Consolidated Statements of Income

Years Ended December 31,	2018	2017	2016
	(dollars in millions, except per share amounts)		
Operating Revenues			
Service revenues and other	**$ 108,605**	$ 107,145	$ 108,468
Wireless equipment revenues	**22,258**	18,889	17,512
Total Operating Revenues	**130,863**	126,034	125,980
Operating Expenses			
Cost of services (exclusive of items shown below)	**32,185**	30,916	30,463
Wireless cost of equipment	**23,323**	22,147	22,238
Selling, general and administrative expense (including net gain on sale of divested businesses of $0, $1,774 and $1,007, respectively)	**31,083**	28,592	28,102
Depreciation and amortization expense	**17,403**	16,954	15,928
Oath goodwill impairment	**4,591**	–	–
Total Operating Expenses	**108,585**	98,609	96,731
Operating Income	**22,278**	27,425	29,249
Equity in losses of unconsolidated businesses	**(186)**	(77)	(98)
Other income (expense), net	**2,364**	(2,021)	(3,789)
Interest expense	**(4,833)**	(4,733)	(4,376)
Income Before (Provision) Benefit For Income Taxes	**19,623**	20,594	20,986
(Provision) benefit for income taxes	**(3,584)**	9,956	(7,378)
Net Income	**$ 16,039**	$ 30,550	$ 13,608
Net income attributable to noncontrolling interests	**$ 511**	$ 449	$ 481
Net income attributable to Verizon	**15,528**	30,101	13,127
Net Income	**$ 16,039**	$ 30,550	$ 13,608
Basic Earnings Per Common Share			
Net income attributable to Verizon	**$ 3.76**	$ 7.37	$ 3.22
Weighted-average shares outstanding (in millions)	**4,128**	4,084	4,080
Diluted Earnings Per Common Share			
Net income attributable to Verizon	**$ 3.76**	$ 7.36	$ 3.21
Weighted-average shares outstanding (in millions)	**4,132**	4,089	4,086

See Notes to Consolidated Financial Statements

Consolidated Statements of Comprehensive Income

Years Ended December 31,	2018	2017	2016
			(dollars in millions)
Net Income	**$ 16,039**	$ 30,550	$ 13,608
Other Comprehensive Income (Loss), Net of Tax (Expense) Benefit			
Foreign currency translation adjustments	**(117)**	245	(159)
Unrealized gain (loss) on cash flow hedges, net of tax of $(19), $20 and $(168)	**55**	(31)	198
Unrealized gain (loss) on marketable securities, net of tax of $0, $10 and $26	**1**	(14)	(55)
Defined benefit pension and postretirement plans, net of tax of $284, $144 and $(1,339)	**(858)**	(214)	2,139
Other comprehensive income (loss) attributable to Verizon	**(919)**	(14)	2,123
Total Comprehensive Income	**$ 15,120**	$ 30,536	$ 15,731
Comprehensive income attributable to noncontrolling interests	**$ 511**	$ 449	$ 481
Comprehensive income attributable to Verizon	**14,609**	30,087	15,250
Total Comprehensive Income	**$ 15,120**	$ 30,536	$ 15,731

See Notes to Consolidated Financial Statements

Consolidated Balance Sheets

(dollars in millions, except per share amounts)

At December 31,	2018	2017
Assets		
Current assets		
Cash and cash equivalents	**$ 2,745**	$ 2,079
Accounts receivable, net of allowances of $765 and $939	**25,102**	23,493
Inventories	**1,336**	1,034
Prepaid expenses and other	**5,453**	3,307
Total current assets	**34,636**	29,913
Property, plant and equipment	**252,835**	246,498
Less accumulated depreciation	**163,549**	157,930
Property, plant and equipment, net	**89,286**	88,568
Investments in unconsolidated businesses	**671**	1,039
Wireless licenses	**94,130**	88,417
Goodwill	**24,614**	29,172
Other intangible assets, net	**9,775**	10,247
Other assets	**11,717**	9,787
Total assets	**$ 264,829**	$ 257,143
Liabilities and Equity		
Current liabilities		
Debt maturing within one year	**$ 7,190**	$ 3,453
Accounts payable and accrued liabilities	**22,501**	21,232
Other current liabilities	**8,239**	8,352
Total current liabilities	**37,930**	33,037
Long-term debt	**105,873**	113,642
Employee benefit obligations	**18,599**	22,112
Deferred income taxes	**33,795**	31,232
Other liabilities	**13,922**	12,433
Total long-term liabilities	**172,189**	179,419
Commitments and Contingencies (Note 16)		
Equity		
Series preferred stock ($0.10 par value; 250,000,000 shares authorized; none issued)	**–**	–
Common stock ($0.10 par value; 6,250,000,000 shares authorized in each period; 4,291,433,646 and 4,242,374,240 shares issued)	**429**	424
Additional paid in capital	**13,437**	11,101
Retained earnings	**43,542**	35,635
Accumulated other comprehensive income	**2,370**	2,659
Common stock in treasury, at cost (159,400,267 and 162,897,868 shares outstanding)	**(6,986)**	(7,139)
Deferred compensation – employee stock ownership plans and other	**353**	416
Noncontrolling interests	**1,565**	1,591
Total equity	**54,710**	44,687
Total liabilities and equity	**$ 264,829**	$ 257,143

See Notes to Consolidated Financial Statements

Consolidated Statements of Cash Flows

Years Ended December 31,	2018	(dollars in millions) 2017	2016
Cash Flows from Operating Activities			
Net Income	**$ 16,039**	$ 30,550	$ 13,608
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization expense	**17,403**	16,954	15,928
Employee retirement benefits	**(2,657)**	440	2,705
Deferred income taxes	**389**	(14,463)	(1,063)
Provision for uncollectible accounts	**980**	1,167	1,420
Equity in losses of unconsolidated businesses, net of dividends received	**231**	117	138
Net gain on sale of divested businesses	**–**	(1,774)	(1,007)
Oath goodwill impairment	**4,591**	–	–
Changes in current assets and liabilities, net of effects from acquisition/disposition of businesses:			
Accounts receivable	**(2,667)**	(5,674)	(5,067)
Inventories	**(324)**	168	61
Prepaid expenses and other	**37**	27	(660)
Accounts payable and accrued liabilities and Other current liabilities	**1,777**	(459)	(1,089)
Discretionary employee benefits contributions	**(1,679)**	(3,411)	(186)
Other, net	**219**	676	(3,099)
Net cash provided by operating activities	**34,339**	24,318	21,689
Cash Flows from Investing Activities			
Capital expenditures (including capitalized software)	**(16,658)**	(17,247)	(17,059)
Acquisitions of businesses, net of cash acquired	**(230)**	(5,880)	(3,765)
Acquisitions of wireless licenses	**(1,429)**	(583)	(534)
Proceeds from dispositions of businesses	**–**	3,614	9,882
Other, net	**383**	1,640	1,602
Net cash used in investing activities	**(17,934)**	(18,456)	(9,874)
Cash Flows from Financing Activities			
Proceeds from long-term borrowings	**5,967**	27,707	12,964
Proceeds from asset-backed long-term borrowings	**4,810**	4,290	4,986
Repayments of long-term borrowings and capital lease obligations	**(10,923)**	(23,837)	(19,159)
Repayments of asset-backed long-term borrowings	**(3,635)**	(400)	–
Dividends paid	**(9,772)**	(9,472)	(9,262)
Other, net	**(1,824)**	(4,439)	(2,905)
Net cash used in financing activities	**(15,377)**	(6,151)	(13,376)
Increase (decrease) in cash, cash equivalents and restricted cash	**1,028**	(289)	(1,561)
Cash, cash equivalents and restricted cash, beginning of period	**2,888**	3,177	4,738
Cash, cash equivalents and restricted cash, end of period (Note 1)	**$ 3,916**	$ 2,888	$ 3,177

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,	2018 Shares	2018 Amount	2017 Shares	2017 Amount	2016 Shares	2016 Amount
Common Stock						
Balance at beginning of year	**4,242,374**	**$ 424**	4,242,374	$ 424	4,242,374	$ 424
Common shares issued	**49,059**	**5**	–	–	–	–
Balance at end of year	**4,291,433**	**429**	4,242,374	424	4,242,374	424
Additional Paid In Capital						
Balance at beginning of year		**11,101**		11,182		11,196
Other		**2,336**		(81)		(14)
Balance at end of year		**13,437**		11,101		11,182
Retained Earnings						
Balance at beginning of year		**35,635**		15,059		11,246
Opening balance sheet adjustment (Note 1)		**2,232**		–		–
Adjusted opening balance		**37,867**		15,059		11,246
Net income attributable to Verizon		**15,528**		30,101		13,127
Dividends declared ($2.385, $2.335, $2.285 per share)		**(9,853)**		(9,525)		(9,314)
Balance at end of year		**43,542**		35,635		15,059
Accumulated Other Comprehensive Income						
Balance at beginning of year attributable to Verizon		**2,659**		2,673		550
Opening balance sheet adjustment (Note 1)		**630**		–		–
Adjusted opening balance		**3,289**		2,673		550
Foreign currency translation adjustments		**(117)**		245		(159)
Unrealized gain (loss) on cash flow hedges		**55**		(31)		198
Unrealized gain (loss) on marketable securities		**1**		(14)		(55)
Defined benefit pension and postretirement plans		**(858)**		(214)		2,139
Other comprehensive income (loss)		**(919)**		(14)		2,123
Balance at end of year attributable to Verizon		**2,370**		2,659		2,673
Treasury Stock						
Balance at beginning of year	**(162,898)**	**(7,139)**	(165,690)	(7,263)	(169,199)	(7,416)
Employee plans (Note 15)	**3,494**	**153**	2,787	124	3,439	150
Shareholder plans (Note 15)	**4**	**–**	5	–	70	3
Balance at end of year	**(159,400)**	**(6,986)**	(162,898)	(7,139)	(165,690)	(7,263)
Deferred Compensation-ESOPs and Other						
Balance at beginning of year		**416**		449		428
Restricted stock equity grant		**162**		157		223
Amortization		**(225)**		(190)		(202)
Balance at end of year		**353**		416		449
Noncontrolling Interests						
Balance at beginning of year		**1,591**		1,508		1,414
Opening balance sheet adjustment (Note 1)		**44**		–		–
Adjusted opening balance		**1,635**		1,508		1,414
Net income attributable to noncontrolling interests		**511**		449		481
Total comprehensive income		**511**		449		481
Distributions and other		**(581)**		(366)		(387)
Balance at end of year		**1,565**		1,591		1,508
Total Equity		**$ 54,710**		$ 44,687		$ 24,032

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 offer voice, data and video services and solutions on our networks that are designed to meet customers' demand for mobility, network connectivity, security and control. We have two reportable segments, Wireless and Wireline. See Note 13 for additional information regarding our business segments.

The Wireless segment provides wireless communications products and services, including wireless voice and data services and equipment sales, across the United States (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.

The Wireline segment provides communications products and enhanced services, including 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 November 2018, we announced a strategic reorganization of our business. We are modifying our internal and external reporting processes, systems and internal controls to accommodate the new structure and expect to transition to the new segment reporting structure during the second quarter of 2019. We continue to report operating results to our chief operating decision maker under our current operating segments.

Consolidation

The method of accounting applied to investments, whether consolidated, or equity, 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. Equity 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 value measurements, including those related to financial instruments, goodwill, spectrum licenses and intangible assets, unrecognized tax benefits, valuation allowances on tax assets, pension and postretirement benefit obligations, contingencies and the identification and valuation of assets acquired and liabilities assumed in connection with business combinations.

Revenue Recognition

We earn revenue from contracts with customers, primarily through the provision of telecommunications and other services and through the sale of wireless equipment. We account for these revenues under Accounting Standards Update (ASU) 2014-09, "Revenue from Contracts with Customers" (Topic 606), which we adopted on January 1, 2018, using the modified retrospective approach. This standard update, along with related subsequently issued updates, clarifies the principles for recognizing revenue and develops a common revenue standard U.S. GAAP. The standard update 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.

We also earn revenues that are not accounted for under Topic 606 from leasing arrangements (such as those for towers and equipment), captive reinsurance arrangements primarily related to wireless device insurance and the interest on equipment financed under a device payment plan agreement when sold to the customer by an authorized agent.

Wireless

Our Wireless segment earns revenue primarily by providing access to and usage of our telecommunications network and selling equipment. Performance obligations in a typical contract, as determined in accordance with Topic 606, with a customer include service and equipment.

Service

We offer our wireless services through a variety of plans on a postpaid or prepaid basis. For wireless service, we recognize revenue using an output method, either as the service allowance units are used or as time elapses, because it reflects the pattern by which we satisfy our performance obligation through the transfer of service to the customer. Monthly service is generally billed in advance, which results in a contract liability. See Note 2 for additional information. For postpaid plans where monthly usage exceeds the allowance, the overage usage represents options held by the customer for incremental services and the usage-based fee is recognized when the customer exercises the option (typically on a month-to-month basis).

Wireless Equipment

We sell wireless devices and accessories. Equipment revenue is generally recognized when the products are delivered to and accepted by the customer, as this is when control passes to the customer. In addition to offering the sale of equipment on a standalone basis, we have two primary offerings through which customers pay for a wireless device, in connection with a service contract: fixed-term plans and device payment plans.

Under a fixed-term plan, the customer is sold the wireless device without any upfront charge or at a discounted price in exchange for entering into a fixed-term service contract (typically for a term of 24 months or less).

Under a device payment plan, the customer is sold the wireless device in exchange for a non-interest bearing installment note, which is repaid by the customer, typically over a 24-month term, and concurrently enters into a month-to-month contract for wireless service. We may offer certain promotions that provide billing credits applied over a specified term, contingent upon the customer maintaining service. The credits are included in the transaction price, which are allocated to the performance obligations based on their relative selling price, and are recognized when earned.

A financing component exists in both our fixed-term plans and device payment plans because the timing of the payment for the device, which occurs over the contract term, differs from the satisfaction of the performance obligation, which occurs at contract inception upon transfer of device to the customer. We periodically assess, at the contract level, the significance of the financing component inherent in our fixed-term and device payment plan receivable based on qualitative and quantitative considerations related to our customer classes. These considerations include assessing the commercial objective of our plans, the term and duration of financing provided, interest rates prevailing in the marketplace, and credit risks of our customer classes, all of which impact our selection of appropriate discount rates. Based on current facts and circumstances, we determined that the financing component in our existing Wireless direct channel device payments and fixed-term contracts with customers is not significant and therefore is not accounted for separately. See Note 8 for additional information on the interest on equipment financed on a device payment plan agreement when sold to the customer by an authorized agent in our indirect channel.

Wireless Contracts

Total contract revenue, which represents the transaction price for wireless service and wireless equipment, is allocated between service and equipment revenue based on their estimated standalone selling prices. We estimate the standalone selling price of the device or accessory to be its retail price excluding subsidies or conditional purchase discounts. We estimate the standalone selling price of wireless service to be the price that we offer to customers on month-to-month contracts that can be cancelled at any time without penalty (i.e., when there is no fixed-term for service) or when service is procured without the concurrent purchase of a wireless device. In addition, we also assess whether the service term is impacted by certain legally enforceable rights and obligations in our contract with customers, such as penalties that a customer would have to pay to early terminate a fixed-term contract or billing credits that would cease if the month-to-month wireless service is canceled. The assessment of these legally enforceable rights and obligations involves judgment and impacts our determination of the transaction price and related disclosures.

From time to time, we may offer certain promotions that provide our customers on device payment plans with the right to upgrade to a new device after paying a specified portion of their device payment plan agreement amount and trading in their device in good working order. We account for this trade-in right as a guarantee obligation. The full amount of the trade-in right's fair value is recognized as a guarantee liability and results in a reduction to the revenue recognized upon the sale of the device. The guarantee obligation was insignificant at December 31, 2018 and 2017. The total transaction price is reduced by the guarantee obligation, which is accounted for outside the scope of Topic 606, and the remaining transaction price is allocated between the performance obligations within the contract.

Our fixed-term plans generally include the sale of a wireless device at subsidized prices. This results in the creation of a contract asset at the time of sale, which represents the recognition of equipment revenue in excess of amounts billed.

For our device payment plans, billing credits are accounted for as consideration payable to a customer and are included in the determination of total transaction price, resulting in a contract liability.

We may provide a right of return on our products and services for a short time period after a sale. These rights are accounted for as variable consideration when determining the transaction price, and accordingly we recognize revenue based on the estimated amount to which we expect to be entitled after considering expected returns. Returns and credits are estimated at contract inception and updated at the end of each reporting period as additional information becomes available. We also may provide credits or incentives on our products and services for contracts with resellers, which are accounted for as variable consideration when estimating the amount of revenue to recognize. These amounts have not been significant.

For certain bundled offerings/transactions involving third-party service providers, we evaluate gross versus net considerations by assessing indicators of control. These offerings have not been significant.

Wireline

Our Wireline segment earns revenue primarily by providing our customers with services involving access to our telecommunications network and facilities. These services include a variety of communication and connectivity services for our consumer and business customers and other carriers that use our facilities to provide services to their customers, as well as professional and integrated managed services for our large enterprises and government customers. We offer these services to customers that we categorize in the following customer groups: Consumer Markets, Enterprise Solutions, Partner Solutions and Business Markets.

Service

For Wireline service, in general, fixed monthly fees for service are billed one month in advance and service revenue is recognized over the enforceable contract term as the service is rendered, as the customer simultaneously receives and consumes the benefits of the services through network access and usage. While substantially all of our Wireline service revenues are the result of providing access to our network, revenue from services that are not fixed in amount and, instead, are based on usage are generally billed in arrears and recognized as the usage occurs.

For communication and connectivity services provided to our residential customers, which are sold to these customers on a standalone basis or as part of a bundle, we recognize service revenue over time since control over these services passes to the customer as the service is rendered. Service revenue is recognized ratably each month.

Wireline Contracts

Total consideration, for services that are bundled in a single contract, is allocated to each performance obligation based on our standalone selling price for each service. While many contracts include one or more service performance obligations, the revenue recognition pattern is generally not impacted by the allocation since the services are generally satisfied over the same period of time. We estimate the standalone selling price to be the price of the services when sold on a standalone basis without any promotional discount. In addition, we also assess whether the service term is impacted by certain legally enforceable rights and obligations in our contract with customers such as penalties that a customer would have to pay to early terminate a fixed-term contract. The assessment of these legally enforceable rights and obligations involves judgment and impacts our determination of transaction price and related disclosures.

We may provide performance-based credits or incentives on our products and services for contracts with our Enterprise Solutions, Partner Solutions and some Business Markets customers, which are accounted for as variable consideration when estimating the transaction price. Credits are estimated at contract inception and are updated at the end of each reporting period as additional information becomes available.

For certain bundled offerings/transactions involving third-party service providers, we evaluate gross versus net considerations by assessing indicators of control. These offerings have not been significant.

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. Our Media business, Verizon Media, which operated in 2018 under the "Oath" brand, primarily earns revenue through display advertising on Verizon Media properties, as well as on third-party properties through our advertising platforms, search advertising and subscription arrangements. We recognize revenue at a point in time for our display and search advertising contracts and over time for our subscription contracts. We determined that we are generally the principal in transactions carried out through our advertising platforms, and therefore report gross revenue based on the amount billed to our customers. Where we are the principal, we concluded that while the control and transfer of digital advertising inventory occurs in a rapid, real-time environment, our proprietary technology enables us to identify, enhance, verify and solely control digital advertising inventory that we then sell to our customers. Our control is further supported by us being primarily responsible to our customers for fulfillment and the fact that we can exercise a level of discretion over pricing.

Verizon Connect primarily earns revenue through subscription services. We recognize revenue over time for our subscription contracts.

We report taxes collected from customers on behalf of governmental authorities on revenue-producing transactions on a net basis.

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 15 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 4 million, 5 million and 6 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, 2018, 2017 and 2016, respectively.

Cash, Cash Equivalents and Restricted Cash

We consider all highly liquid investments with an original 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.

Cash collections on the device payment plan agreement receivables collateralizing asset-backed debt securities 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 in our consolidated balance sheets.

Cash, cash equivalents and restricted cash are included in the following line items on the consolidated balance sheets:

			(dollars in millions)
At December 31,	**2018**	2017	Increase
Cash and cash equivalents	**$ 2,745**	$ 2,079	$ 666
Restricted cash:			
Prepaid expenses and other	**1,047**	693	354
Other assets	**124**	116	8
Cash, cash equivalents and restricted cash	**$ 3,916**	$ 2,888	$ 1,028

Investments in Debt and Equity Securities

Investments in equity securities that are not accounted for under equity method accounting or result in consolidation are to be measured at fair value. For investments in equity securities without readily determinable fair values, Verizon elects the measurement alternative permitted under GAAP to measure these investments at cost, less any impairment, plus or minus changes resulting from observable price changes in orderly transactions for an identical or similar investment of the same issuer. For investments in debt securities without quoted prices, Verizon uses an alternative matrix pricing method. Investments in equity securities that do not result in consolidation of the investee are included in Investments in unconsolidated businesses and debt securities are included in Other assets in our consolidated balance sheets.

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 indirect-channel device payment plan loans. We maintain allowances for uncollectible accounts receivable, including our direct-channel device payment plan agreement receivables, for estimated losses resulting from the failure or inability of our customers to make required payments. Indirect-channel device payment loans are considered financial instruments and are initially recorded at fair value net of imputed interest, and credit losses are recorded as incurred. However, loan balances are assessed quarterly for impairment and an allowance is recorded if the loan is considered impaired. 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. Similar to traditional service revenue, we record direct device payment plan agreement bad debt expense based on an estimate of the percentage of equipment revenue that will not be collected. This estimate is 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 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 net realizable value.

Plant and Depreciation

Property, Plant and Equipment

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 property, plant and equipment accounts and any gains or losses on disposition are recognized in income.

We capitalize and depreciate network software purchased or developed along with related property, plant and equipment 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 2018, we determined that the average useful lives of certain assets would be increased. These changes in estimates were applied prospectively and resulted in a decrease to depreciation expense of $0.3 billion for the year ended 2018. In addition, 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 decreases to depreciation expense of $0.1 billion, $0.1 billion and $0.2 billion in 2018, 2017 and 2016, respectively. We determined that changes were also necessary to the remaining estimated useful lives of certain assets as a result of technology changes, enhancements and planned retirements. These changes resulted in increases in depreciation expense of $0.5 billion, $0.3 billion and $0.3 billion in 2018, 2017 and 2016, 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 4 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 quantitative 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. Estimated fair values of reporting units are Level 3 measures in the fair value hierarchy, see Fair Value Measurements discussion below for additional information.

Under the qualitative assessment, we consider several qualitative factors, including the business enterprise value of the reporting unit 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 Earnings before interest, taxes, depreciation and amortization (EBITDA) margin projections), the recent and projected financial performance of the reporting unit, as well as other factors.

The market approach includes the use of comparative multiples of guideline companies 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 represents 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. During the fourth quarter of 2018, the Company updated its five-year strategic planning review for each of its reporting units. Those plans considered current economic conditions and trends, estimated future operating results, the Company’s view of growth-rates and-anticipated future economic and regulatory conditions.

See Note 4 for additional information regarding our goodwill impairment testing.

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. Our quantitative assessment consists 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 estimate 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. As part of our qualitative assessment, we consider 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), margin projections, the recent and projected financial performance of our Wireless segment, as well as other factors. See Note 4 for additional information regarding our impairment tests.

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 4.

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 for the years in which those tax assets and liabilities are expected to be realized or settled. 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.

Verizon has completed its analysis of the impacts of the Tax Cuts and Jobs Act (TCJA), including analyzing the effects of any Internal Revenue Service (IRS) and U.S. Treasury guidance issued, and state tax law changes enacted, within the maximum one year measurement period resulting in no significant adjustments to the $16.8 billion provisional amount previously recorded.

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 10 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 11 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 starting interest rate swaps, interest rate swaps, interest rate caps and foreign exchange forwards. We do not hold derivatives for trading purposes. See Note 9 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

The following ASUs were issued by Financial Accounting Standards Board (FASB), and have been recently adopted by Verizon.

Description	Date of Adoption	Effect on Financial Statements
ASU 2014-09, Revenue from Contracts with Customers (Topic 606)		
This standard update, along with related subsequently issued updates, clarifies the principles for recognizing revenue and develops a common revenue standard for U.S. GAAP. The standard update 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 standard update intends to provide a more robust framework for addressing revenue issues; improve comparability of revenue recognition practices across entities, industries, jurisdictions, and capital markets; and provide more useful information to users of financial statements through improved disclosure requirements.	1/1/2018	We recorded the pre-tax cumulative effect of $3.9 billion ($2.9 billion net of tax) as an adjustment to the January 1, 2018 opening balance of Retained earnings. We adopted this standard using the modified retrospective method. The cumulative after-tax effect of the changes made to our consolidated balance sheet for the adoption of this standard are reflected in the table below. See Note 2 for additional information related to revenues and contract costs, including qualitative and quantitative disclosures required under Topic 606, as well as a reconciliation of the adjustments from the adoption of Topic 606 relative to Topic 605 on certain impacted financial statement line items.
ASU 2016-01, Financial Instruments – Overall (Subtopic 825-10)		
The amendments in this update make targeted improvements to GAAP by requiring most equity securities to be measured at fair value with changes in fair value recognized in net income. For investments in equity securities without readily determinable fair values, the cost method is eliminated. A practicability exception is available for investments in equity securities that do not have readily determinable fair values. These investments may be measured at cost, less any impairment, plus or minus changes resulting from observable price changes in orderly transactions for an identical or similar investment of the same issuer. This update simplifies the impairment assessment of equity investments without readily determinable fair values by requiring a qualitative assessment to identify impairment. When a qualitative assessment indicates impairment exists, an entity is required to measure the investment at fair value	1/1/2018	We adopted this standard update on a prospective basis resulting in an insignificant adjustment to our opening retained earnings. The amendments related to equity securities without readily determinable fair values are applied prospectively to equity investments that exist as of the date of adoption.
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. This standard update requires, among other things, that cash receipts from payments on a transferor's beneficial interests in securitized trade receivables be classified as cash inflows from investing activities. The amendment relating to beneficial interests in securitization transactions impacted our presentation of collections of certain deferred purchase price from sales of wireless device payment plan agreement receivables in our consolidated statements of cash flows.	1/1/2018	We retrospectively reclassified approximately $0.6 billion of deferred purchase price collections 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. There were no other significant impacts as a result of adopting this standard.

Description	Date of Adoption	Effect on Financial Statements
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.	1/1/2018	We have provided a reconciliation from Cash and cash equivalents as presented in our consolidated balance sheets to Cash, cash equivalents and restricted cash as reported in our consolidated statements of cash flows. We adopted the amendments in this accounting standard update on a retrospective basis. The adoption of this standard update for the year ended December 31, 2017 resulted in an increase in cash flow used in financing activities of $0.6 billion, a decrease in cash flow provided by operating activities of $0.1 billion and an insignificant increase in cash flow used in investing activities. There was an insignificant impact to our consolidated statements of cash flows for the year ended December 31, 2016. See "Cash, Cash Equivalents and Restricted Cash" for additional information, as well as a discussion of the nature of our restricted cash balances.
ASU 2017-07, Compensation – Retirement Benefits (Topic 715)		
The amendments in this update require an employer to report the service cost component arising from employer sponsored pension and other postretirement plans 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 consolidated statements of income separately from the service cost component and outside the 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. Verizon previously recorded service cost and other components of net periodic benefit cost in operating expenses in the consolidated statements of income. The amendments in this update allow a practical expedient that permits an employer to use the amounts disclosed in its employee benefits footnote for the prior comparative periods as the estimation basis for applying the retrospective presentation.	1/1/2018	As required by the amendments in this update, the presentation of the service cost component and other components of net periodic benefit cost in the consolidated statements of income were applied retrospectively, and the updates for the capitalization of the service cost component of net periodic benefit cost in assets were applied prospectively on and after the effective date. Verizon reclassified the other components of net periodic benefit costs from Cost of services and Selling, general and administrative expense to Other income (expense), net, which is part of non-operating expenses. The retrospective adoption of this standard update had an insignificant impact to consolidated operating income for the year ended December 31, 2017 and an increase to consolidated operating income of approximately $2.2 billion for the year ended December 31, 2016. These impacts to consolidated operating income were fully offset by an insignificant decrease and a $2.2 billion decrease to Other income (expense), net for the years ended December 31, 2017 and 2016, respectively. There was no impact to consolidated Net income for the years ended December 31, 2017 or 2016. Verizon utilized the practical expedient to estimate the impact on the prior comparative period information presented in the consolidated statements of income.
ASU 2018-02, Income Statement-Reporting Comprehensive Income (Topic 220)		
The amendments in this update allow a reclassification from accumulated other comprehensive income to retained earnings for stranded tax effects resulting from TCJA. The stranded tax effects result from the change in the federal tax rate for deferred taxes recorded to Accumulated other comprehensive income. This standard update is effective as of the first quarter of 2019; however, early adoption is permitted. Verizon has elected to early adopt this update effective January 1, 2018 and record the effects of adoption at the beginning of the period of adoption.	1/1/2018	The adoption of this standard update resulted in a charge to Retained earnings of $0.7 billion which consists primarily of stranded tax effects related to deferred taxes for pensions and postretirement benefits. It is Verizon's policy to release income tax effects from accumulated other comprehensive income at the same time that the related unit of account affects net income. The cumulative after-tax effect of the changes made to our consolidated balance sheet for the adoption of this standard are reflected in the table below.

The cumulative after-tax effect of the changes made to our consolidated balance sheet for the adoption of Topic 606, ASU 2018-02 and other ASUs was as follows:

		Adjustments due to			
(dollars in millions)	At December 31, 2017	Topic 606	ASU 2018-02	Other ASUs	At January 1, 2018
Accounts receivable, net of allowance	$ 23,493	$ 53	$ –	$ –	$ 23,546
Prepaid expenses and other	3,307	2,014	–	–	5,321
Other assets	9,787	1,238	–	(59)	10,966
Investments in unconsolidated businesses	1,039	2	–	–	1,041
Other current liabilities	8,352	(541)	–	–	7,811
Deferred income taxes	31,232	1,008	–	(31)	32,209
Other liabilities	12,433	(94)	–	–	12,339
Retained earnings	35,635	2,890	(652)	(6)	37,867
Accumulated other comprehensive income	2,659	–	652	(22)	3,289
Noncontrolling interests	1,591	44	–	–	1,635

Recently Issued Accounting Standards

The following ASUs have been recently issued by the FASB.

Description	Date of Adoption	Effect on Financial Statements
ASU 2016-02, Leases (Topic 842)		
In February 2016, the FASB issued this standard update 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 allows for a modified retrospective application and is effective as of the first quarter of 2019; however, early adoption is permitted. Entities are allowed to apply the modified retrospective approach: (1) retrospectively to each prior reporting period presented in the financial statements with the cumulative- effect adjustment recognized at the beginning of the earliest comparative period presented; or (2) retrospectively at the beginning of the period of adoption (January 1, 2019) through a cumulative-effect adjustment. The effective date of this standard is January 1, 2019, at which time Verizon will adopt the standard using the modified retrospective approach with a cumulative- effect adjustment to opening retained earnings recorded at the beginning of the period of adoption. Therefore, upon adoption, Verizon will recognize and measure leases without revising comparative period information or disclosure. The modified retrospective approach includes a number of optional practical expedients that entities may elect to apply.	1/1/2019	We have established a cross-functional coordinated team to implement the standard update. We have completed our assessment of the transition practical expedients offered by the standard. These practical expedients lessen the transitional burden of implementing the standard update by not requiring a reassessment of certain conclusions reached under existing lease accounting guidance. Accordingly, we will apply these practical expedients and will not reassess: (1) whether an expired or existing contract is a lease or contains an embedded lease; (2) lease classification of an expired or existing lease; (3) initial direct costs for an existing lease; and (4) whether an existing or expired land easement is or contains a lease if it has not historically been accounted for as a lease. We have identified and implemented a new system solution to meet the requirements of the new standard and have identified and implemented processes and internal controls to meet the standards reporting and disclosure requirements. Upon adoption of this standard, there will be a significant impact in our consolidated balance sheet as we expect to recognize a right-of-use asset and liability related to substantially all operating lease arrangements, which we currently estimate will range between $21.0 billion and $23.0 billion. Verizon's current operating lease portfolio included in this range is primarily comprised of network equipment including towers, distributed antenna systems, and small cells, real estate, connectivity mediums including dark fiber, and equipment leases. In addition, pre-tax deferred gains of approximately $0.6 billion arising from prior period sales-leaseback transactions, which would have been recognized to income over an average period of nine years, will be adjusted through opening retained earnings on January 1, 2019. Lastly, we expect a lower amount of lease costs to qualify as initial direct costs under the new standard which will result in an immediate recognition of expense instead of recognition of expense over time.
ASU 2016-13, Financial Instruments – Credit Losses (Topic 326)		
In June 2016, the FASB issued this standard update which requires 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. An entity will apply the update through a cumulative effect adjustment to retained earnings as of the beginning of the first reporting period in which the guidance is effective. A prospective transition approach is required for debt securities for which an other-than-temporary impairment has been recognized before the effective date. Early adoption of this standard is permitted.	1/1/2020	We are currently evaluating the impacts that this standard update will have on our various financial assets which we expect to include, but is not limited to, our device payment plan agreement receivables and service receivables. We have established a cross-functional coordinated team to address the potential impacts to our systems, processes and internal controls in order to meet the standard update's accounting and reporting requirements.

Note 2.
Revenue and Contract Costs

We earn revenue from contracts with customers, primarily through the provision of telecommunications and other services and through the sale of wireless equipment. We account for these revenues under Topic 606, which we adopted on January 1, 2018, using the modified retrospective approach. We also earn revenues that are not accounted for under Topic 606 from leasing arrangements (such as those for towers and equipment), captive reinsurance arrangements primarily related to wireless device insurance and the interest on equipment financed on a device payment plan agreement when sold to the customer by an authorized agent.

We applied the new revenue recognition standard to customer contracts not completed at the date of initial adoption. For incomplete contracts that were modified before the date of adoption, the Company elected to use the practical expedient available under the modified retrospective method, which allows us to aggregate the effect of all modifications when identifying satisfied and unsatisfied performance obligations, determining the transaction price and allocating transaction price to the satisfied and unsatisfied performance obligations for the modified contract at transition. Results for reporting periods beginning after January 1, 2018 are presented under Topic 606, while amounts reported for prior periods have not been adjusted and continue to be reported under accounting standards in effect for those periods.

In our Wireless business, prior to the adoption of Topic 606, we were required to limit the revenue recognized when a wireless device was sold to the amount of consideration that was not contingent on the provision of future services, which was typically limited to the amount of consideration received from the customer at the time of sale. Under Topic 606, the total consideration in the contract is allocated between wireless equipment and service based on their relative standalone selling prices. This change primarily impacts our arrangements that include sales of wireless devices at subsidized prices in conjunction with a fixed-term plan, also known as the subsidy model, for service. Accordingly, under Topic 606, generally more equipment revenue is recognized upon sale of the equipment to the customer and less service revenue is recognized over the contract term than was previously recognized under the prior “Revenue Recognition” (Topic 605) standard. At the time the equipment is sold, this allocation results in the recognition of a contract asset equal to the difference between the amount of revenue recognized and the amount of consideration received from the customer. As of January 2017, we no longer offer consumers new fixed-term plans with subsidized equipment pricing; however, we continue to offer fixed-term plans to our business customers. At December 31, 2018 and December 31, 2017, approximately 14% and 19% of retail postpaid connections were under fixed-term plans, respectively.

Topic 606 also requires the deferral of incremental costs incurred to obtain a customer contract, which are then amortized to expense, as a component 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 were historically expensed as incurred by our Wireless and Wireline businesses under our previous accounting, are now deferred and amortized under Topic 606.

Finally, under Topic 605, at the time of the sale of a device, we imputed risk adjusted interest on the device payment plan agreement receivables. We recorded the imputed interest as a reduction to the related accounts receivable and interest income was recognized over the financed device payment term. Under Topic 606, while there continues to be a financing component in both the fixed-term plans and device payment plans, also known as the installment model, we have determined that this financing component for our customer classes in the Wireless direct channel plans is not significant and therefore we no longer impute interest for these contracts. This change results in additional revenue recognized upon the sale of wireless devices and no interest income recognized over the device payment term.

A reconciliation of the adjustments from the adoption of Topic 606 relative to Topic 605 on certain impacted financial statement line items in our consolidated statements of income and balance sheet were as follows:

			December 31, 2018
(dollars in millions)	**As reported**	Balances without adoption of Topic 606	Adjustments
Operating Revenues			
Service revenues and other	**$ 108,605**	$ 109,964	$ (1,359)
Wireless equipment revenues	**22,258**	20,474	1,784
Total Operating Revenues	**130,863**	130,438	425
Cost of services (exclusive of items shown below)	**32,185**	32,240	(55)
Wireless cost of equipment	**23,323**	23,189	134
Selling, general and administrative expense	**31,083**	32,588	(1,505)
Equity in losses of unconsolidated businesses	**(186)**	(187)	1
Income Before Provision For Income Taxes	**19,623**	17,771	1,852
Provision for income taxes	**(3,584)**	(3,104)	(480)
Net Income	**$ 16,039**	$ 14,667	$ 1,372
Net income attributable to noncontrolling interests	**$ 511**	$ 481	$ 30
Net income attributable to Verizon	**15,528**	14,186	1,342
Net Income	**$ 16,039**	$ 14,667	$ 1,372

			December 31, 2018
(dollars in millions)	**As reported**	Balances without adoption of Topic 606	Adjustments
Assets			
Current assets			
Accounts receivable, net of allowance	**$ 25,102**	$ 24,759	$ 343
Prepaid expenses and other	**5,453**	2,902	2,551
Investments in unconsolidated businesses	**671**	668	3
Other assets	**11,717**	9,631	2,086
Liabilities and Equity			
Current liabilities			
Accounts payable and accrued liabilities	**22,501**	21,727	774
Other current liabilities	**8,239**	8,805	(566)
Deferred income taxes	**33,795**	33,082	713
Other liabilities	**13,922**	14,166	(244)
Equity			
Retained earnings	**43,542**	39,310	4,232
Noncontrolling interests	**1,565**	1,491	74

Revenue by Category

We operate and manage our business in two reportable segments, Wireless and Wireline. Revenue is disaggregated by products and services, and customer groups, respectively, which we view as the relevant categorization of revenues for these businesses. See Note 13 for additional information on revenue by segment.

Corporate and other includes the results of our Media business, Verizon Media, which operated in 2018 under the "Oath" brand, and our telematics business, branded Verizon Connect. Oath generated revenues from contracts with customers under Topic 606 of approximately $7.7 billion for the year ended December 31, 2018. Verizon Connect generated revenues from contracts with customers under Topic 606 of approximately $1.0 billion for the year ended December 31, 2018.

We also earn revenues, that are not accounted for under Topic 606, from leasing arrangements (such as towers and equipment), captive reinsurance arrangements primarily related to wireless device insurance and the interest on equipment financed on a device payment plan agreement when sold to the customer by an authorized agent. Revenues from arrangements that were not accounted for under Topic 606 were approximately $4.5 billion for the year ended December 31, 2018.

Remaining Performance Obligations

When allocating the total contract transaction price to identified performance obligations, a portion of the total transaction price may relate to service performance obligations which were not satisfied or are partially satisfied as of the end of the reporting period. Below we disclose information relating to these unsatisfied performance obligations. We have elected to apply the practical expedient available under Topic 606, that provides the option to exclude the expected revenues arising from unsatisfied performance obligations related to contracts that have an original expected duration of one year or less. This situation primarily arises with respect to certain month-to-month service contracts. At December 31, 2018, month-to-month service contracts represented approximately 86% of Wireless postpaid contracts and approximately 56% of Wireline consumer and small business contracts.

Additionally, certain Wireless and Wireline contracts provide customers the option to purchase additional services. The fee related to the additional services is recognized when the customer exercises the option (typically on a month-to-month basis).

Wireless customer contracts are generally either month-to-month and cancellable at any time (typically under a device payment plan) or contain terms greater than one month (typically under a fixed-term plan). Additionally, customers may incur charges based on usage or may purchase additional optional services in conjunction with entering into a contract which can be cancelled at any time and therefore are not included in the transaction price. When a service contract is longer than one month, the service contract term will generally be two years or less. The transaction price allocated to service performance obligations, which are not satisfied or are partially satisfied as of the end of the reporting period, are generally related to our fixed-term plans.

Our wireless customers also include other telecommunications companies who utilize Verizon's network to resell wireless service to their respective end customers. Reseller arrangements occur on a month-to-month basis or include a stated contract term, which generally extends longer than two years. Arrangements with a stated contract term generally include an annual minimum revenue commitment over the term of the contract for which revenues will be recognized in future periods.

At December 31, 2018, the transaction price related to Wireless unsatisfied performance obligations expected to be recognized for 2019, 2020 and thereafter was $10.9 billion, $5.5 billion and $2.2 billion, respectively.

Wireline customer contracts are either month-to-month, include a specified term with fixed monthly fees, or contain revenue commitments, and may also contain usage based services. Consumer Markets customers under contract generally have a service term of two years; however, this term may be shorter at month-to-month. Certain Enterprise Solutions, Partner Solutions and Business Markets service contracts with customers extend into future periods, contain fixed monthly fees and usage-based fees, and can include annual commitments per each year of the contract or commitments over the entire specified contract term. A significant number of contracts within these businesses have a contract term that is twelve months or less.

At December 31, 2018, the transaction price relating to Wireline unsatisfied performance obligations expected to be recognized for 2019, 2020 and thereafter was $7.7 billion, $3.2 billion and $0.9 billion, respectively.

In certain Enterprise Solutions, Partner Solutions and Business Markets service contracts within Wireline and certain telematics service contracts within Corporate and other, there are customer contracts that have a contractual minimum fee over the total contract term. We cannot predict the time period when revenue will be recognized related to those contracts; thus they are excluded from the time bands above. These contracts have varying terms spanning over five years ending in June 2023 and have aggregate contract minimum payments totaling $3.9 billion.

Accounts Receivable and Contract Balances

The timing of revenue recognition may differ from the time of billing to our customers. Receivables presented in our consolidated balance sheet represent an unconditional right to consideration. Contract balances represent amounts from an arrangement when either Verizon has performed, by transferring goods or services to the customer in advance of receiving all or partial consideration for such goods and services from the customer, or the customer has made payment to Verizon in advance of obtaining control of the goods and/or services promised to the customer in the contract.

Contract assets primarily relate to our rights to consideration for goods or services provided to the customers but for which we do not have an unconditional right at the reporting date. Under a fixed-term plan, the total contract revenue is allocated between wireless services and equipment revenues, as discussed above. In conjunction with these arrangements, a contract asset is created, which represents the difference between the amount of equipment revenue recognized upon sale and the amount of consideration received from the customer. The contract asset is reclassified as accounts receivable as wireless services are provided and billed. We have the right to bill the customer as service is provided over time, which results in our right to the payment being unconditional. The contract asset balances are presented in our consolidated balance sheet as Prepaid expenses and other and Other assets. We assess our contract assets for impairment on a quarterly basis and will recognize an impairment charge to the extent their carrying amount is not recoverable. The impairment charge related to contract assets was $0.1 billion for the year ended December 31, 2018, and is included in Other in the table below.

Contract liabilities arise when we bill our customers and receive consideration in advance of providing the goods or services promised in the contract. We typically bill service one month in advance, which is the primary component of the contract liability balance. Contract liabilities are recognized as revenue when services are provided to the customer. The contract liability balances are presented in our consolidated balance sheet as Other current liabilities and Other liabilities.

The following table presents information about receivables from contracts with customers:

(dollars in millions)	At January 1, 2018	**At December 31, 2018**
Receivables[(1)]	$ 12,073	**$ 12,104**
Device payment plan agreement receivables[(2)]	1,461	**8,940**

(1) Balances do not include receivables related to the following contracts: leasing arrangements (such as towers and equipment), captive reinsurance arrangements primarily related to wireless device insurance and the interest on equipment financed on a device payment plan agreement when sold to the customer by an authorized agent.
(2) Included in device payment plan agreement receivables presented in Note 8. Balances do not include receivables related to contracts completed prior to January 1, 2018 and receivables derived from the sale of equipment on a device payment plan through an authorized agent.

The following table represents significant changes in the contract assets balance:

(dollars in millions)	**Contract Assets**
Balance at January 1, 2018	**$ 38**
Opening balance sheet adjustment related to Topic 606 adoption	**1,132**
Adjusted opening balance, January 1, 2018	**1,170**
Increase resulting from new contracts	**1,583**
Contract assets reclassified to a receivable or collected in cash	**(1,575)**
Other	**(175)**
Balance at December 31, 2018	**$ 1,003**

The following table represents significant changes in the contract liabilities balance:

(dollars in millions)	**Contract Liabilities**
Balance at January 1, 2018[(1)]	**$ 5,086**
Opening balance sheet adjustments related to Topic 606 adoption	**(634)**
Adjusted opening balance, January 1, 2018	**4,452**
Net increase in contract liabilities	**4,446**
Revenue recognized related to contract liabilities existing at January 1, 2018	**(3,923)**
Other	**(32)**
Balance at December 31, 2018	**$ 4,943**

(1) Prior to the adoption of Topic 606, liabilities related to contracts with customers included advanced billings and deferred revenue, which was included within Other current liabilities and Other liabilities in our consolidated balance sheet at December 31, 2017.

The balance of contract assets and contract liabilities recorded in our consolidated balance sheet were as follows:

(dollars in millions)	**At December 31, 2018**
Assets	
Prepaid expenses and other	**$ 757**
Other assets	**246**
Total	**$ 1,003**
Liabilities	
Other current liabilities	**$ 4,207**
Other liabilities	**736**
Total	**$ 4,943**

Contract Costs

Topic 606 requires the recognition of an asset for incremental costs to obtain a customer contract, which are then amortized to expense, over the respective periods of expected benefit. We recognize an asset for incremental commission expenses paid to internal sales personnel and agents in conjunction with obtaining customer contracts. We only defer these costs when we have determined the commissions are, in fact, incremental and would not have been incurred absent the customer contract. Costs to obtain a contract are amortized and recorded ratably as commission expense over the period representing the transfer of goods or services to which the assets relate. Wireless costs to obtain contracts are amortized over our customers' estimated device upgrade cycles, as such costs are typically incurred each time a customer upgrades. Wireline costs to obtain contracts are amortized as expense over the estimated customer relationship period for our Consumer Markets customers. Incremental costs to obtain contracts for our Enterprise Solutions, Partner Solutions and Business Markets are insignificant. These costs are recorded in Selling, general and administrative expense.

We also defer costs incurred to fulfill contracts that: (1) relate directly to the contract; (2) are expected to generate resources that will be used to satisfy our performance obligation under the contract; and (3) are expected to be recovered through revenue generated under the contract. Contract fulfillment costs are expensed to Cost of services as we satisfy our performance obligations. These costs principally relate to direct costs that enhance our Wireline business resources, such as costs incurred to install circuits.

We determine the amortization periods for our costs incurred to obtain or fulfill a customer contract at a portfolio level due to the similarities within these customer contract portfolios.

Other costs, such as general costs or costs related to past performance obligations, are expensed as incurred.

Collectively, costs to obtain a contract and costs to fulfill a contract are referred to as Deferred contract costs, which were as follows:

(dollars in millions)	Amortization Period	At December 31, 2018
Wireless	2 to 3 years	**$ 2,989**
Wireline	2 to 5 years	**850**
Corporate	2 to 3 years	**56**
Total		**$ 3,895**

Deferred contract costs are classified as current or non-current within Prepaid expenses and other and Other assets, respectively. The balances of Deferred contract costs included in our consolidated balance sheet were as follows:

(dollars in millions)	At December 31, 2018
Assets	
Prepaid expenses and other	**$ 2,083**
Other assets	**1,812**
Total	**$ 3,895**

For the year ended December 31, 2018, we recognized expense of $2.0 billion, associated with the amortization of Deferred contract costs, primarily within Selling, general and administrative expense in our consolidated statements of income.

We assess our Deferred contract costs for impairment on a quarterly basis. We recognize an impairment charge to the extent the carrying amount of a deferred cost exceeds the remaining amount of consideration we expect to receive in exchange for the goods and services related to the cost, less the expected costs related directly to providing those goods and services that have not yet been recognized as expenses. There have been no impairment charges recognized for the year ended December 31, 2018.

Note 3.
Acquisitions and Divestitures

Wireless

Spectrum License Transactions

Since 2016, we have entered into or completed several strategic spectrum transactions including:

- During the fourth quarter of 2015, we entered into a license exchange agreement with affiliates of AT&T Inc. (AT&T) to exchange certain Advanced Wireless Services (AWS) and Personal Communication Services (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 in 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 (Sprint) 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 in 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 in 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 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 in 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 Inc. 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 in our consolidated statement of income for the year ended December 31, 2017.
- During 2018, we entered into and completed various wireless license transactions, including the purchase of Straight Path Communications Inc. (Straight Path) and NextLink Wireless LLC (NextLink).

Straight Path

In May 2017, we entered into a purchase agreement to acquire Straight Path, a holder of millimeter wave spectrum configured for fifth-generation (5G) wireless services, for total consideration reflecting an enterprise value of approximately $3.1 billion. Under the terms of the purchase agreement, we agreed to pay: (1) Straight Path shareholders $184.00 per share, payable in Verizon shares; and (2) certain transaction costs payable in cash of approximately $0.7 billion, consisting primarily of a fee to be paid to the FCC. The transaction closed in February 2018 at which time we issued approximately 49 million shares of Verizon common stock, valued at approximately $2.4 billion, and paid the associated cash consideration.

The acquisition of Straight Path was accounted for as an asset acquisition, as substantially all of the value related to the acquired spectrum. Upon closing, we recorded approximately $4.5 billion of wireless licenses and $1.4 billion of a deferred tax liability. The spectrum acquired as part of the transaction is being used for our 5G technology deployment. See Note 4 for additional information.

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. 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 year ended December 31, 2016, these businesses generated revenues of approximately $1.3 billion and operating income of $0.7 billion 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 7 for additional information. 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 in 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 and Ethernet networks in the U.S. Concurrently, we entered into a separate agreement to utilize certain wireless spectrum from a wholly-owned subsidiary of XO Holdings, NextLink, that held its wireless spectrum. The agreement included an option, subject to certain conditions, to buy NextLink. 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, and we prepaid $0.3 billion in connection with the NextLink option which represented the fair value of the option.

In April 2017, we exercised our option to buy NextLink for approximately $0.5 billion, subject to certain adjustments, of which $0.3 billion was prepaid in the first quarter of 2017. The transaction closed in January 2018. The acquisition of NextLink was accounted for as an asset acquisition, as substantially all of the value related to the acquired spectrum. Upon closing, we recorded approximately $0.7 billion of wireless licenses, $0.1 billion of a deferred tax liability and $0.1 billion of other liabilities. 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 property, plant and equipment, $0.1 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 included within our Wireline segment, represents future economic benefits that we expect to achieve as a result of the acquisition. See Note 4 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 in 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 in 2019. The total cash consideration for the transactions is approximately $0.3 billion, of which $0.2 billion was received in December 2017.

Other

Acquisition of AOL Inc.

In May 2015, we entered into an Agreement and Plan of Merger 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. In September 2018, we obtained court approval to settle this matter for total cash consideration of $0.2 billion of which an insignificant amount relates to interest, resulting in an insignificant gain. We paid the cash consideration in October 2018.

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 had 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 at the closing 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.

The acquisition of Yahoo's operating business has been accounted for as a business combination. 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 Accounting Standards Codification 820, Fair Value Measurements and Disclosures, 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.

In June 2018, we finalized the accounting for the Yahoo acquisition. The following table summarizes the final accounting for 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 December 31, 2017	Measurement-period adjustments(1)	Adjusted Fair Value
Cash payment to Yahoo's equity holders	$ 4,673	$ –	$ 4,673
Estimated liabilities to be paid	38	–	38
Total consideration	$ 4,711	$ –	$ 4,711
Assets acquired:			
Goodwill	$ 1,929	$ 215	$ 2,144
Intangible assets subject to amortization	1,873	1	1,874
Property, plant, and equipment	1,805	(6)	1,799
Other	1,332	128	1,460
Total assets acquired	6,939	338	7,277
Liabilities assumed:			
Total liabilities assumed	2,178	338	2,516
Net assets acquired:	4,761	–	4,761
Noncontrolling interest	(50)	–	(50)
Total consideration	$ 4,711	$ –	$ 4,711

(1) Adjustments to the 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. The most significant adjustments related to an increase in goodwill and the recognition of liabilities per certain pre-acquisition contingencies.

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 was primarily attributable to increased synergies that were expected to be achieved from the integration of Yahoo's operating business into our Media business. The goodwill related to this acquisition is included within Corporate and other. See Note 4 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

Related to the Yahoo Transaction, we recorded $0.5 billion of acquisition and integration related charges during the year ended December 31, 2018, of which $0.3 billion, $0.2 billion and an insignificant amount are related to Severance, Integration costs and Transaction costs, respectively. In connection with the Yahoo Transaction, we recorded acquisition and integration related charges of approximately $0.8 billion during the year ended December 31, 2017, of which $0.5 billion, $0.2 billion and $0.1 billion related to Severance, Integration costs and Transaction costs, respectively. These charges were recorded in Selling, general and administrative expense in 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, 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 4 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 2018, we entered into and completed various other transactions for $0.1 billion of cash consideration. During 2017 and 2016, we entered into and completed various other transactions for an insignificant amount of cash consideration.

Note 4.
Wireless Licenses, Goodwill and Other Intangible Assets

Wireless Licenses

The carrying amounts of Wireless licenses are as follows:

	(dollars in millions)	
At December 31,	**2018**	2017
Wireless licenses	**$ 94,130**	$ 88,417

For the year ended December 31, 2018, we recorded approximately $4.5 billion of wireless licenses in connection with the Straight Path acquisition and $0.7 billion in connection with the NextLink acquisition. See Note 3 for additional information.

At December 31, 2018 and 2017, approximately $8.6 billion and $8.8 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 each of the years ended December 31, 2018 and 2017, respectively.

The average remaining renewal period of our wireless license portfolio was 4.6 years as of December 31, 2018. See Note 1 for additional information.

As discussed in Note 1, we test our wireless licenses for potential impairment annually or more frequently if impairment indicators are present. In 2018, our quantitative impairment test consisted of comparing the estimated fair value of our aggregate wireless licenses estimated using the Greenfield approach to the aggregated carrying amount of the licenses as of the test date. In 2017 and 2016, we performed a qualitative assessment to determine whether it was more likely than not that the fair value of our wireless licenses was less than the carrying amount. Our assessments in 2018, 2017 and 2016 indicated that the fair value of our wireless licenses exceeded the carrying value and, therefore, did not result in impairment.

Goodwill

Changes in the carrying amount of Goodwill are as follows:

				(dollars in millions)
	Wireless	**Wireline**	**Other**	**Total**
Balance at January 1, 2017	$ 18,393	$ 3,746	$ 5,066	$ 27,205
Acquisitions (Note 3)	4	208	1,956	2,168
Reclassifications, adjustments and other	–	1	(202)	(201)
Balance at December 31, 2017	18,397	3,955	6,820	29,172
Acquisitions (Note 3)	**–**	**(77)**	**225**	**148**
Oath goodwill impairment	**–**	**–**	**(4,591)**	**(4,591)**
Reclassifications, adjustments and other	**–**	**(7)**	**(108)**	**(115)**
Balance at December 31, 2018	**$ 18,397**	**$ 3,871**	**$ 2,346**	**$ 24,614**

We recognized goodwill of $2.1 billion within the Media reporting unit (included within Other in the table above) as a result of the acquisition of Yahoo's operating business and $0.1 billion in Wireline as a result of the acquisition of XO. See Note 3 for additional information.

In the fourth quarter of 2018, we performed a quantitative impairment test for our Wireless, Wireline, Connect and Media reporting units. Based on our assessment, it was determined that the fair value exceeded the carrying amount of each of our reporting units except for our Media reporting unit. Our Media business, Verizon Media, which operated in 2018 under the "Oath" brand, has continued to experience increased competitive and market pressures throughout 2018 that have resulted in lower than expected revenues and earnings. These pressures are expected to continue and have resulted in a loss of market positioning to our competitors in the digital advertising business. Oath has also achieved lower than expected benefits from the integration of the Yahoo and AOL businesses.

In connection with Verizon's annual budget process in the fourth quarter, the new leadership at both Oath and Verizon completed a comprehensive five-year strategic planning review of Oath's business prospects resulting in unfavorable adjustments to Oath's financial projections. These revised projections were used as a key input into the Company's annual goodwill impairment test performed in the fourth quarter.

Consistent with our accounting policy, we applied a combination of a market approach and a discounted cash flow method reflecting current assumptions and inputs, including our revised projections, discount rate and expected growth rates, which resulted in the fair value of the Media reporting unit being less than its carrying amount. As a result, we recorded a non-cash goodwill impairment charge of approximately $4.6 billion ($4.5 billion after-tax) in the fourth quarter of 2018 in our consolidated statement of income. The goodwill balance of the Media reporting unit was approximately $4.8 billion prior to the incurrence of this impairment charge.

We performed a quantitative impairment assessment for all of our reporting units in 2018 and for all of our reporting units, except for our Wireless reporting unit, in 2017 and 2016 for which a qualitative assessment was completed. For 2018, 2017 and 2016, our impairment tests indicated that the fair value for each of our Wireless, Wireline and Connect reporting units exceeded their respective carrying value and therefore, did not result in a goodwill impairment. For 2017 and 2016, our impairment tests indicated that the fair value for our Media reporting unit exceeded its carrying value and therefore, did not result in goodwill impairment.

Other Intangible Assets

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

(dollars in millions)

	2018			2017		
At December 31,	**Gross Amount**	**Accumulated Amortization**	**Net Amount**	Gross Amount	Accumulated Amortization	Net Amount
Customer lists (8 to 13 years)	**$ 3,951**	**$ (1,121)**	**$ 2,830**	$ 3,621	$ (691)	$ 2,930
Non-network internal-use software (3 to 7 years)	**18,603**	**(12,785)**	**5,818**	18,010	(12,374)	5,636
Other (2 to 25 years)	**1,988**	**(861)**	**1,127**	2,474	(793)	1,681
Total	**$ 24,542**	**$ (14,767)**	**$ 9,775**	$ 24,105	$ (13,858)	$ 10,247

During 2017, we recognized 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 3 for additional information.

The amortization expense for Other intangible assets was as follows:

Years	(dollars in millions)
2018	**$ 2,217**
2017	2,213
2016	1,701

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

Years	(dollars in millions)
2019	**$ 2,145**
2020	**1,801**
2021	**1,501**
2022	**1,230**
2023	**949**

Note 5. Property, Plant and Equipment

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

(dollars in millions)

At December 31,	**Lives (years)**	**2018**	2017
Land	**–**	**$ 807**	$ 806
Buildings and equipment	**7 to 45**	**30,468**	28,914
Central office and other network equipment	**3 to 50**	**147,250**	145,093
Cable, poles and conduit	**7 to 50**	**49,859**	47,972
Leasehold improvements	**5 to 20**	**8,580**	8,394
Work in progress	**–**	**6,362**	6,139
Furniture, vehicles and other	**3 to 20**	**9,509**	9,180
		252,835	246,498
Less accumulated depreciation		**(163,549)**	(157,930)
Property, plant and equipment, net		**$ 89,286**	$ 88,568

Note 6.
Leasing Arrangements

As Lessee

We lease certain facilities and equipment for use in our operations under both capital and operating leases. Certain operating leases contain renewal options with varying terms and conditions that may be exercised. Total rent expense under operating leases amounted to $4.1 billion in 2018, $3.8 billion in 2017, and $3.6 billion in 2016.

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

	(dollars in millions)	
At December 31,	**2018**	2017
Capital leases	**$ 1,756**	$ 1,463
Less accumulated amortization	**(998)**	(692)
Total	**$ 758**	$ 771

The aggregate minimum rental commitments under noncancelable leases for the periods shown at December 31, 2018 are as follows:

		(dollars in millions)
Years	**Capital Leases**	**Operating Leases**
2019	**$ 343**	**$ 4,043**
2020	**245**	**3,678**
2021	**148**	**3,272**
2022	**100**	**2,871**
2023	**52**	**2,522**
Thereafter	**115**	**10,207**
Total minimum rental commitments	**$ 1,003**	**$ 26,593**
Less interest and executory costs	**$ (98)**	
Present value of minimum lease payments	**905**	
Less current installments	**(316)**	
Long-term obligation at December 31, 2018	**$ 589**	

Tower Monetization Transaction

During March 2015, we completed a transaction with American Tower Corporation (American Tower) pursuant to which American Tower acquired the exclusive rights to lease and operate approximately 11,300 of our wireless towers and corresponding ground leases 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 for the towers amounted to $0.3 billion for both the years ended December 31, 2018 and 2017. We expect to make minimum future lease payments of approximately $1.8 billion. We continue to include the towers in Property, plant and equipment, net in our consolidated balance sheets and depreciate them accordingly. Towers related to this transaction that were included in Property, plant and equipment, net, amounted to $0.4 billion for both the years ended December 31, 2018 and 2017. In addition, the minimum future payments for the ground leases of approximately $2.5 billion is included in our operating lease commitments. As part of the rights obtained during the transaction, American Tower is responsible for the payment of the leases, and we do not expect to be required to make payments unless American Tower defaults.

Note 7.
Debt

Outstanding long-term debt obligations as of December 31, 2018 are as follows:

(dollars in millions)

At December 31,	Interest Rates%	Maturities	2018	2017
Verizon Communications	**1.38 – 4.00**	**2018 – 2042**	**$ 29,651**	$ 31,370
	4.05 – 5.51	**2020 – 2055**	**66,230**	67,906
	5.82 – 6.90	**2026 – 2054**	**5,658**	5,835
	7.35 – 8.95	**2029 – 2039**	**1,076**	1,106
	Floating	**2018 – 2025**	**4,657**	6,684
VerizonWireless	**6.80 – 7.88**	**2029 – 2032**	**234**	234
Telephone subsidiaries – debentures	**5.13 – 6.50**	**2028 – 2033**	**226**	226
	7.38 – 7.88	**2022 – 2032**	**341**	341
	8.00 – 8.75	**2022 – 2031**	**229**	229
Other subsidiaries – notes payable, debentures and other	**6.70 – 8.75**	**2018 – 2028**	**444**	748
VerizonWireless and other subsidiaries – asset-backed debt	**1.42 – 3.55**	**2021 – 2023**	**7,962**	6,293
	Floating	**2021 – 2023**	**2,139**	2,620
Capital lease obligations (average rate of 4.1% and 3.6% in 2018 and 2017, respectively)			**905**	1,020
Unamortized discount, net of premium			**(6,298)**	(7,133)
Unamortized debt issuance costs			**(541)**	(534)
Total long-term debt, including current maturities			**112,913**	116,945
Less long-term debt maturing within one year			**7,040**	3,303
Total long-term debt			**$ 105,873**	$ 113,642
Total long-term debt, including current maturities			**$ 112,913**	$ 116,945
Plus short-term notes payable			**150**	150
Total debt			**$ 113,063**	$ 117,095

Maturities of long-term debt (secured and unsecured) outstanding, including current maturities, excluding unamortized debt issuance costs, at December 31, 2018 are as follows:

Years	(dollars in millions)
2019	**$ 7,058**
2020	**7,380**
2021	**6,999**
2022	**7,674**
2023	**5,903**
Thereafter	**78,439**

During 2018, we received $10.8 billion of proceeds from long-term borrowings, which included $4.8 billion of proceeds from asset-backed debt transactions. The net proceeds were used for general corporate purposes including the repayment of debt. We used $14.6 billion to repay long-term borrowings and capital lease obligations, including $3.6 billion to prepay and repay asset-backed, long-term borrowings.

During 2017, we received $32.0 billion of proceeds from long-term borrowings, which included $4.3 billion of proceeds from asset-backed debt transactions. The net proceeds were used for general corporate purposes including the repayment of debt. We used $24.2 billion to repay long-term borrowings and capital lease obligations, including $0.4 billion to prepay asset-backed, long-term borrowings.

2018 Significant Debt Transactions

Tender Offers

(dollars in millions)	Principal Amount Purchased	Cash Consideration[1]
Verizon 1.750% – 5.012% notes due 2021-2055	$ 2,881	$ 2,829
Verizon 3.850% – 5.012% notes due 2039-2055	1,876	1,787
Total	**$ 4,757**	**$ 4,616**

(1) In addition to the purchase price, any accrued and unpaid interest on the purchased notes was paid to the date of purchase.

Exchange Offers and Cash Offers

(dollars in millions)	Principal Amount Exchanged/ Purchased	Principal Amount Issued/ Cash Paid in Exchange
Verizon 1.750% – 5.150% and floating rate notes due 2020 – 2024	$ 4,633	$ –
Verizon 4.329% notes due 2028		4,252
Cash paid in exchange and cash offer		539[1]
Total	**$ 4,633**	**$ 4,791**

(1) In addition to the purchase price, any accrued and unpaid interest on the purchased notes was paid to the date of purchase.

Debt Redemptions, Repurchases and Repayments

(dollars in millions)	Principal Amount Redeemed/ Repurchased	% of Principal Paid
Verizon floating rate (LIBOR + 1.372%) notes due 2025	$ 2,500	100.000%
Open market repurchase of various Verizon notes	1,481	Various
Verizon 2.550% notes due 2019	213	100.000%
Total	**$ 4,194**	

In 2018, we also repaid $0.4 billion for a Verizon floating rate note that matured in September 2018.

During February 2019, we notified investors of our intention to redeem in March 2019 in whole $0.5 billion aggregate principal amount of 5.900% notes due 2054.

Debt Issuances

(dollars in millions)	Principal Amount Issued	Net Proceeds[1]
Verizon 5.320% notes due 2053	$ 730	$ 725
Verizon floating rate (LIBOR + 1.100%) notes due 2025	1,789	1,782
Verizon retail notes	338	328
Total	**$ 2,857**	**$ 2,835**

(1) Net proceeds were net of discount and issuance costs.

In February 2019, we issued $1.0 billion aggregate principal amount of 3.875% notes due 2029, which we refer to as the “green bond.” An amount equal to the net proceeds from the green bond will be used to fund, in whole or in part, “Eligible Green Investments.” “Eligible Green Investments” include new and existing investments made by us during the period from two years prior to the issuance of the green bond through the maturity date of the green bond, in the following categories: (1) renewable energy; (2) energy efficiency; (3) green buildings; (4) sustainable water management; and (5) biodiversity and conservation.

Asset-Backed Debt

As of December 31, 2018, the carrying value of our asset-backed debt was $10.1 billion. Our asset-backed debt includes notes (the Asset-Backed Notes) issued to third-party investors (Investors) and loans (ABS Financing Facilities) 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 (Cellco) 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 and the Originators to the ABS Entities.

Cash collections on the device payment plan agreement receivables collateralizing our asset-backed debt securities 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 in our consolidated balance sheets.

Proceeds from our asset-backed debt transactions are reflected in Cash flows from financing activities in our condensed consolidated statements of cash flows. The asset-backed debt issued and the assets securing this debt are included in our consolidated balance sheets.

Asset-Backed Notes

In 2018, we completed the following major Asset-Backed Notes transactions:

(dollars in millions)

	Interest Rates%	Expected Weighted-average Life to Maturity	Principal Amount Issued
March			
A-1a Senior class notes	2.820	2.49	$ 725
A-1b Senior floating rate class notes	0.260(1)	2.49	275
B Junior class notes	3.050	3.14	91
C Junior class notes	3.200	3.36	92
March total			1,183
October			
A-1a Senior class notes	3.230	2.51	1,226
A-1b Senior floating rate class notes	0.240(1)	2.51	200
B Junior class notes	3.380	3.24	98
C Junior class notes	3.550	3.41	76
October total			1,600
Total			$ 2,783

(1) Rate is the percentage presented plus one-month London Interbank Offered Rate (LIBOR), which will be reset monthly. The applicable one-month LIBOR rate at December 31, 2018 was 2.520%

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. The two year revolving period of the Asset-Backed Notes we issued in July 2016 and November 2016 ended in July 2018 and November 2018 respectively, and we began to repay principal on the 2016-1 Class A senior Asset-Backed Notes and the 2016-2 Class A senior Asset-Backed Notes in August 2018 and December 2018, respectively. During 2018, we made aggregate repayments of $0.6 billion.

ABS Financing Facility

In May 2018, we entered into a second device payment plan agreement financing facility with a number of financial institutions (2018 ABS Financing Facility). Under the terms of the 2018 ABS Financing Facility, the financial institutions made advances under asset-backed loans backed by device payment plan agreement receivables of business customers for proceeds of $0.5 billion. The loan agreement entered into in connection with the 2018 ABS Financing Facility has a final maturity date in December 2021 and bears interest at a floating rate. There is a one year revolving period beginning from May 2018 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 the loan agreement, we have the right to prepay all or a portion of the advances at any time without penalty, but in certain cases, with breakage costs. If we choose to prepay, the amount prepaid shall be available for further drawdowns until May 2019, except in certain circumstances. As of December 31, 2018, the 2018 ABS Financing Facility is fully drawn and the outstanding borrowing under the 2018 ABS Financing Facility was $0.5 billion.

We entered into an ABS Financing Facility in September 2016 with a number of financial institutions (2016 ABS Financing Facility). Under the terms of the 2016 ABS Financing Facility, the financial institutions made advances under asset-backed loans backed by device payment plan agreement receivables of consumer customers. Two loan agreements were entered into in connection with the 2016 ABS Financing Facility in September 2016 and May 2017. The loan agreements have a final maturity date in March 2021 and bear interest at floating rates. The two year revolving period of the two loan agreements ended in September 2018. Under the loan agreements, we have the right to prepay all or a portion of the advances at any time without penalty, but in certain cases, with breakage costs. Subject to certain conditions, we may also remove receivables from the ABS Entity. As a result of a $1.5 billion drawdown and an aggregate amount of $3.0 billion of prepayments and repayments, aggregate outstanding borrowings under the two loans agreements were $0.9 billion as of December 31, 2018.

Variable Interest Entities

The ABS Entities meet the definition of a VIE for which we have determined that 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 in our consolidated balance sheets were as follows:

(dollars in millions)

At December 31,	2018	2017
Assets		
Accounts receivable, net	**$ 8,861**	$ 8,101
Prepaid expenses and other	**989**	636
Other Assets	**2,725**	2,680
Liabilities		
Accounts payable and accrued liabilities	**7**	5
Debt maturing within one year	**5,352**	1,932
Long-term debt	**4,724**	6,955

See Note 8 for additional information on device payment plan agreement receivables used to secure asset-backed debt.

Credit Facilities

In April 2018, we amended our $9.0 billion credit facility to increase the capacity to $9.5 billion and extend its maturity to April 4, 2022. As of December 31, 2018, the unused borrowing capacity under our $9.5 billion credit facility was approximately $9.4 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 $1.0 billion credit facility insured by Eksportkreditnamnden Stockholm, Sweden, the Swedish export credit agency. As of December 31, 2018, the outstanding balance was $0.7 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 providing us 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 that we make. During 2018, we drew down $3.0 billion from these facilities, and $2.8 billion remained outstanding as of December 31, 2018. In January 2019, we drew down an additional $0.4 billion from these facilities.

Non-Cash Transaction

During the years ended December 31, 2018, 2017 and 2016, we financed, primarily through vendor financing arrangements, the purchase of approximately $1.1 billion, $0.5 billion, and $0.5 billion respectively, of long-lived assets consisting primarily of network equipment. At December 31, 2018 and December 31, 2017, $1.1 billion and $1.2 billion, respectively, 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 in our consolidated statements of cash flows.

Early Debt Redemptions

During 2018 and 2017, we recorded losses on early debt redemptions of $0.7 billion and $2.0 billion, respectively.

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

Guarantees

We guarantee the debentures of our operating telephone company subsidiaries. As of December 31, 2018, $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.

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, 2018, $0.4 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 in our debt agreements.

Note 8. 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 wireless monthly bill. As of January 2017, we no longer offer consumers new fixed-term subsidized service plans for phones; however, we continue to offer subsidized plans to our business customers, and we also continue to service existing fixed-term subsidized plans for consumers who have not yet purchased and activated devices under the Verizon device payment program.

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,	2018	2017
	(dollars in millions)	
Device payment plan agreement receivables, gross	**$ 19,313**	$ 17,770
Unamortized imputed interest	**(546)**	(821)
Device payment plan agreement receivables, net of unamortized imputed interest	**18,767**	16,949
Allowance for credit losses	**(597)**	(848)
Device payment plan agreement receivables, net	**$ 18,170**	$ 16,101
Classified in our consolidated balance sheets:		
Accounts receivable, net	**$ 12,624**	$ 11,064
Other assets	**5,546**	5,037
Device payment plan agreement receivables, net	**$ 18,170**	$ 16,101

Included in our device payment plan agreement receivables, net at December 31, 2018 and December 31, 2017, are net device payment plan agreement receivables of $11.5 billion and $10.7 billion, respectively, that have been transferred to ABS Entities and continue to be reported in our consolidated balance sheet. See Note 7 for additional information. We believe the carrying value of our installment loans receivables approximate their fair value using a Level 3 expected cash flow model.

We may offer certain promotions that allow a customer to trade in their 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, 2018 and December 31, 2017, the amount of trade-in liability was $0.1 billion and insignificant, respectively.

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.

For Wireless indirect channel contracts with customers, 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 in our consolidated statements of income, is recognized over the financed device payment term. See Note 2 for additional information on financing considerations with respect to Wireless direct channel contracts with customers.

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 reliability to make future payments. 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 specified offers of credit including an account level spending limit and either a maximum amount of credit allowed per device or a required down payment percentage. During the fourth quarter of 2018 Verizon Wireless moved all customers, new and existing, from a required down payment percentage, between zero and 100%, to a maximum amount of credit per device.

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,	**2018**	2017
Unbilled	**$ 18,043**	$ 16,591
Billed:		
Current	**986**	975
Past due	**284**	204
Device payment plan agreement receivables, gross	**$ 19,313**	$ 17,770

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

	(dollars in millions)	
	2018	2017
Balance at January 1,	**$ 848**	$ 688
Bad debt expense	**459**	718
Write-offs	**(710)**	(558)
Balance at December 31,	**$ 597**	$ 848

Sales of Wireless Device Payment Plan Agreement Receivables

In 2015 and 2016, we established programs pursuant to a Receivables Purchase Agreement (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 and non-revolving basis, collectively the Programs. 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.

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 in our consolidated statements of cash flows.

Deferred Purchase Price

The deferred purchase price was initially recorded in our consolidated balance sheets as an Other asset 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. 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 were bankruptcy remote special purpose entities (Sellers). At December 31, 2017, our deferred purchase price receivable was fully satisfied.

Collections following the repurchase of receivables were $0.2 billion during both 2018 and 2017. Collections of deferred purchase price were $1.4 billion during 2017 and $1.1 billion during 2016. These collections were recorded in Cash flows used in investing activities in our consolidated statement of cash flows.

Variable Interest Entities

As the Programs were terminated in December 2017, VIEs related to the sale of wireless device payment plan receivables did not exist at December 31, 2018 or December 31, 2017.

During 2017, under the RPA, the Sellers' sole business consisted of the acquisition of the receivables from Cellco and certain other affiliates of Verizon and the resale of the receivables to the Purchasers. The assets of the Sellers were not available to be used to satisfy obligations of any Verizon entities other than the Sellers. We determined that the Sellers were VIEs as they lack sufficient equity to finance their activities. Given that we had the power to direct the activities of the Sellers that most significantly impact the Sellers' economic performance, we were deemed to be the primary beneficiary of the Sellers. As a result, we consolidated the assets and liabilities of the Sellers into our consolidated financial statements.

Continuing Involvement

At December 31, 2018 and 2017, the total portfolio of device payment plan agreement receivables that we were servicing was $19.3 billion and $17.8 billion, respectively. There were no derecognized device payment plan agreement receivables outstanding at December 31, 2017. As of December 31, 2017, we have collected and remitted approximately $10.1 billion, net of fees and no amounts remained to be remitted to the Purchasers.

During the year ended December 31, 2017, 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.

Note 9. 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, 2018:

(dollars in millions)

	Level 1[1]	Level 2[2]	Level 3[3]	Total
Assets:				
Other assets:				
Fixed income securities	**$ –**	**$ 405**	**$ –**	**$ 405**
Interest rate swaps	**–**	**3**	**–**	**3**
Cross currency swaps	**–**	**220**	**–**	**220**
Interest rate caps	**–**	**14**	**–**	**14**
Total	**$ –**	**$ 642**	**$ –**	**$ 642**
Liabilities:				
Other liabilities:				
Interest rate swaps	**$ –**	**$ 813**	**$ –**	**$ 813**
Cross currency swaps	**–**	**536**	**–**	**536**
Forward starting interest rate swaps	**–**	**60**	**–**	**60**
Interest rate caps	**–**	**4**	**–**	**4**
Total	**$ –**	**$ 1,413**	**$ –**	**$ 1,413**

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

(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) Unobservable pricing inputs in the market

Equity securities measured at fair value on a recurring basis consist of investments in common stock of domestic and international corporations measured using quoted prices in active markets. Equity securities in the table above excludes certain of our equity investments, which were previously accounted for under the cost method, as they do not have readily determinable fair values. Beginning January 1, 2018 these investments have been measured using a quantitative approach under the practicability exception offered by ASU 2016-01. Such investments are measured at cost, less any impairment, plus or minus changes resulting from observable price changes in orderly transactions for an identical or similar investment of the same issuer and are included in Investments in unconsolidated businesses in our consolidated balance sheets. As of December 31, 2018, the carrying amount of our investments without readily determinable fair values was $0.2 billion. During 2018, there were insignificant adjustments due to observable price changes and we recognized an insignificant impairment charge.

Fixed income securities consist primarily of investments in municipal bonds. 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 2018 and 2017.

Fair Value of Short-term and Long-term Debt

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

(dollars in millions)

At December 31,	**2018**		2017	
	Carrying Amount	**Fair Value**	Carrying Amount	Fair Value
Short- and long-term debt, excluding capital leases	**$ 112,159**	**$ 118,535**	$ 116,075	$ 128,658

Derivative Instruments

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

At December 31,	2018	2017
	(dollars in millions)	
Interest rate swaps	**$ 19,813**	$ 20,173
Cross currency swaps	**16,638**	16,638
Forward starting interest rate swaps	**4,000**	–
Interest rate caps	**2,218**	2,840
Foreign exchange forwards	**600**	–

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 in 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 2018, we entered into interest rate swaps with a total notional value of $0.7 billion and settled interest rate swaps with a total notional value of $1.1 billion. 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.

The ineffective portion of these interest rate swaps was insignificant for the years ended December 31, 2018 and 2017.

The following amounts were recorded in Long-term debt in our consolidated balance sheets related to cumulative basis adjustments for fair value hedges:

At December 31,	2018	2017
	(dollars in millions)	
Carrying amount of hedged liabilities	**$ 18,903**	$ 19,723
Cumulative amount of fair value hedging adjustment included in the carrying amount of the hedged liabilities	**(785)**	(316)

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 2018, a pre-tax loss of $0.7 billion was recognized in Other comprehensive income (loss) with respect to these swaps.

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.

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.

Forward Starting Interest Rate Swaps

We have entered into forward starting interest rate swaps designated as cash flow hedges in order to manage our exposure to interest rate changes on future forecasted transactions.

During 2018, we entered into forward starting interest rate swaps with a total notional value of $4.0 billion. During 2018, a pre-tax loss of $0.1 billion was recognized in Other comprehensive income (loss).

We hedge our exposure to the variability in future cash flows of based on the expected maturities of the related forecasted debt issuance.

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 $0.8 billion and $0.9 billion at December 31, 2018 and 2017, respectively.

Undesignated Derivatives

We also have the following derivative contracts which we use as economic hedges 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 both 2018 and 2017, we recognized an insignificant amount in Interest expense.

Foreign Exchange Forwards

We enter into British Pound Sterling and Euro foreign exchange forwards to mitigate our foreign exchange rate risk related to non-functional currency denominated monetary assets and liabilities of international subsidiaries. During 2018, we entered into foreign exchange forwards with a total notional value of $2.8 billion and settled foreign exchange forwards with a total notional value of $2.2 billion.

Treasury Rate Locks

We entered into treasury rate locks with a total notional value of $2.0 billion to hedge the tender offers conducted in September 2018 for eight series of notes issued by Verizon with coupon rates ranging from 3.850% to 5.012% and maturity dates ranging from 2039 to 2055 (September Tender Offers). Upon the early settlement of the September Tender Offers, we settled these hedges. During 2018, we recognized an insignificant loss related to treasury rate locks in Other income (expense), net.

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 (CSA) agreements 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. During 2017, we paid an insignificant amount of cash to extend amendments to certain of our collateral exchange arrangements, which eliminated the requirement to post collateral for a specified period of time. Additionally, during the fourth quarter of 2017, we began negotiating and executing new ISDA master agreements and CSA agreements with our counterparties. The negotiations and executions of new agreements continued in 2018. The newly executed CSA agreements 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. At December 31, 2018, we posted collateral of approximately $0.1 billion related to derivative contracts under collateral exchange arrangements, which were recorded as Prepaid expenses and other in our consolidated balance sheet. 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 10.
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). 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 number of shares that were remaining but not issued under the 2009 Plan. Shares subject to outstanding awards under the 2009 Plan that expire, are canceled or otherwise terminated will also be available for the awards under the 2017 Plan. As of December 31, 2018, 89 million shares are reserved for future issuance under the 2017 Plan.

Restricted Stock Units

Restricted Stock Units (RSUs) granted under the 2017 Plan generally vest in three equal installments on each anniversary of the grant date. The RSUs that are paid in stock upon vesting and are thus classified as 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. The RSUs that are settled in cash are classified as liability awards and the liability is measured at its fair value at the end of each reporting period. All RSUs granted under the 2017 Plan have dividend equivalent units, which will be paid to participants at the time the RSU award is paid, and in the same proportion as the RSU award.

In February 2018, Verizon announced a broad-based employee special award of RSUs under the 2017 Plan to eligible full-time and part-time employees. These RSUs will vest in two equal installments on each anniversary of the grant date, and will be paid in cash.

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 2017 Plan also provides for grants of Performance Stock Units (PSUs) that generally vest at the end of the third year after the grant. As defined by the 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. All PSUs granted under the 2017 Plan have dividend equivalent units, which will be paid to participants at the time that PSU award is determined and paid, and in the same proportion as the PSU award. The granted and cancelled activity for the PSU award includes adjustments for the performance goals achieved.

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

	Restricted Stock Units		
(shares in thousands)	**Equity Awards**	**Liability Awards**	**Performance Stock Units**
Outstanding January 1, 2016	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
Granted	**4,134**	**15,157**	**5,779**
Payments	**(5,977)**	**(6,860)**	**(4,526)**
Cancelled/Forfeited	**(213)**	**(2,362)**	**(2,583)**
Outstanding December 31, 2018	**10,577**	**19,926**	**16,905**

As of December 31, 2018, unrecognized compensation expense related to the unvested portion of Verizon's RSUs and PSUs was approximately $1.1 billion and is expected to be recognized over approximately two years.

The equity RSUs granted in 2018 and 2017 have weighted-average grant date fair values of $49.19 and $49.93 per unit, respectively. During 2018, 2017 and 2016, we paid $0.8 billion, $0.8 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 $0.7 billion, $0.4 billion and $0.4 billion for 2018, 2017 and 2016, respectively.

Note 11. 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 benefits related credits and/or charges based on actuarial assumptions, including projected discount rates, an estimated return on plan assets, and health care trend rates. These estimates are updated in the fourth quarter to reflect actual return on plan assets and updated actuarial assumptions or upon a remeasurement. The adjustment is recognized in the income statement during the fourth quarter or upon a remeasurement event pursuant to our accounting policy for the recognition of actuarial gains and losses.

Pension and Other Postretirement Benefits

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

Obligations and Funded Status

(dollars in millions)

	Pension		Health Care and Life	
At December 31,	**2018**	2017	**2018**	2017
Change in Benefit Obligations				
Beginning of year	**$ 21,531**	$ 21,112	**$ 19,460**	$ 19,650
Service cost	**284**	280	**127**	149
Interest cost	**690**	683	**615**	659
Plan amendments	**230**	–	**(8)**	(545)
Actuarial (gain) loss, net	**(1,418)**	1,377	**(2,729)**	627
Benefits paid	**(1,475)**	(1,932)	**(1,101)**	(1,080)
Curtailment and termination benefits	**181**	11	**–**	–
Settlements paid	**(456)**	–	–	–
End of year	**19,567**	21,531	**16,364**	19,460
Change in Plan Assets				
Beginning of year	**19,175**	14,663	**1,119**	1,363
Actual return on plan assets	**(494)**	2,342	**(26)**	134
Company contributions	**1,066**	4,141	**1,183**	702
Benefits paid	**(1,475)**	(1,932)	**(1,101)**	(1,080)
Settlements paid	**(456)**	–	**–**	–
Divestiture (Note 3)	**–**	(39)	–	–
End of year	**17,816**	19,175	**1,175**	1,119
Funded Status				
End of year	**$ (1,751)**	$ (2,356)	**$ (15,189)**	$ (18,341)

(dollars in millions)

At December 31,	Pension 2018	Pension 2017	Health Care and Life 2018	Health Care and Life 2017
Amounts recognized on the balance sheet				
Noncurrent assets	**$ 3**	$ 21	**$ –**	$ –
Current liabilities	**(71)**	(63)	**(292)**	(637)
Noncurrent liabilities	**(1,683)**	(2,314)	**(14,897)**	(17,704)
Total	**$ (1,751)**	$ (2,356)	**$ (15,189)**	$ (18,341)
Amounts recognized in Accumulated Other Comprehensive Income (Pre-tax)				
Prior service cost (benefit)	**$ 585**	$ 404	**$ (4,698)**	$ (5,667)
Total	**$ 585**	$ 404	**$ (4,698)**	$ (5,667)

The accumulated benefit obligation for all defined benefit pension plans was $19.6 billion and $21.5 billion at December 31, 2018 and 2017, respectively.

2018 Collective Bargaining Negotiations

The extension agreement ratified in August 2018 extended our collective bargaining agreements with the Communications Workers of America and the International Brotherhood of Electrical Workers that were due to expire on August 3, 2019 for four years until August 5, 2023. The collective bargaining agreements cover approximately 34,000 employees. Amendments triggered by the collective bargaining negotiations were made to certain pension plans for certain union represented employees and retirees. The impact of the plan amendments was an increase in our defined benefit pension plans plan obligations and a net decrease to Accumulated other comprehensive income of $0.2 billion (net of taxes of $0.2 billion). The annual impact of the amount recorded in Accumulated other comprehensive income that will be reclassified to net periodic benefit cost is minimal.

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

During 2016, we 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 ratified in June 2016. The impact includes 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, $0.7 billion and $0.4 billion, respectively, during 2018, 2017 and 2016.

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

(dollars in millions)

At December 31,	2018	2017
Projected benefit obligation	**$ 19,510**	$ 21,300
Accumulated benefit obligation	**19,461**	21,242
Fair value of plan assets	**17,757**	18,923

Net Periodic Benefit Cost (Income)

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

(dollars in millions)

	Pension			**Health Care and Life**		
Years Ended December 31,	**2018**	2017	2016	**2018**	2017	2016
Service cost – Cost of services	**$ 230**	$ 215	$ 252	**$ 104**	$ 116	$ 150
Service cost – Selling, general and administrative expense	**54**	65	70	**23**	33	43
Service cost	**284**	280	322	**127**	149	193
Amortization of prior service cost (credit)	**48**	39	21	**(976)**	(949)	(657)
Expected return on plan assets	**(1,293)**	(1,262)	(1,045)	**(44)**	(53)	(54)
Interest cost	**690**	683	677	**615**	659	746
Remeasurement loss (gain), net	**369**	337	1,198	**(2,658)**	546	1,300
Curtailment and termination benefits	**181**	11	4	**–**	–	–
Other components	**(5)**	(192)	855	**(3,063)**	203	1,335
Total	**$ 279**	$ 88	$ 1,177	**$ (2,936)**	$ 352	$ 1,528

The service cost component of net periodic benefit cost (income) is recorded in Cost of services and Selling, general and administrative expense in the consolidated statements of income while the other components, including mark-to-market adjustments, if any, are recorded in Other income (expense), net.

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

(dollars in millions)

	Pension			**Health Care and Life**		
At December 31,	**2018**	2017	2016	**2018**	2017	2016
Prior service cost (benefit)	**$ 230**	$ –	$ 428	**$ (8)**	$ (544)	$ (5,142)
Reversal of amortization items						
Prior service (benefit) cost	**(48)**	(39)	(21)	**976**	949	657
Amounts reclassified to net income	**–**	–	87	**–**	–	451
Total recognized in other comprehensive loss (income) (pre-tax)	**$ 182**	$ (39)	$ 494	**$ 968**	$ 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 3 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 $0.1 billion. The estimated prior service cost for the defined benefit postretirement plans that will be amortized from Accumulated other comprehensive income into net periodic benefit income over the next fiscal year is $1.0 billion.

Assumptions

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

	Pension		Health Care and Life	
At December 31,	**2018**	2017	**2018**	2017
Discount Rate	**4.40%**	3.70%	**4.30%**	3.60%
Rate of compensation increases	**3.00**	3.00	**N/A**	N/A

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

	Pension			Health Care and Life		
At December 31,	**2018**	2017	2016	**2018**	2017	2016
Discount rate in effect for determining service cost	**4.10%**	4.70%	4.50%	**3.90%**	4.60%	4.20%
Discount rate in effect for determining interest cost	**3.40**	3.40	3.20	**3.20**	3.50	4.20
Expected return on plan assets	**7.00**	7.70	7.00	**4.80**	4.50	4.80
Rate of compensation increases	**3.00**	3.00	3.00	**N/A**	N/A	N/A

In determining our pension and other postretirement benefit obligations, we used a weighted-average discount rate of 4.40% in 2018. 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, 2018. The bonds selected had maturities that coincided with the time periods during which benefits payments are expected to occur, were non-callable and available in sufficient quantities to ensure marketability (at least $0.3 billion par outstanding).

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

The assumed health care cost trend rates follow:

	Health Care and Life		
At December 31,	**2018**	2017	2016
Healthcare cost trend rate assumed for next year	**6.30%**	7.00%	6.50%
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	**2027**	2026	2025

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

	(dollars in millions)	
One-Percentage Point	**Increase**	**Decrease**
Effect on 2018 service and interest cost	**$ 20**	**$ (19)**
Effect on postretirement benefit obligation as of December 31, 2018	**462**	**(485)**

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 52.5% 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 45.5% 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 2.0% 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, 2018 are as follows:

(dollars in millions)

Asset Category	Total	Level 1	Level 2	Level 3
Cash and cash equivalents	**$ 1,701**	**$ 1,694**	**$ 7**	**$ –**
Equity securities	**2,253**	**2,220**	**20**	**13**
Fixed income securities				
U.S. Treasuries and agencies	**1,684**	**1,557**	**127**	**–**
Corporate bonds	**3,645**	**124**	**3,244**	**277**
International bonds	**1,113**	**19**	**1,076**	**18**
Other	**–**	**–**	**–**	**–**
Real estate	**727**	**–**	**–**	**727**
Other				
Private equity	**664**	**–**	**–**	**664**
Hedge funds	**459**	**–**	**373**	**86**
Total investments at fair value	**12,246**	**5,614**	**4,847**	**1,785**
Investments measured at NAV	**5,570**			
Total	**$ 17,816**	**$ 5,614**	**$ 4,847**	**$ 1,785**

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

(dollars in millions)

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

The 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, 2017	$ –	$ 97	$ 14	$ 655	$ 624	$ 4	$ 1,394
Actual gain (loss) 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
Actual gain (loss) on plan assets	**1**	**(7)**	**3**	**134**	**25**	**–**	**156**
Purchases (sales)	**11**	**177**	**(5)**	**(34)**	**59**	**62**	**270**
Transfers out	**–**	**3**	**–**	**–**	**–**	**(161)**	**(158)**
Balance at December 31, 2018	**$ 13**	**$ 277**	**$ 18**	**$ 727**	**$ 664**	**$ 86**	**$ 1,785**

Health Care and Life Plans

The fair values for the other postretirement benefit plans by asset category at December 31, 2018 are as follows:

(dollars in millions)

Asset Category	**Total**	**Level 1**	**Level 2**	**Level 3**
Cash and cash equivalents	**$ 471**	**$ 431**	**$ 40**	**$ –**
Equity securities	**239**	**239**	**–**	**–**
Fixed income securities				
U.S. Treasuries and agencies	**24**	**24**	**–**	**–**
Corporate bonds	**96**	**96**	**–**	**–**
International bonds	**18**	**18**	**–**	**–**
Total investments at fair value	**848**	**808**	**40**	**–**
Investments measured at NAV	**327**			
Total	**$ 1,175**	**$ 808**	**$ 40**	**$ –**

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

(dollars in millions)

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

The 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 2018, we made $1.0 billion discretionary contribution to our qualified pension plans and $0.7 billion discretionary contribution to a retiree benefit account to fund health and welfare benefits. Qualified pension plans contributions are estimated to be $0.3 billion, nonqualified pension plans contributions are estimated to be $0.1 billion, and contributions to our other postretirement benefit plans are estimated to be $0.5 billion in 2019.

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
2019	**$ 2,771**	**$ 1,086**
2020	**1,796**	**1,113**
2021	**1,578**	**1,130**
2022	**1,526**	**1,135**
2023	**1,500**	**1,137**
2024 to 2028	**5,008**	**5,689**

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, 2018, the number of allocated shares of common stock in this ESOP was 51 million. There were no unallocated shares of common stock in this ESOP at December 31, 2018. All leveraged ESOP shares are included in earnings per share computations.

Total savings plan costs were $1.1 billion in 2018, $0.8 billion in 2017 and $0.7 billion in 2016.

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
2016	$ 800	$ 417	$ (583)	$ 22	$ 656
2017	656	581	(564)	(46)	627
2018	**627**	**2,093**	**(560)**	**(4)**	**2,156**

Severance, Pension and Benefits (Credits) Charges

During 2018, we recorded net pre-tax pension and benefits credits of $2.1 billion in accordance with our accounting policy to recognize actuarial gains and losses in the period in which they occur. The pension and benefits remeasurement credits of $2.3 billion, which were recorded in Other income (expense), net in our consolidated statements of income, were primarily driven by an increase in our discount rate assumption used to determine the current year liabilities of our pension plans and postretirement benefit plans from a weighted-average of 3.7% at December 31, 2017 to a weighted-average of 4.4% at December 31, 2018 ($2.6 billion), and mortality and other assumption adjustments of $1.7 billion, $1.6 billion of which related to healthcare claims and trend adjustments, offset by the difference between our estimated return on assets of 7.0% and our actual return on assets of (2.7)% ($1.9 billion). The credits were partially offset by $0.2 billion due to the effect of participants retiring under the voluntary separation program.

In September 2018, Verizon announced a voluntary separation program for select U.S.-based management employees. Approximately 10,400 eligible employees will separate from the Company under this program by the end of June 2019, with nearly half of these employees having exited in December of 2018. Principally as a result of this program but also as a result of other headcount reduction initiatives, the Company recorded a severance charge of $1.8 billion ($1.4 billion after-tax) during the year ended December 31, 2018, which was recorded in Selling, general and administrative expense in our consolidated statement of income. During 2018, we also recorded $0.3 billion in severance costs under our other existing separation plan.

During 2017, we recorded net pre-tax severance, pension and benefits 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 benefits remeasurement charges of approximately $0.9 billion, which were recorded in Other income (expense), net in our consolidated statements of income, 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, which were recorded in Selling, general and administrative expense in our consolidated statements of income.

During 2016, we recorded net pre-tax severance, pension and benefits 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 benefits remeasurement charges of $2.5 billion, which were recorded in Other income (expense), net in our consolidated statements of income, 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, which were recorded in Selling, general and administrative expense in our consolidated statements of income.

The net pre-tax severance, pension and benefits 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 benefits 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 benefits 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 benefits 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.

Note 12. Taxes

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

(dollars in millions)

Years Ended December 31,	2018	2017	2016
Domestic	**$ 19,801**	$ 19,645	$ 20,047
Foreign	**(178)**	949	939
Total	**$ 19,623**	$ 20,594	$ 20,986

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

(dollars in millions)

Years Ended December 31,	2018	2017	2016
Current			
Federal	**$ 2,187**	$ 3,630	$ 7,451
Foreign	**267**	200	148
State and Local	**741**	677	842
Total	**3,195**	4,507	8,441
Deferred			
Federal	**175**	(14,360)	(933)
Foreign	**30**	(66)	(2)
State and Local	**184**	(37)	(128)
Total	**389**	(14,463)	(1,063)
Total income tax provision (benefit)	**$ 3,584**	$ (9,956)	$ 7,378

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,	2018	2017	2016
Statutory federal income tax rate	**21.0%**	35.0%	35.0%
State and local income tax rate, net of federal tax benefits	**3.7**	1.6	2.2
Affordable housing credit	**(0.6)**	(0.6)	(0.7)
Employee benefits including ESOP dividend	**(0.3)**	(0.5)	(0.5)
Impact of tax reform re-measurement	**–**	(81.6)	–
Internal restructure	**(9.1)**	(0.6)	(0.7)
Noncontrolling interests	**(0.5)**	(0.6)	(0.6)
Non-deductible goodwill	**4.7**	1.0	2.2
Other, net	**(0.6)**	(2.0)	(1.7)
Effective income tax rate	**18.3%**	(48.3)%	35.2%

The effective income tax rate for 2018 was 18.3% compared to (48.3)% for 2017. The increase in the effective tax rate and the provision for income taxes was primarily due to the non-recurring, non-cash income tax benefit of $16.8 billion recorded in 2017 for the re-measurement of U.S. deferred tax liabilities at the lower 21% U.S. federal corporate income tax rate, as a result of the enactment of the TCJAon December 22, 2017. In addition, the current period provision for income taxes includes the tax impact of the Oath goodwill impairment charge not deductible for tax purposes, offset by the current year reduction in the statutory U.S. federal corporate income tax rate from 35% to 21%, effective January 1, 2018 under the TCJA and a non-recurring deferred tax benefit of approximately $2.1 billion as a result of an internal reorganization of legal entities within the Wireless business.

In December 2017, the Securities and Exchange Commission staff issued Staff Accounting Bulletin (SAB) 118 to provide guidance for companies that had not completed their accounting for the income tax effects of the TCJA. Due to the complexities involved in accounting for the enactment of the TCJA, SAB 118 allowed for a provisional estimate of the impacts of the TCJA in our earnings for the year ended December 31, 2017, as well as up to a one year measurement period that ended on December 22, 2018, for any subsequent adjustments to such provisional estimate. Pursuant to SAB 118, Verizon recorded a provisional estimate of $16.8 billion for the impacts of the TCJA, primarily due to the re-measurement of its U.S. deferred income tax liabilities at the lower 21% U.S. federal corporate income tax rate, with no significant impact from the transition tax on repatriation, the implementation of the territorial tax system, or limitations on the deduction of interest expense. Verizon has completed its analysis of the impacts of the TCJA, including analyzing the effects of any Internal Revenue Service (IRS) and U.S. Treasury guidance issued, and state tax law changes enacted, within the maximum one year measurement period resulting in no significant adjustments to the $16.8 billion provisional amount previously recorded.

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 primarily due to a non-recurring, non-cash income tax benefit recorded in 2017 as a result of the enactment of the TCJA described above.

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

(dollars in millions)

Years Ended December 31,	2018	2017	2016
Income taxes, net of amounts refunded	**$ 2,213**	$ 4,432	$ 9,577
Employment taxes	**1,066**	1,207	1,196
Property and other taxes	**1,598**	1,737	1,796
Total	**$ 4,877**	$ 7,376	$ 12,569

Deferred Tax Assets and Liabilities

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,	2018	2017
	(dollars in millions)	
Deferred Tax Assets		
Employee benefits	**$ 5,403**	$ 6,174
Tax loss and credit carry forwards	**3,576**	4,176
Other – assets	**1,650**	1,938
	10,629	12,288
Valuation allowances	**(2,741)**	(3,293)
Deferred tax assets	**7,888**	8,995
Deferred Tax Liabilities		
Spectrum and other intangible amortization	**21,976**	21,148
Depreciation	**15,662**	14,767
Other – liabilities	**3,976**	4,281
Deferred tax liabilities	**41,614**	40,196
Net deferred tax liability	**$ 33,726**	$ 31,201

At December 31, 2018, undistributed earnings of our foreign subsidiaries indefinitely invested outside the U.S. amounted to approximately $3.0 billion. The majority of Verizon's cash flow is generated from domestic operations and we are not dependent on foreign cash or earnings to meet our funding requirements, nor do we intend to repatriate these undistributed foreign earnings to fund U.S. operations. Furthermore, a portion of these undistributed earnings represents amounts that legally must be kept in reserve in accordance with certain foreign jurisdictional requirements and are unavailable for distribution or repatriation. As a result, we have not provided U.S. deferred taxes on these undistributed earnings because we intend that they will remain indefinitely reinvested outside of the U.S. and therefore unavailable for use in funding U.S. operations. Determination of the amount of unrecognized deferred taxes related to these undistributed earnings is not practicable.

At December 31, 2018, we had net after-tax loss and credit carry forwards for income tax purposes of approximately $3.6 billion that primarily relate to state and foreign taxes. Of these net after-tax loss and credit carry forwards, approximately $2.1 billion will expire between 2019 and 2038 and approximately $1.5 billion may be carried forward indefinitely.

During 2018, the valuation allowance decreased approximately $0.6 billion. The balance of the valuation allowance at December 31, 2018 and the 2018 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:

	2018	2017	2016
			(dollars in millions)
Balance at January 1,	**$ 2,355**	$ 1,902	$ 1,635
Additions based on tax positions related to the current year	**160**	219	338
Additions for tax positions of prior years	**699**	756	188
Reductions for tax positions of prior years	**(248)**	(419)	(153)
Settlements	**(40)**	(42)	(18)
Lapses of statutes of limitations	**(55)**	(61)	(88)
Balance at December 31,	**$ 2,871**	$ 2,355	$ 1,902

Included in the total unrecognized tax benefits at December 31, 2018, 2017 and 2016 is $2.3 billion, $1.9 billion and $1.5 billion, respectively, that if recognized, would favorably affect the effective income tax rate.

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

Years Ended December 31,	(dollars in millions)
2018	**$ (75)**
2017	(77)
2016	(25)

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)
2018	**$ 348**
2017	269

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 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 13. 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 communications products and enhanced services include 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.

The Wireline segment is organized in four customer groups: Consumer Markets, which includes consumer retail customers; Enterprise Solutions, which includes large business customers, including multinational corporations, and federal government customers; Partner Solutions, which includes other carriers that use our facilities to provide services to their customers; and Business Markets, which includes U.S.-based small and medium business customers, state and local governments, and educational institutions.

Corporate and other includes the results of our Media business, Verizon Media, which operated in 2018 under the "Oath" brand, our telematics business, branded Verizon Connect, and other businesses, investments in unconsolidated businesses, unallocated corporate expenses, pension and other employee benefit related costs and interest and financing expenses. 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 from these transactions that are not individually significant are included in segment results as these items are included in the chief operating decision maker's assessment of segment performance.

In November 2018, we announced a strategic reorganization of our business. We are modifying our internal and external reporting processes, systems and internal controls to accommodate the new structure and expect to transition to the new segment reporting structure during the second quarter of 2019. We continue to report operating results to our chief operating decision maker under our current operating segments.

We completed our acquisition of Yahoo's operating business on June 13, 2017.

In May 2017, we completed the Data Center Sale, where we sold 23 customer-facing data center sites in the U.S. and Latin America to Equinix. The results of operations for this divestiture 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 period presentation. On January 1, 2018, we adopted ASU 2017-07, "Compensation – Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost." Components other than the service component of net periodic pension cost and periodic postretirement benefit cost (income), inclusive of the mark-to-market pension and benefit remeasurements, have been reclassified from operating to non-operating charges (benefits) in our consolidated statements of income. The adoption of ASU 2017-07 did not change how we present our segment results.

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

(dollars in millions)

2018	**Wireless**	**Wireline**	**Total Reportable Segments**
External Operating Revenues			
Service	**$ 62,936**	**$ –**	**$ 62,936**
Equipment	**22,258**	**–**	**22,258**
Other	**6,201**	**–**	**6,201**
Consumer Markets	**–**	**12,586**	**12,586**
Enterprise Solutions	**–**	**8,837**	**8,837**
Partner Solutions	**–**	**3,685**	**3,685**
Business Markets	**–**	**3,397**	**3,397**
Other	**–**	**242**	**242**
Intersegment revenues	**339**	**1,013**	**1,352**
Total operating revenues	**91,734**	**29,760**	**121,494**
Cost of services	**9,251**	**17,701**	**26,952**
Wireless cost of equipment	**23,323**	**–**	**23,323**
Selling, general and administrative expense	**16,604**	**6,151**	**22,755**
Depreciation and amortization expense	**9,736**	**6,181**	**15,917**
Total operating expenses	**58,914**	**30,033**	**88,947**
Operating income (loss)	**$ 32,820**	**$ (273)**	**$ 32,547**
Assets	**$ 213,290**	**$ 94,799**	**$ 308,089**
Property, plant and equipment, net	**42,749**	**43,350**	**86,099**
Capital expenditures	**8,486**	**6,255**	**14,741**

(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	8,886	17,922	26,808
Wireless cost of equipment	22,147	–	22,147
Selling, general and administrative expense	17,876	6,274	24,150
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	9,031	18,353	27,384
Wireless cost of equipment	22,238	–	22,238
Selling, general and administrative expense	18,881	6,476	25,357
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

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,	2018	2017	2016
Operating Revenues			
Total reportable segments	**$ 121,494**	$ 118,191	$ 119,696
Corporate and other	**10,942**	9,019	5,663
Reconciling items:			
Operating results from divested businesses (Note 3)	**–**	368	2,115
Eliminations	**(1,573)**	(1,544)	(1,494)
Consolidated operating revenues	**$ 130,863**	$ 126,034	$ 125,980

Fios revenues are included within our Wireline segment and amounted to approximately $11.9 billion, $11.7 billion, and $11.2 billion for the years ended December 31, 2018, 2017 and 2016, respectively.

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

(dollars in millions)

Years Ended December 31,	2018	2017	2016
Operating Income			
Total reportable segments	**$ 32,547**	$ 29,587	$ 29,559
Corporate and other	**(1,694)**	(1,492)	(1,455)
Reconciling items:			
Severance charges (Note 11)	**(2,157)**	(497)	(421)
Other components of net periodic pension and benefit (charges) credits (Note 11)	**(823)**	(800)	(578)
Net gain on sale of divested businesses (Note 3)	**–**	1,774	1,007
Acquisition and integration related charges (Note 3)	**(553)**	(884)	–
Gain on spectrum license transaction (Note 3)	**–**	270	142
Operating results from divested businesses	**–**	149	995
Oath goodwill impairment	**(4,591)**	–	
Product realignment charges	**(451)**	(682)	–
Consolidated operating income	**22,278**	27,425	29,249
Equity in losses of unconsolidated businesses	**(186)**	(77)	(98)
Other income (expense), net	**2,364**	(2,021)	(3,789)
Interest expense	**(4,833)**	(4,733)	(4,376)
Income Before (Provision) Benefit For Income Taxes	**$ 19,623**	$ 20,594	$ 20,986

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

(dollars in millions)

At December 31,	2018	2017
Assets		
Total reportable segments	**$ 308,089**	$ 311,155
Corporate and other	**244,695**	239,040
Eliminations	**(287,955)**	(293,052)
Total consolidated	**$ 264,829**	$ 257,143

No single customer accounted for more than 10% of our total operating revenues during the years ended December 31, 2018, 2017 and 2016. International operating revenues and long-lived assets are not significant.

Note 14. 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 gains (losses) on marketable securities	Defined benefit pension and postretirement plans	Total
Balance at January 1, 2016	$ (554)	$ (278)	$ 101	$ 1,281	$ 550
Other comprehensive income (loss)	(159)	(225)	(13)	2,881	2,484
Amounts reclassified to net income	–	423	(42)	(742)	(361)
Net other comprehensive income (loss)	(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
Opening balance sheet adjustment (Note 1)	**(15)**	**(24)**	**(13)**	**682**	**630**
Adjusted opening balance	**(483)**	**(135)**	**19**	**3,888**	**3,289**
Other comprehensive income (loss)	**(117)**	**(574)**	**–**	**(164)**	**(855)**
Amounts reclassified to net income	**–**	**629**	**1**	**(694)**	**(64)**
Net other comprehensive income (loss)	**(117)**	**55**	**1**	**(858)**	**(919)**
Balance at December 31, 2018	**$ (600)**	**$ (80)**	**$ 20**	**$ 3,030**	**$ 2,370**

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 in our consolidated statements of income. See Note 9 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 in 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 Other income (expense), net in our consolidated statements of income. See Note 11 for additional information.

Note 15.
Additional Financial Information

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

Income Statement Information

Years Ended December 31,	2018	2017	2016
			(dollars in millions)
Depreciation expense	**$ 15,186**	$ 14,741	$ 14,227
Interest costs on debt balances	**5,399**	5,256	4,961
Net amortization of debt discount	**174**	155	119
Capitalized interest costs	**(740)**	(678)	(704)
Advertising expense	**2,682**	2,643	2,744
Other income (expense), net			
Interest income	**$ 94**	$ 82	$ 59
Other components of net periodic benefit (cost) income	**3,068**	(11)	(2,190)
Other, net	**(798)**	(2,092)	(1,658)
	$ 2,364	$ (2,021)	$ (3,789)

Balance Sheet Information

At December 31,	2018	2017
		(dollars in millions)
Accounts payable and accrued liabilities		
Accounts payable	**$ 7,232**	$ 7,063
Accrued expenses	**5,948**	6,756
Accrued vacation, salaries and wages	**6,268**	4,521
Interest payable	**1,570**	1,409
Taxes payable	**1,483**	1,483
	$ 22,501	$ 21,232
Other current liabilities		
Dividends payable	**$ 2,512**	$ 2,429
Contract liability[(1)]	**4,207**	4,050
Other	**1,520**	1,873
	$ 8,239	**$ 8,352**

(1) Prior to the adoption of Topic 606, liabilities related to contracts with customers included advance billing and deferred revenues. These balances have been reclassified to conform to current year presentation.

Cash Flow Information

Years Ended December 31,	2018	2017	2016
			(dollars in millions)
Cash Paid			
Interest, net of amounts capitalized	**$ 4,408**	$ 4,369	$ 4,085
Income taxes, net of amounts refunded	**2,213**	4,432	9,577
Other, net Cash Flows from Operating Activities			
Changes in device payment plan agreement non-current receivables	**$ (509)**	$ (579)	$ (3,303)
Other, net	**728**	1,255	204
	$ 219	$ 676	$ (3,099)
Other, net Cash Flows from Financing Activities			
Net debt related costs	**$ (141)**	$ (3,599)	$ (1,991)
Change in short-term obligations, excluding current maturities	**(790)**	(170)	(149)
Other, net	**(893)**	(670)	(765)
	$ (1,824)	$ (4,439)	$ (2,905)

In March 2017, the Verizon Board of Directors authorized a share buyback program to repurchase up to 100 million shares of the Company's common stock. The 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, 2018, 2017, and 2016, Verizon did not repurchase any shares of Verizon's common stock under our authorized share buyback programs. At December 31, 2018, the maximum number of shares that could be purchased by or on behalf of Verizon under our share buyback program was 100 million.

Common stock has been used from time to time to satisfy some of the funding requirements of employee and shareholder plans. During the years ended December 31, 2018, 2017, and 2016, we issued 3.5 million, 2.8 million and 3.5 million common shares from Treasury stock, respectively, which had an insignificant aggregate value.

Note 16.
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 30 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, 2018, 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 $22.2 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, $8.8 billion is attributable to 2019, $9.1 billion is attributable to 2020 through 2021, $2.1 billion is attributable to 2022 through 2023 and $2.2 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 $9.0 billion for 2018, $8.2 billion for 2017, and $8.1 billion for 2016. 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, 2018, 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 17.
Quarterly Financial Information (Unaudited)

(dollars in millions, except per share amounts)

Quarter Ended	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Full Year
2018					
Operating Revenues	**$ 31,772**	**$ 32,203**	**$ 32,607**	**$ 34,281**	**$ 130,863**
Operating Income	**7,349**	**6,617**	**7,675**	**637**	**22,278**
Net Income	**4,666**	**4,246**	**5,062**	**2,065**	**16,039**
Net Income Attributable to Verizon	**4,545**	**4,120**	**4,924**	**1,939**	**15,528**
Basic Earnings Per Share Attributable to Verizon[1]	**$ 1.11**	**$ 1.00**	**$ 1.19**	**$ 0.47**	**$ 3.76**
Diluted Earnings Per Share Attributable to Verizon[1]	**$ 1.11**	**$ 1.00**	**$ 1.19**	**$ 0.47**	**$ 3.76**
2017					
Operating Revenues	$ 29,814	$ 30,548	$ 31,717	$ 33,955	$ 126,034
Operating Income	6,963	8,013	6,990	5,459	27,425
Net Income	3,553	4,478	3,736	18,783	30,550
Net Income Attributable to Verizon	3,450	4,362	3,620	18,669	30,101
Basic Earnings Per Share Attributable to Verizon[1]	$ 0.85	$ 1.07	$ 0.89	$ 4.57	$ 7.37
Diluted Earnings Per Share Attributable to Verizon[1]	$ 0.84	$ 1.07	$ 0.89	$ 4.56	$ 7.36

(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 2018 and 2017 include the following after-tax charges (credits) attributable to Verizon:

(dollars in millions)

	2018				2017			
	First Quarter	**Second Quarter**	**Third Quarter**	**Fourth Quarter**	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Severance, pension and benefits charges (credits)	**$ –**	**$ 250**	**$ (335)**	**$ 108**	$ –	$ 118	$ –	$ 732
Early debt redemption costs	**184**	**–**	**352**	**–**	512	–	274	409
Acquisition and integration related charges	**82**	**92**	**103**	**142**	–	355	100	95
Gain on spectrum license transactions	**–**	**–**	**–**	**–**	(77)	–	–	(91)
Net gain on sale of divested businesses	**–**	**–**	**–**	**–**	–	(931)	–	–
Product realignment charges	**–**	**509**	**–**	**–**	–	–	–	461
Corporate tax reform	**–**	**–**	**–**	**–**	–	–	–	(16,761)
Oath goodwill impairment	**–**	**–**	**–**	**4,527**	–	–	–	–
Wireless legal entity restructuring	**–**	**–**	**–**	**(2,065)**	–	–	–	–

Wireless Legal Entity Restructuring

During the fourth quarter of 2018, we completed an internal reorganization of legal entities within the Wireless business and recorded a non-recurring deferred tax benefit of approximately $2.1 billion on our consolidated statement of income for the year ended December 31, 2018, which reduced our deferred tax liability by the same amount.

Corporate Tax Reform

During the fourth quarter of 2017, we recorded a one-time corporate tax reduction of approximately $16.8 billion in (Provision) benefit for income taxes in our consolidated statement of income for the year ended December 31, 2017. Verizon has completed its analysis of the impacts of the TCJA, including analyzing the effects of any IRS and U.S. Treasury guidance issued, and state tax law changes enacted, within the maximum one year measurement period resulting in no significant adjustments to the provisional amount previously recorded.