in millions)			
	Total	Level 1	Level 2	Level 3
Cash and cash equivalents	\$ 131	\$ 1	\$ 130	\$ –
Equity securities	463	463	–	–
Fixed income securities				
U.S. Treasuries and agencies	23	22	1	–
Corporate bonds	170	145	25	–
International bonds	60	30	30	–
Total investments at fair value	847	661	186	–
Investments measured at NAV	516			
Total	\$ 1,363	\$ 661	\$ 186	\$ –

The following are general descriptions of asset categories, as well as the valuation methodologies and inputs used to determine the fair value of each major category of assets.

Cash and cash equivalents include short-term investment funds (less than 90 days to maturity), primarily in diversified portfolios of investment grade money market instruments and are valued using quoted market prices or other valuation methods. The carrying value of cash equivalents approximates fair value due to the short-term nature of these investments.

Investments in securities traded on national and foreign securities exchanges are valued by the trustee at the last reported sale prices on the last business day of the year or, if no sales were reported on that date, at the last reported bid prices. Government obligations, corporate bonds, international bonds and asset-backed debt are valued using matrix prices with input from independent third-party valuation sources. Over-the-counter securities are valued at the bid prices or the average of the bid and ask prices on the last business day of the year from published sources or, if not available, from other sources considered reliable such as multiple broker quotes.

Commingled funds not traded on national exchanges are priced by the custodian or fund's administrator at their net asset value (NAV). Commingled funds held by third-party custodians appointed by the fund managers provide the fund managers with a NAV. The fund managers have the responsibility for providing this information to the custodian of the respective plan.

The investment manager of the entity values venture capital, corporate finance, and natural resource limited partnership investments. Real estate investments are valued at amounts based upon appraisal reports prepared by either independent real estate appraisers or the investment manager using discounted cash flows or market comparable data. Loans secured by mortgages are carried at the lesser of the unpaid balance or appraised value of the underlying properties. The values assigned to these investments are based upon available and current market information and do not necessarily represent amounts that might ultimately be realized. Because of the inherent uncertainty of valuation, estimated fair values might differ significantly from the values that would have been used had a ready market for the securities existed. These differences could be material.

Forward currency contracts, futures, and options are valued by the trustee at the exchange rates and market prices prevailing on the last business day of the year. Both exchange rates and market prices are readily available from published sources. These securities are classified by the asset class of the underlying holdings.

Hedge funds are valued by the custodian at NAV based on statements received from the investment manager. These funds are valued in accordance with the terms of their corresponding offering or private placement memoranda.

Commingled funds, hedge funds, venture capital, corporate finance, natural resource and real estate limited partnership investments for which fair value is measured using the NAV per share as a practical expedient are not leveled within the fair value hierarchy and are included as a reconciling item to total investments.

Employer Contributions

In 2017, we contributed \$4.0 billion to our qualified pension plans, which included \$3.4 billion of discretionary contributions, \$0.1 billion to our nonqualified pension plans and \$1.3 billion to our other postretirement benefit plans. Nonqualified pension plans contributions are estimated to be \$0.1 billion and contributions to our other postretirement benefit plans are estimated to be \$0.8 billion in 2018.

Severance Benefits

The following table provides an analysis of our severance liability recorded in accordance with the accounting standard regarding employers' accounting for postemployment benefits:

(dollars in millions)					
Year	Beginning of Year	Charged to Expense	Payments	Other	End of Year
2015	\$ 875	\$ 551	\$ (619)	\$ (7)	\$ 800
2016	800	417	(583)	22	656
2017	656	581	(564)	(46)	627

Severance, Pension and Benefit Charges (Credits)

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

Estimated Future Benefit Payments

The benefit payments to retirees are expected to be paid as follows:

(dollars in millions)		
Year	Pension Benefits	Health Care and Life
2018	\$ 2,401	\$ 1,246
2019	2,098	1,249
2020	1,464	1,297
2021	1,212	1,318
2022	1,161	1,336
2023 to 2027	5,526	6,277

Savings Plan and Employee Stock Ownership Plans

We maintain four leveraged employee stock ownership plans (ESOP). We match a certain percentage of eligible employee contributions to certain savings plans with shares of our common stock from this ESOP. At December 31, 2017, the number of allocated shares of common stock in this ESOP was 53 million. There were no unallocated shares of common stock in this ESOP at December 31, 2017. All leveraged ESOP shares are included in earnings per share computations.

Total savings plan costs were \$0.8 billion in 2017, \$0.7 billion in 2016 and \$0.9 billion in 2015.

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

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

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

Note 11 Taxes

The components of income before benefit (provision) for income taxes are as follows:

Years Ended December 31,	(dollars in millions)		
	2017	2016	2015
Domestic	\$ 19,645	\$ 20,047	\$ 27,639
Foreign	949	939	601
Total	\$ 20,594	\$ 20,986	\$ 28,240

The components of the (benefit) provision for income taxes are as follows:

Years Ended December 31,	(dollars in millions)		
	2017	2016	2015
Current			
Federal	\$ 3,630	\$ 7,451	\$ 5,476
Foreign	200	148	70
State and Local	677	842	803
Total	4,507	8,441	6,349
Deferred			
Federal	(14,360)	(933)	3,377
Foreign	(66)	(2)	9
State and Local	(37)	(128)	130
Total	(14,463)	(1,063)	3,516
Total income tax (benefit) provision	\$ (9,956)	\$ 7,378	\$ 9,865

The following table shows the principal reasons for the difference between the effective income tax rate and the statutory federal income tax rate:

Years Ended December 31,	2017	2016	2015
Statutory federal income tax rate	35.0%	35.0%	35.0%
State and local income tax rate, net of federal tax benefits	1.6	2.2	2.1
Affordable housing credit	(0.6)	(0.7)	(0.5)
Employee benefits including ESOP dividend	(0.5)	(0.5)	(0.4)
Impact of tax reform re-measurement	(81.6)	—	—
Noncontrolling interests	(0.6)	(0.6)	(0.5)
Non-deductible goodwill	1.0	2.2	—
Other, net	(2.6)	(2.4)	(0.8)
Effective income tax rate	(48.3)%	35.2%	34.9%

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

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

The amounts of cash taxes paid by Verizon are as follows:

Years Ended December 31,	(dollars in millions)		
	2017	2016	2015
Income taxes, net of amounts refunded	\$ 4,432	\$ 9,577	\$ 5,293
Employment taxes	1,207	1,196	1,284
Property and other taxes	1,737	1,796	1,868
Total	\$ 7,376	\$ 12,569	\$ 8,445

The increase in cash taxes paid during 2016 compared to 2015 was due to a \$3.2 billion increase in income taxes paid primarily as a result of the Access Line Sale.

Deferred taxes arise because of differences in the book and tax bases of certain assets and liabilities. Significant components of deferred tax assets and liabilities are as follows:

At December 31,	(dollars in millions)	
	2017	2016
Employee benefits	\$ 6,174	\$ 10,453
Tax loss and credit carry forwards	4,176	3,318
Other – assets	1,938	2,632
	12,288	16,403
Valuation allowances	(3,293)	(2,473)
Deferred tax assets	8,995	13,930
Spectrum and other intangible amortization	21,148	31,404
Depreciation	14,767	22,848
Other – liabilities	4,281	5,642
Deferred tax liabilities	40,196	59,894
Net deferred tax liability	\$ 31,201	\$ 45,964

The decrease in the net deferred tax liability during 2017 was primarily due to the \$16.8 billion re-measurement of U.S. deferred taxes at the lower 21% U.S. federal corporate income tax rate.

At December 31, 2017, undistributed earnings of our foreign subsidiaries indefinitely invested outside the United States amounted to approximately \$1.8 billion. Due to foreign legal restrictions that require minimum reserves be maintained in certain countries, not all of the foreign undistributed earnings are available for repatriation. No U.S. federal deferred income taxes on these undistributed earnings are required because, under the TCJA, such earnings have been subject to U.S. federal tax as a result of the mandatory repatriation provision. In addition, such earnings will not be subject to U.S. federal tax when actually distributed under the new 100% participation exemption as enacted under the TCJA.

At December 31, 2017, we had net after-tax loss and credit carry forwards for income tax purposes of approximately \$4.2 billion that primarily relate to state and foreign taxes. Of these net after-tax loss and credit carry forwards, approximately \$2.6 billion will expire between 2018 and 2037 and approximately \$1.6 billion may be carried forward indefinitely.

During 2017, the valuation allowance increased approximately \$0.8 billion. The balance of the valuation allowance at December 31, 2017 and the 2017 activity is primarily related to state and foreign taxes.

Unrecognized Tax Benefits

A reconciliation of the beginning and ending balance of unrecognized tax benefits is as follows:

	(dollars in millions)		
	2017	2016	2015
Balance at January 1,	\$ 1,902	\$ 1,635	\$ 1,823
Additions based on tax positions related to the current year	219	338	194
Additions for tax positions of prior years	756	188	330
Reductions for tax positions of prior years	(419)	(153)	(412)
Settlements	(42)	(18)	(79)
Lapses of statutes of limitations	(61)	(88)	(221)
Balance at December 31,	\$ 2,355	\$ 1,902	\$ 1,635

Included in the total unrecognized tax benefits at December 31, 2017, 2016 and 2015 is \$1.9 billion, \$1.5 billion and \$1.2 billion, respectively, that if recognized, would favorably affect the effective income tax rate.

We recognized the following net after-tax (expenses) benefits related to interest and penalties in the provision for income taxes:

Years Ended December 31,	(dollars in millions)
2017	\$ (77)
2016	(25)
2015	43

The after-tax accruals for the payment of interest and penalties in the consolidated balance sheets are as follows:

At December 31,	(dollars in millions)
2017	\$ 269
2016	142

The increase in unrecognized tax benefits during 2017 was primarily related to the acquisition of Yahoo's operating business.

Verizon and/or its subsidiaries file income tax returns in the U.S. federal jurisdiction, and various state, local and foreign jurisdictions. As a large taxpayer, we are under audit by the Internal Revenue Service (IRS) and multiple state and foreign jurisdictions for various open tax years. The IRS is currently examining the Company's U.S. income tax returns for tax years 2013-2014 and Cellco Partnership's U.S. income tax return for tax year 2013-2014. Tax controversies are ongoing for tax years as early as 2005. The amount of the liability for unrecognized tax benefits will change in the next twelve months due to the expiration of the statute of limitations in various jurisdictions and it is reasonably possible that various current tax examinations will conclude or require reevaluations of the Company's tax positions during this period. An estimate of the range of the possible change cannot be made until these tax matters are further developed or resolved.

Note 12

Segment Information

Reportable Segments

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

Our segments and their principal activities consist of the following:

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

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

Corporate and other includes the results of our Media business, branded Oath, our telematics and other businesses, investments in unconsolidated businesses, unallocated corporate expenses, pension and other employee benefit related costs and lease financing. Corporate and other also includes the historical results of divested businesses and other adjustments and gains and losses that are not allocated in assessing segment performance due to their nature. Although such transactions are excluded from the business segment results, they are included in reported consolidated earnings. Gains and losses that are not individually significant are included in all segment results as these items are included in the chief operating decision maker's assessment of segment performance. We completed our acquisition of Yahoo's operating business on June 13, 2017.

On April 1, 2016, we completed the Access Line Sale. Additionally, on May 1, 2017, we completed the Data Center Sale. See Note 2 for additional information. The results of operations for these divestitures and other insignificant transactions are included within Corporate and other for all periods presented to reflect comparable segment operating results consistent with the information regularly reviewed by our chief operating decision maker.

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

The reconciliation of segment operating revenues and expenses to consolidated operating revenues and expenses below includes the effects of special items that management does not consider in assessing segment performance, primarily because of their nature.

We have adjusted prior period consolidated and segment information, where applicable, to conform to the current year presentation.

The following table provides operating financial information for our two reportable segments:

	(dollars in millions)		
2017	Wireless	Wireline	Total Reportable Segments
External Operating Revenues			
Service	\$ 62,972	\$ —	\$ 62,972
Equipment	18,889	—	18,889
Other	5,270	—	5,270
Consumer Markets	—	12,775	12,775
Enterprise Solutions	—	9,165	9,165
Partner Solutions	—	3,969	3,969
Business Markets	—	3,585	3,585
Other	—	234	234
Intersegment revenues	380	952	1,332
Total operating revenues	87,511	30,680	118,191
Cost of services	7,990	17,922	25,912
Wireless cost of equipment	22,147	—	22,147
Selling, general and administrative expense	18,772	6,274	25,046
Depreciation and amortization expense	9,395	6,104	15,499
Total operating expenses	58,304	30,300	88,604
Operating income	\$ 29,207	\$ 380	\$ 29,587
Assets	\$ 235,873	\$ 75,282	\$ 311,155
Property, plant and equipment, net	43,935	41,351	85,286
Capital expenditures	10,310	5,339	15,649
	(dollars in millions)		
2016	Wireless	Wireline	Total Reportable Segments
External Operating Revenues			
Service	\$ 66,362	\$ —	\$ 66,362
Equipment	17,511	—	17,511
Other	4,915	—	4,915
Consumer Markets	—	12,751	12,751
Enterprise Solutions	—	9,162	9,162
Partner Solutions	—	3,976	3,976
Business Markets	—	3,356	3,356
Other	—	314	314
Intersegment revenues	398	951	1,349
Total operating revenues	89,186	30,510	119,696
Cost of services	7,988	18,353	26,341
Wireless cost of equipment	22,238	—	22,238
Selling, general and administrative expense	19,924	6,476	26,400
Depreciation and amortization expense	9,183	5,975	15,158
Total operating expenses	59,333	30,804	90,137
Operating income (loss)	\$ 29,853	\$ (294)	\$ 29,559
Assets	\$ 211,345	\$ 66,679	\$ 278,024
Property, plant and equipment, net	42,898	40,205	83,103
Capital expenditures	11,240	4,504	15,744

	(dollars in millions)		
2015	Wireless	Wireline	Total Reportable Segments
External Operating Revenues			
Service	\$ 70,305	\$ —	\$ 70,305
Equipment	16,924	—	16,924
Other	4,294	—	4,294
Consumer Markets	—	12,696	12,696
Enterprise Solutions	—	9,376	9,376
Partner Solutions	—	4,228	4,228
Business Markets	—	3,553	3,553
Other	—	330	330
Intersegment revenues	157	967	1,124
Total operating revenues	91,680	31,150	122,830
Cost of services	7,803	18,483	26,286
Wireless cost of equipment	23,119	—	23,119
Selling, general and administrative expense	21,805	7,140	28,945
Depreciation and amortization expense	8,980	6,353	15,333
Total operating expenses	61,707	31,976	93,683
Operating income (loss)	\$ 29,973	\$ (826)	\$ 29,147
Assets	\$ 185,405	\$ 78,305	\$ 263,710
Property, plant and equipment, net	40,911	41,044	81,955
Capital expenditures	11,725	5,049	16,774

Reconciliation to Consolidated Financial Information

A reconciliation of the reportable segment operating revenues to consolidated operating revenues is as follows:

	(dollars in millions)		
Years Ended December 31,	2017	2016	2015
Operating Revenues			
Total reportable segments	\$ 118,191	\$ 119,696	\$ 122,830
Corporate and other	9,019	5,663	3,738
Reconciling items:			
Operating results from divested businesses (Note 2)	368	2,115	6,224
Eliminations	(1,544)	(1,494)	(1,172)
Consolidated operating revenues	\$ 126,034	\$ 125,980	\$ 131,620

Fios revenues are included within our Wireline segment and amounted to approximately \$11.7 billion, \$11.2 billion, and \$10.7 billion for the years ended December 31, 2017, 2016 and 2015, respectively.

A reconciliation of the total of the reportable segments' operating income to consolidated income before provision for income taxes is as follows:

Years Ended December 31,	(dollars in millions)		
	2017	2016	2015
Operating Income			
Total reportable segments	\$ 29,587	\$ 29,559	\$ 29,147
Corporate and other	(1,409)	(1,721)	(1,720)
Reconciling items:			
Severance, pension and benefit (charges) credits (Note 10)	(1,391)	(2,923)	2,256
Net gain on sale of divested businesses (Note 2)	1,774	1,007	—
Acquisition and integration related charges (Note 2)	(884)	—	—
Gain on spectrum license transactions (Note 2)	270	142	254
Operating results from divested businesses	149	995	3,123
Product realignment	(682)	—	—
Consolidated operating income	27,414	27,059	33,060
Equity in losses of unconsolidated businesses	(77)	(98)	(86)
Other income (expense), net	(2,010)	(1,599)	186
Interest expense	(4,733)	(4,376)	(4,920)
Income Before Benefit (Provision) For Income Taxes	\$ 20,594	\$ 20,986	\$ 28,240

A reconciliation of the total of the reportable segments' assets to consolidated assets is as follows:

At December 31,	(dollars in millions)	
	2017	2016
Assets		
Total reportable segments	\$ 311,155	\$ 278,024
Corporate and other	239,040	213,787
Eliminations	(293,052)	(247,631)
Total consolidated	\$ 257,143	\$ 244,180

No single customer accounted for more than 10% of our total operating revenues during the years ended December 31, 2017, 2016 and 2015. International operating revenues and long-lived assets are not significant.

Note 13 Comprehensive Income

Comprehensive income consists of net income and other gains and losses affecting equity that, under U.S. GAAP, are excluded from net income. Significant changes in the components of Other comprehensive income, net of provision for income taxes are described below.

Accumulated Other Comprehensive Income

The changes in the balances of Accumulated other comprehensive income by component are as follows:

(dollars in millions)

	Foreign currency translation adjustments	Unrealized gains (losses) on cash flow hedges	Unrealized losses on marketable securities	Defined benefit pension and postretirement plans	Total
Balance at January 1, 2015	\$ (346)	\$ (84)	\$ 112	\$ 1,429	\$ 1,111
Other comprehensive loss	(208)	(1,063)	(5)	–	(1,276)
Amounts reclassified to net income	–	869	(6)	(148)	715
Net other comprehensive loss	(208)	(194)	(11)	(148)	(561)
Balance at December 31, 2015	(554)	(278)	101	1,281	550
Other comprehensive (loss) income	(159)	(225)	(13)	2,881	2,484
Amounts reclassified to net income	–	423	(42)	(742)	(361)
Net other comprehensive (loss) income	(159)	198	(55)	2,139	2,123
Balance at December 31, 2016	(713)	(80)	46	3,420	2,673
Other comprehensive income	245	818	10	327	1,400
Amounts reclassified to net income	–	(849)	(24)	(541)	(1,414)
Net other comprehensive income (loss)	245	(31)	(14)	(214)	(14)
Balance at December 31, 2017	\$ (468)	\$ (111)	\$ 32	\$ 3,206	\$2,659

The amounts presented above in net other comprehensive income (loss) are net of taxes. The amounts reclassified to net income related to unrealized gain (loss) on cash flow hedges in the table above are included in Other income (expense), net and Interest expense on our consolidated statements of income. See Note 8 for additional information. The amounts reclassified to net income related to unrealized gain (loss) on marketable securities in the table above are included in Other income (expense), net on our consolidated statements of income. The amounts reclassified to net income related to defined benefit pension and postretirement plans in the table above are included in Cost of services and Selling, general and administrative expense on our consolidated statements of income. See Note 10 for additional information.

Note 14 Additional Financial Information

The tables that follow provide additional financial information related to our consolidated financial statements:

Income Statement Information

Years Ended December 31,	(dollars in millions)		
	2017	2016	2015
Depreciation expense	\$ 14,741	\$ 14,227	\$ 14,323
Interest costs on debt balances	5,256	4,961	5,391
Net amortization of debt discount	155	119	113
Capitalized interest costs	(678)	(704)	(584)
Advertising expense	2,643	2,744	2,749

Balance Sheet Information

(dollars in millions)

At December 31,	2017	2016
<i>Accounts Payable and Accrued Liabilities</i>		
Accounts payable	\$ 7,063	\$ 7,084
Accrued expenses	6,756	5,717
Accrued vacation, salaries and wages	4,521	3,813
Interest payable	1,409	1,463
Taxes payable	1,483	1,516
	\$ 21,232	\$ 19,593
<i>Other Current Liabilities</i>		
Advance billings and customer deposits	\$ 3,084	\$ 2,914
Dividends payable	2,429	2,375
Other	2,839	2,813
	\$ 8,352	\$ 8,102

Cash Flow Information

Years Ended December 31,	(dollars in millions)		
	2017	2016	2015
Cash Paid			
Interest, net of amounts capitalized	\$ 4,369	\$ 4,085	\$ 4,491
Income taxes, net of amounts refunded	4,432	9,577	5,293
Other, net Cash Flows from Operating Activities			
Changes in device payment plan agreement receivables-non-current	\$ (579)	\$ (3,303)	\$ (23)
Proceeds from Tower Monetization Transaction	–	–	2,346
Other, net	1,251	206	(3,637)
	\$ 672	\$ (3,097)	\$ (1,314)
Other, net Cash Flows from Financing Activities			
Net debt related costs	\$ (3,599)	\$ (1,991)	\$ (422)
Proceeds from Tower Monetization Transaction	–	–	2,742
Other, net	(1,253)	(806)	(743)
	\$ (4,852)	\$ (2,797)	\$ 1,577

On March 3, 2017, the Verizon Board of Directors authorized a new share buyback program to repurchase up to 100 million shares of the company's common stock. The new program will terminate when the aggregate number of shares purchased reaches 100 million, or at the close of business on February 28, 2020, whichever is sooner. During the years ended December 31, 2017 and 2016, Verizon did not repurchase any shares of Verizon's common stock under our authorized share buyback programs. During the year ended December 31, 2015, Verizon repurchased approximately 2.8 million shares of the Company's common stock under our previous share buyback program for approximately \$0.1 billion. At December 31, 2017, the maximum number of shares that could be purchased by or on behalf of Verizon under our share buyback program was 100 million.

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

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

**Note 15
Commitments and Contingencies**

In the ordinary course of business, Verizon is involved in various commercial litigation and regulatory proceedings at the state and federal level. Where it is determined, in consultation with counsel based on litigation and settlement risks, that a loss is probable and estimable in a given matter, the Company establishes an accrual. In none of the currently pending matters is the amount of accrual material. An estimate of the reasonably possible loss or range of loss in excess of the amounts already accrued cannot be made at this time due to various factors typical in contested proceedings, including (1) uncertain damage theories and demands; (2) a less than complete factual record; (3) uncertainty concerning legal theories and their resolution by courts or regulators; and (4) the unpredictable nature of the opposing party and its demands. We continuously monitor these proceedings as they develop and adjust any accrual or disclosure as needed. We do not expect that the ultimate resolution of any pending regulatory or legal matter in future periods, including the Hicksville matter described below, will have a material effect on our financial condition, but it could have a material effect on our results of operations for a given reporting period.

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

Verizon is currently involved in approximately 40 federal district court actions alleging that Verizon is infringing various patents. Most of these cases are brought by non-practicing entities and effectively seek only monetary damages; a small number are brought by companies that have sold products and could seek injunctive relief as well. These cases have progressed to various stages and a small number may go to trial in the coming 12 months if they are not otherwise resolved.

In connection with the execution of agreements for the sales of businesses and investments, Verizon ordinarily provides representations and warranties to the purchasers pertaining to a variety of nonfinancial matters, such as ownership of the securities being sold, as well as indemnity from certain financial losses. From time to time, counterparties may make claims under these provisions, and Verizon will seek to defend against those claims and resolve them in the ordinary course of business.

Subsequent to the sale of Verizon Information Services Canada in 2004, we continue to provide a guarantee to publish directories, which was issued when the directory business was purchased in 2001 and had a 30-year term (before extensions). The preexisting guarantee continues, without modification, despite the subsequent sale of Verizon Information Services Canada and the spin-off of our domestic print and Internet yellow pages directories business. The possible financial impact of the guarantee, which is not expected to be adverse, cannot be reasonably estimated as a variety of the potential outcomes available under the guarantee result in costs and revenues or benefits that may offset each other. We do not believe performance under the guarantee is likely.

As of December 31, 2017, letters of credit totaling approximately \$0.6 billion, which were executed in the normal course of business and support several financing arrangements and payment obligations to third parties, were outstanding.

We have several commitments, totaling \$21.0 billion, primarily to purchase programming and network services, equipment, software and marketing services, which will be used or sold in the ordinary course of business, from a variety of suppliers. Of this total amount, \$7.6 billion is attributable to 2018, \$9.0 billion is attributable to 2019 through 2020, \$2.1 billion is attributable to 2021 through 2022 and \$2.3 billion is attributable to years thereafter. These amounts do not represent our entire anticipated purchases in the future, but represent only those items that are the subject of contractual obligations. Our commitments are generally determined based on the noncancelable quantities or termination amounts. Purchases against our commitments totaled approximately \$8.2 billion for 2017, \$8.1 billion for 2016, and \$10.2 billion for 2015. Since the commitments to purchase programming services from television networks and broadcast stations have no minimum volume requirement, we estimated our obligation based on number of subscribers at December 31, 2017, and applicable rates stipulated in the contracts in effect at that time. We also purchase products and services as needed with no firm commitment.

Note 16

Quarterly Financial Information (Unaudited)

(dollars in millions, except per share amounts)
Net Income attributable to Verizon ⁽¹⁾

Quarter Ended	Operating Revenues	Operating Income	Amount	Per Share-Basic	Per Share-Diluted	Net Income
2017						
March 31	\$ 29,814	\$ 7,181	\$ 3,450	\$ 0.85	\$ 0.84	\$ 3,553
June 30	30,548	8,232	4,362	1.07	1.07	4,478
September 30	31,717	7,208	3,620	0.89	0.89	3,736
December 31	33,955	4,793	18,669	4.57	4.56	18,783
2016						
March 31	\$ 32,171	\$ 7,942	\$ 4,310	\$ 1.06	\$ 1.06	\$ 4,430
June 30	30,532	4,554	702	0.17	0.17	831
September 30	30,937	6,540	3,620	0.89	0.89	3,747
December 31	32,340	8,023	4,495	1.10	1.10	4,600

⁽¹⁾ Net income attributable to Verizon per common share is computed independently for each quarter and the sum of the quarters may not equal the annual amount.

- Results of operations for the first quarter of 2017 include after-tax charges attributable to Verizon of \$0.5 billion related to early debt redemption costs, as well as after-tax credits attributable to Verizon of \$0.1 billion related to a gain on spectrum license transactions.
- Results of operations for the second quarter of 2017 include after-tax charges attributable to Verizon of \$0.1 billion related to severance, pension and benefit charges, and after-tax charges attributable to Verizon of \$0.4 billion related to acquisition and integration related charges, as well as after-tax credits attributable to Verizon of \$0.9 billion related to a net gain on sale of divested businesses.
- Results of operations for the third quarter of 2017 include after-tax charges attributable to Verizon of \$0.3 billion related to early debt redemption costs and after-tax charges attributable to Verizon of \$0.1 billion related to acquisition and integration related charges.
- Results of operations for the fourth quarter of 2017 include after-tax credits attributable to Verizon of \$16.8 billion related to the impact of tax reform, after-tax charges attributable to Verizon of \$0.7 billion related to severance, pension and benefit charges, after-tax charges attributable to Verizon of \$0.5 billion related to product realignment costs, as well as after-tax charges attributable to Verizon of \$0.4 billion related to early debt redemption costs. In addition, results of operations for the fourth quarter of 2017 include after-tax credits attributable to Verizon of \$0.1 billion related to a gain on spectrum license transactions and after-tax charges attributable to Verizon of \$0.1 billion related to acquisition and integration related charges.
- Results of operations for the first quarter of 2016 include after-tax charges attributable to Verizon of \$0.1 billion related to a pension remeasurement, as well as after-tax credits attributable to Verizon of \$0.1 billion related to a gain on spectrum license transactions.
- Results of operations for the second quarter of 2016 include after-tax charges attributable to Verizon of \$2.2 billion related to pension and benefit remeasurements and after-tax charges attributable to Verizon of \$1.1 billion related to early debt redemption costs, as well as after-tax credits attributable to Verizon of \$0.1 billion related to a gain on the Access Line Sale.
- Results of operations for the third quarter of 2016 include after-tax charges attributable to Verizon of \$0.5 billion related to a pension remeasurement and severance costs.
- Results of operations for the fourth quarter of 2016 include after-tax credits attributable to Verizon of \$1.0 billion related to severance, pension and benefit credits.