

AT&T INC. FINANCIAL REVIEW 2019

Selected Financial and Operating Data	14
Management's Discussion and Analysis of Financial Condition and Results of Operations.....	15
Consolidated Financial Statements	50

Selected Financial and Operating Data

Dollars in millions except per share amounts

At December 31 and for the year ended:	2019	2018	2017	2016	2015
Financial Data					
Operating revenues	\$181,193	\$170,756	\$160,546	\$163,786	\$146,801
Operating expenses	\$153,238	\$144,660	\$140,576	\$140,243	\$126,439
Operating income	\$ 27,955	\$ 26,096	\$ 19,970	\$ 23,543	\$ 20,362
Interest expense	\$ 8,422	\$ 7,957	\$ 6,300	\$ 4,910	\$ 4,120
Equity in net income (loss) of affiliates	\$ 6	\$ (48)	\$ (128)	\$ 98	\$ 79
Other income (expense) – net	\$ (1,071)	\$ 6,782	\$ 1,597	\$ 1,081	\$ 4,371
Income tax (benefit) expense	\$ 3,493	\$ 4,920	\$ (14,708)	\$ 6,479	\$ 7,005
Net Income	\$ 14,975	\$ 19,953	\$ 29,847	\$ 13,333	\$ 13,687
Less: Net Income Attributable to Noncontrolling Interest	\$ (1,072)	\$ (583)	\$ (397)	\$ (357)	\$ (342)
Net Income Attributable to AT&T	\$ 13,903	\$ 19,370	\$ 29,450	\$ 12,976	\$ 13,345
Net Income Attributable to Common Stock	\$ 13,900	\$ 19,370	\$ 29,450	\$ 12,976	\$ 13,345
Basic Earnings Per Common Share:					
Net Income Attributable to Common Stock	\$ 1.90	\$ 2.85	\$ 4.77	\$ 2.10	\$ 2.37
Diluted Earnings Per Common Share:					
Net Income Attributable to Common Stock	\$ 1.89	\$ 2.85	\$ 4.76	\$ 2.10	\$ 2.37
Weighted-average common shares outstanding (000,000)	7,319	6,778	6,164	6,168	5,628
Weighted-average common shares outstanding with dilution (000,000)	7,348	6,806	6,183	6,189	5,646
End of period common shares outstanding (000,000)	7,255	7,282	6,139	6,139	6,145
Dividends declared per common share	\$ 2.05	\$ 2.01	\$ 1.97	\$ 1.93	\$ 1.89
Cash and cash equivalents	\$ 12,130	\$ 5,204	\$ 50,498	\$ 5,788	\$ 5,121
Total assets	\$551,669	\$531,864	\$444,097	\$403,821	\$402,672
Long-term debt	\$151,309	\$166,250	\$125,972	\$113,681	\$118,515
Total debt	\$163,147	\$176,505	\$164,346	\$123,513	\$126,151
Debt ratio	44.7%	47.7%	53.6%	49.9%	50.5%
Net debt ratio	41.4%	46.2%	37.2%	47.5%	48.5%
Book value per common share	\$ 27.84	\$ 26.63	\$ 23.13	\$ 20.22	\$ 20.12
Capital expenditures	\$ 19,635	\$ 21,251	\$ 21,550	\$ 22,408	\$ 20,015
Vendor financing payments	\$ 3,050	\$ 560	\$ 572	\$ —	\$ —
Gross capital investment ¹	\$ 23,690	\$ 23,240	\$ 22,401	\$ 22,408	\$ 20,015
Spectrum acquisitions ²	\$ 1,316	\$ 447	\$ (1,380)	\$ 2,477	\$ 17,740
Number of employees	247,800	268,220	254,000	268,540	281,450

¹ Includes capital expenditures and vendor financing payments and excludes FirstNet reimbursements of \$1,005 in 2019, \$1,429 in 2018, \$279 in 2017 and \$0 in 2016-2015 (see Note 20).

² Cash paid for FCC license and domestic spectrum acquired in business acquisitions and swaps, net of auction deposit returns.

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

Dollars in millions except per share amounts

OVERVIEW

AT&T Inc. is referred to as "we," "AT&T" or the "Company" throughout this document, and the names of the particular subsidiaries and affiliates providing the services generally have been omitted. AT&T is a holding company whose subsidiaries and affiliates operate worldwide in the telecommunications, media and technology industries. You should read this discussion in conjunction with the consolidated financial statements and accompanying notes (Notes). We completed the acquisition of Time Warner Inc. (Time Warner) on June 14, 2018, and have included its results after that date. In accordance with U.S. generally accepted accounting principles (GAAP), operating results from Time Warner prior to the acquisition are excluded.

Our Management's Discussion and Analysis of Financial Condition and Results of Operations included in this document generally discusses 2019 and 2018 items and year-to-year comparisons between 2019 and 2018. Discussions of 2017 items and year-to-year comparisons between 2018 and 2017 that are not included in this document can be found in "Management's Discussion and Analysis of Financial Condition and Results of Operations"

in Part II, Item 7 of our Annual Report on Form 10-K for the fiscal year ended December 31, 2018.

We have four reportable segments: (1) Communications, (2) WarnerMedia, (3) Latin America and (4) Xandr. Our segment results presented in Note 4 and discussed below follow our internal management reporting. We analyze our segments based on segment operating contribution, which consists of operating income, excluding acquisition-related costs and other significant items and equity in net income (loss) of affiliates for investments managed within each segment. Each segment's percentage calculation of total segment operating revenue and contribution is derived from our segment results table in Note 4 and may total more than 100% due to losses in one or more segments. Percentage increases and decreases that are not considered meaningful are denoted with a dash. We have recast our segment results for all prior periods presented to exclude wireless and wireline operations in Puerto Rico and the U.S. Virgin Islands from our Mobility and Business Wireline business units of the Communications segment, instead reporting them with Corporate and Other (see Note 6).

	2019	2018	2017	Percent Change	
				2019 vs. 2018	2018 vs. 2017
Operating Revenues					
Communications	\$142,359	\$143,721	\$149,457	(0.9)%	(3.8)%
WarnerMedia	33,499	18,941	430	76.9	—
Latin America	6,963	7,652	8,269	(9.0)	(7.5)
Xandr	2,022	1,740	1,373	16.2	26.7
Corporate and other	1,603	2,101	2,200	(23.7)	(4.5)
Eliminations and consolidation	(5,253)	(3,399)	(1,183)	(54.5)	—
AT&T Operating Revenues	181,193	170,756	160,546	6.1	6.4
Operating Contribution					
Communications	32,230	32,108	31,488	0.4	2.0
WarnerMedia	9,326	5,695	62	63.8	—
Latin America	(635)	(710)	(266)	10.6	—
Xandr	1,318	1,333	1,202	(1.1)	10.9
Segment Operating Contribution	\$ 42,239	\$ 38,426	\$ 32,486	9.9%	18.3%

The **Communications segment** accounted for approximately 77% of our 2019 total segment operating revenues compared to 84% in 2018 and 76% of our 2019 total segment operating contribution as compared to 84% in 2018. This segment provides services to businesses and consumers located in the U.S. and businesses globally. Our business strategies reflect bundled product offerings that cut across product lines and utilize shared assets. This segment contains the following business units:

- **Mobility** provides nationwide wireless service and equipment.

- **Entertainment Group** provides video, including over-the-top (OTT) services, broadband and voice communications services to residential customers. This segment also sells advertising on DIRECTV and U-verse distribution platforms.
- **Business Wireline** provides advanced IP-based services, as well as traditional voice and data services to business customers.

The **WarnerMedia segment** accounted for approximately 18% of our 2019 total segment operating revenues compared to 11% in 2018 and 22% of our 2019 total segment operating contribution compared to 15% in 2018.

Management's Discussion and Analysis of Financial Condition and Results of Operations (continued)

Dollars in millions except per share amounts

This segment develops, produces and distributes feature films, television, gaming and other content over various physical and digital formats. This segment contains the following business units:

- **Turner** primarily operates multichannel basic television networks and digital properties. Turner also sells advertising on its networks and digital properties.
- **Home Box Office** consists of premium pay television and OTT and streaming services domestically and premium pay, basic tier television and OTT and streaming services internationally, as well as content licensing and home entertainment.
- **Warner Bros.** consists of the production, distribution and licensing of television programming and feature films, the distribution of home entertainment products and the production and distribution of games.

The **Latin America segment** accounted for approximately 4% of our 2019 and 2018 total segment operating revenues. This segment provides entertainment and wireless services outside of the U.S. This segment contains the following business units:

- **Mexico** provides wireless service and equipment to customers in Mexico.
- **Vrio** provides video services primarily to residential customers using satellite technology in Latin America and the Caribbean.

The **Xandr segment** accounted for approximately 1% of our total segment operating revenues in 2019 and 2018 and 3% of our total segment operating contribution in 2019 and 2018. This segment provides advertising services. These services utilize data insights to develop and deliver targeted advertising across video and digital platforms.

RESULTS OF OPERATIONS

Consolidated Results Our financial results are summarized in the following table. We then discuss factors affecting our overall results for the past three years. Additional analysis is discussed in our "Segment Results" section. We also discuss our expected revenue and expense trends for 2020 in the "Operating Environment and Trends of the Business" section. Certain prior period amounts have been reclassified to conform to the current period's presentation.

	2019	2018	2017	Percent Change	
				2019 vs. 2018	2018 vs. 2017
Operating revenues					
Service	\$163,499	\$152,345	\$145,597	7.3%	4.6%
Equipment	17,694	18,411	14,949	(3.9)	23.2
Total Operating Revenues	181,193	170,756	160,546	6.1	6.4
Operating expenses					
Operations and support	125,021	116,230	116,189	7.6	—
Depreciation and amortization	28,217	28,430	24,387	(0.7)	16.6
Total Operating Expenses	153,238	144,660	140,576	5.9	2.9
Operating Income	27,955	26,096	19,970	7.1	30.7
Interest expense	8,422	7,957	6,300	5.8	26.3
Equity in net income (loss) of affiliates	6	(48)	(128)	—	62.5
Other income (expense) – net	(1,071)	6,782	1,597	—	—
Income Before Income Taxes	18,468	24,873	15,139	(25.8)	64.3
Net Income	14,975	19,953	29,847	(24.9)	(33.1)
Net Income Attributable to AT&T	13,903	19,370	29,450	(28.2)	(34.2)
Net Income Attributable to Common Stock	\$ 13,900	\$ 19,370	\$ 29,450	(28.2)%	(34.2)%

OVERVIEW

Operating revenues increased in 2019, primarily due to including a full year's worth of Time Warner results, which was acquired in June 2018. Partially offsetting the increase were declines in the Communications segment driven by continued pressure in legacy and video services and lower wireless equipment upgrades that were offset by growth in advanced data and wireless services.

Operations and support expenses increased in 2019, primarily due to our 2018 acquisition of Time Warner and the abandonment of certain copper assets that will not be necessary to support future network activity (see Note 7). The increase was partially offset by lower costs in our Communications segment, specifically fewer subscribers contributing to lower content costs, lower upgrades driving a decline in wireless equipment costs and our continued focus on cost management.

Depreciation and amortization expense decreased in 2019.

Amortization expense decreased \$415, or 5.0%, in 2019 primarily due to the amortization of intangibles associated with WarnerMedia. We expect continued declines in amortization expense, reflecting the accelerated method of amortization applied to certain of the WarnerMedia intangibles.

Depreciation expense increased \$202, or 1.0%, in 2019 primarily due to the Time Warner acquisition.

Operating income increased in 2019 and 2018. Our operating margin was 15.4% in 2019, compared to 15.3% in 2018 and 12.4% in 2017.

Interest expense increased in 2019, primarily due to lower capitalized interest associated with putting spectrum into network service.

Equity in net income (loss) of affiliates increased in 2019, primarily due to the sale of Hulu, which had losses of \$44 in 2019 and \$105 in 2018. (See Note 6)

Other income (expense) – net decreased in 2019 primarily due to the recognition of \$5,171 in actuarial losses, compared to gains of \$3,412 in 2018. Also contributing to the decline were higher debt redemption costs, partially

offset by increased income from Rabbi trusts and other investments and gains from the sales of nonstrategic assets.

Income tax expense decreased in 2019, primarily driven by a decrease in income before income taxes. Our effective tax rate was 18.9% in 2019, 19.8% in 2018, and (97.2)% in 2017. All years were impacted by The Tax Cuts and Jobs Act, which was enacted in 2017.

Segment Results Our segments are strategic business units that offer different products and services over various technology platforms and/or in different geographies that are managed accordingly. Our segment results presented below follow our internal management reporting. In addition to segment operating contribution, we also evaluate segment performance based on EBITDA and/or EBITDA margin. EBITDA is defined as segment operating contribution, excluding equity in net income (loss) of affiliates and depreciation and amortization. We believe EBITDA to be a relevant and useful measurement to our investors as it is part of our internal management reporting and planning processes and it is an important metric that management uses to evaluate operating performance. EBITDA does not give effect to cash used for debt service requirements and thus does not reflect available funds for distributions, reinvestment or other discretionary uses. EBITDA margin is EBITDA divided by total revenues.

COMMUNICATIONS SEGMENT

	2019	2018	2017	Percent Change	
				2019 vs. 2018	2018 vs. 2017
Segment Operating Revenues					
Mobility	\$ 71,056	\$ 70,521	\$ 70,259	0.8%	0.4%
Entertainment Group	45,126	46,460	49,995	(2.9)	(7.1)
Business Wireline	26,177	26,740	29,203	(2.1)	(8.4)
Total Segment Operating Revenues	142,359	143,721	149,457	(0.9)	(3.8)
Segment Operating Contribution					
Mobility	22,321	21,568	20,011	3.5	7.8
Entertainment Group	4,822	4,715	5,471	2.3	(13.8)
Business Wireline	5,087	5,825	6,006	(12.7)	(3.0)
Total Segment Operating Contribution	\$ 32,230	\$ 32,108	\$ 31,488	0.4%	2.0%

Selected Subscribers and Connections

(000s)	December 31,		
	2019	2018	2017
Mobility subscribers	165,889	151,921	139,986
Total domestic broadband connections	14,659	14,751	14,487
Network access lines in service	8,487	10,002	11,754
U-verse VoIP connections	4,370	5,114	5,682

Management's Discussion and Analysis of Financial Condition and Results of Operations (continued)

Dollars in millions except per share amounts

Operating revenues decreased in 2019, driven by declines in our Entertainment Group and Business Wireline business units, partially offset by increases in our Mobility business unit. The decrease reflects the continued shift away from legacy voice and data products and linear video, largely offset by higher wireless service revenues from growth in postpaid phone subscribers and average revenue per subscriber (ARPU), and growth in our prepaid subscriber base.

Operating contribution increased in 2019 and 2018. The 2019 contribution includes improvements in our Mobility and Entertainment Group business units, partially offset by declines in our Business Wireline business unit. Our Communications segment operating income margin was 22.6% in 2019, 22.3% in 2018 and 21.1% in 2017.

Communications Business Unit Discussion

Mobility Results

	2019	2018	2017	Percent Change	
				2019 vs. 2018	2018 vs. 2017
Operating revenues					
Service	\$55,331	\$54,294	\$57,023	1.9%	(4.8)%
Equipment	15,725	16,227	13,236	(3.1)	22.6
Total Operating Revenues	71,056	70,521	70,259	0.8	0.4
Operating expenses					
Operations and support	40,681	40,690	42,317	—	(3.8)
Depreciation and amortization	8,054	8,263	7,931	(2.5)	4.2
Total Operating Expenses	48,735	48,953	50,248	(0.4)	(2.6)
Operating Income	22,321	21,568	20,011	3.5	7.8
Equity in Net Income (Loss) of Affiliates	—	—	—	—	—
Operating Contribution	\$22,321	\$21,568	\$20,011	3.5%	7.8%

The following tables highlight other key measures of performance for Mobility:

Mobility Subscribers

(in 000s)	2019	2018	2017	Percent Change	
				2019 vs. 2018	2018 vs. 2017
Postpaid Phone Subscribers	63,018	62,882	63,197	0.2%	(0.5)%
Total Phone Subscribers	79,700	78,767	77,657	1.2	1.4
Postpaid smartphones	60,664	60,131	59,298	0.9	1.4
Postpaid feature phones and other devices	14,543	15,937	17,376	(8.7)	(8.3)
Postpaid	75,207	76,068	76,674	(1.1)	(0.8)
Prepaid	17,803	16,828	15,154	5.8	11.0
Reseller	6,893	7,693	9,171	(10.4)	(16.1)
Connected devices ¹	65,986	51,332	38,987	28.5	31.7
Total Mobility Subscribers	165,889	151,921	139,986	9.2%	8.5%

¹ Includes data-centric devices such as wholesale automobile systems, monitoring devices, fleet management and session-based tablets.

Mobility Net Additions

(in 000s)	2019	2018	2017	Percent Change	
				2019 vs. 2018	2018 vs. 2017
Postpaid Phone Net Additions	483	194	(186)	149.0%	204.3%
Total Phone Net Additions	989	1,248	659	(20.8)	89.4
Postpaid ²	(435)	(90)	853	—	—
Prepaid	677	1,301	996	(48.0)	30.6
Reseller	(928)	(1,599)	(1,765)	42.0	9.4
Connected devices ³	14,645	12,324	9,694	18.8	27.1
Mobility Net Subscriber Additions¹	13,959	11,936	9,778	16.9%	22.1%
Postpaid Churn ⁴	1.18%	1.12%	1.07%	6 BP	5 BP
Postpaid Phone-Only Churn ⁴	0.95%	0.90%	0.85%	5 BP	5 BP

¹ Excludes acquisition-related additions during the period.

² In addition to postpaid phones, includes tablets and wearables and other. Tablet net adds (losses) were (1,487), (1,200) and 59 for the years ended December 31, 2019, 2018 and 2017, respectively. Wearables and other net adds were 569, 916 and 980 for the years ended December 31, 2019, 2018 and 2017, respectively.

³ Includes data-centric devices such as session-based tablets, monitoring devices and primarily wholesale automobile systems. Excludes postpaid tablets.

⁴ Calculated by dividing the aggregate number of wireless subscribers who canceled service during a month divided by the total number of wireless subscribers at the beginning of that month. The churn rate for the period is equal to the average of the churn rate for each month of that period.

Service revenue increased during 2019 largely due to prepaid subscriber gains and higher postpaid phone ARPU driven by the adoption of unlimited plans.

ARPU

ARPU increased primarily due to pricing actions that were not in effect in the prior year and a continued shift by subscribers to our unlimited plans.

Churn

The effective management of subscriber churn is critical to our ability to maximize revenue growth and to maintain and improve margins. Competitive pricing in the industry contributed to higher postpaid churn rates in 2019, and our move to unlimited plans combined with an improved customer experience in 2018 contributed to lower churn rates in that year.

Equipment revenue decreased in 2019. The 2019 decrease was driven by lower postpaid sales, resulting from the continuing trend of customers choosing to upgrade devices less frequently or bring their own, which is generally offset by lower equipment expense.

Operations and support expenses decreased in 2019, primarily due to lower equipment expense driven by low upgrade rates and increased operational efficiencies, partially offset by higher bad debt expense and handset insurance costs.

Depreciation expenses decreased in 2019, primarily due to fully depreciated assets, partially offset by ongoing capital spending for network upgrades and expansion.

Operating income increased in 2019 and 2018. Our Mobility operating income margin was 31.4% in 2019, 30.6% in 2018 and 28.5% in 2017. Our Mobility EBITDA margin was 42.7% in 2019, 42.3% in 2018 and 39.8% in 2017.

Subscriber Relationships

As the wireless industry has matured, we believe future wireless growth will depend on our ability to offer innovative services, plans and devices that take advantage of our premier 5G wireless network, and to provide these services in bundled product offerings. Subscribers that purchase two or more services from us have significantly lower churn than subscribers that purchase only one service. To support higher mobile data usage, our priority is to best utilize a wireless network that has sufficient spectrum and capacity to support these innovations on as broad a geographic basis as possible.

To attract and retain subscribers in a mature and highly competitive market, we have launched a wide variety of plans, including our FirstNet and prepaid products, and arrangements that bundle our video services. Virtually all of our postpaid smartphone subscribers are on plans that provide for service on multiple devices at reduced rates, and such subscribers tend to have higher retention and lower churn rates. Such offerings are intended to encourage existing subscribers to upgrade their current services and/or add devices, attract subscribers from other providers and/or minimize subscriber churn. We also offer unlimited data plans and such subscribers also tend to have higher retention and lower churn rates.

Connected Devices

Connected devices include data-centric devices such as wholesale automobile systems, monitoring devices, fleet management and session-based tablets. Connected device subscribers increased in 2019, and we added approximately 8.4 million wholesale connected cars through agreements with various carmakers, and experienced strong growth in other Internet of Things (IoT) connections as well. We believe that these connected car agreements give us the opportunity to create future retail relationships with the car owners.

Management's Discussion and Analysis of Financial Condition and Results of Operations (continued)

Dollars in millions except per share amounts

Entertainment Group Results

	2019	2018	2017	Percent Change	
				2019 vs. 2018	2018 vs. 2017
Operating revenues					
Video entertainment	\$32,110	\$33,357	\$36,167	(3.7)%	(7.8)%
High-speed internet	8,403	7,956	7,674	5.6	3.7
Legacy voice and data services	2,573	3,041	3,767	(15.4)	(19.3)
Other service and equipment	2,040	2,106	2,387	(3.1)	(11.8)
Total Operating Revenues	45,126	46,460	49,995	(2.9)	(7.1)
Operating expenses					
Operations and support	35,028	36,430	38,903	(3.8)	(6.4)
Depreciation and amortization	5,276	5,315	5,621	(0.7)	(5.4)
Total Operating Expenses	40,304	41,745	44,524	(3.5)	(6.2)
Operating Income	4,822	4,715	5,471	2.3	(13.8)
Equity in Net Income (Loss) of Affiliates	—	—	—	—	—
Operating Contribution	\$ 4,822	\$ 4,715	\$ 5,471	2.3%	(13.8)%

The following tables highlight other key measures of performance for Entertainment Group:

Connections

(in 000s)	2019	2018	2017	Percent Change	
				2019 vs. 2018	2018 vs. 2017
Video Connections					
Premium TV	19,473	22,903	24,089	(15.0)%	(4.9)%
AT&T TV NOW	926	1,591	1,155	(41.8)	37.7
Total Video Connections	20,399	24,494	25,244	(16.7)	(3.0)
Broadband Connections					
IP	13,598	13,729	13,462	(1.0)	2.0
DSL	521	680	888	(23.4)	(23.4)
Total Broadband Connections	14,119	14,409	14,350	(2.0)	0.4
Retail Consumer Switched Access Lines	3,329	3,967	4,774	(16.1)	(16.9)
U-verse Consumer VoIP Connections	3,794	4,582	5,222	(17.2)	(12.3)
Total Retail Consumer Voice Connections	7,123	8,549	9,996	(16.7)	(14.5)
Fiber Broadband Connections (included in IP)	3,887	2,763	1,767	40.7%	56.4%

Net Additions

(in 000s)	2019	2018	2017	Percent Change	
				2019 vs. 2018	2018 vs. 2017
Video Net Additions					
Premium TV	(3,430)	(1,186)	(1,176)	—%	(0.9)%
AT&T TV NOW	(665)	436	888	—	(50.9)
Net Video Additions	(4,095)	(750)	(288)	—	—
Broadband Net Additions					
IP	(131)	267	574	—	(53.5)
DSL	(159)	(208)	(403)	23.6	48.4
Net Broadband Additions	(290)	59	171	—	(65.5)
Fiber Broadband Net Additions	1,124	1,034	1,525	8.7%	(32.2)%

Video entertainment revenues are comprised of subscription and advertising revenues. Revenues decreased in 2019, largely driven by a 15.0% decline in premium TV subscribers, as we continue to focus on high-value customers, partially offset by subscription-based advertising growth of 4.8%. Our customers continue to shift, consistent with the rest of the industry, from a premium linear service to our more economically priced OTT video service, or to competitors, which has pressured our video revenues.

Revenue declines in our premium TV products were partially offset by growth in revenues from our OTT service, AT&T TV NOW, which were primarily attributable to pricing actions. AT&T TV NOW subscriber net additions declined in 2019 due to price increases and fewer promotions.

High-speed internet revenues increased in 2019, reflecting higher ARPU resulting from the continued shift of subscribers to our higher-speed fiber services. Our bundling strategy is helping to lower churn with subscribers who bundle broadband with another AT&T service.

Legacy voice and data service revenues decreased in 2019, reflecting the continued migration of customers to our more advanced IP-based offerings or to competitors. The trend at which we are experiencing these revenue declines has slowed, with a decrease of \$468 in 2019 compared to \$726 in 2018.

Operations and support expenses decreased in 2019, largely driven by lower content costs from fewer subscribers and our ongoing focus on cost initiatives. Partially offsetting the decreases were higher amortization of fulfillment cost deferrals, including the impact of second-quarter updates to decrease the estimated economic life for our Entertainment Group customers, and costs associated with NFL SUNDAY TICKET. We expect the second-quarter 2019 update to estimated economic customer lives, and our launch of AT&T TV, our new streaming premium TV product, to contribute to expense pressure in the first half of 2020.

Depreciation expenses decreased in 2019, due to network assets becoming fully depreciated. Partially offsetting the decreases was ongoing capital spending for network upgrades and expansion, including the completion of the fiber commitment under the DIRECTV acquisition.

Operating income increased in 2019 and decreased in 2018. Our Entertainment Group operating income margin was 10.7% in 2019, 10.1% in 2018 and 10.9% in 2017. Our Entertainment Group EBITDA margin was 22.4% in 2019, 21.6% in 2018 and 22.2% in 2017.

Business Wireline Results

	2019	2018	2017	Percent Change	
				2019 vs. 2018	2018 vs. 2017
Operating revenues					
Strategic and managed services	\$15,440	\$14,660	\$13,880	5.3%	5.6%
Legacy voice and data services	9,180	10,674	13,791	(14.0)	(22.6)
Other service and equipment	1,557	1,406	1,532	10.7	(8.2)
Total Operating Revenues	26,177	26,740	29,203	(2.1)	(8.4)
Operating expenses					
Operations and support	16,091	16,201	18,441	(0.7)	(12.1)
Depreciation and amortization	4,999	4,714	4,756	6.0	(0.9)
Total Operating Expenses	21,090	20,915	23,197	0.8	(9.8)
Operating Income	5,087	5,825	6,006	(12.7)	(3.0)
Equity in Net Income (Loss) of Affiliates	—	—	—	—	—
Operating Contribution	\$ 5,087	\$ 5,825	\$ 6,006	(12.7)%	(3.0)%

Strategic and managed services revenues increased in 2019. Our strategic services are made up of (1) data services, including our VPN, dedicated internet ethernet and broadband, (2) voice service, including VoIP and cloud-based voice solutions, (3) security and cloud solutions, and (4) managed, professional and outsourcing services. Revenue increases were primarily attributable to our data services and security and cloud solutions.

Legacy voice and data service revenues decreased in 2019, primarily due to lower demand as customers continue to shift to our more advanced IP-based offerings or our competitors. The trend at which we are experiencing these revenue declines has slowed, with a decrease of \$1,494 in 2019 compared to \$3,117 in 2018.

Management's Discussion and Analysis of Financial Condition and Results of Operations (continued)

Dollars in millions except per share amounts

Other service and equipment revenues increased in 2019, driven by higher intellectual property licensing activity. Revenues from the licensing of intellectual property assets vary from period-to-period and can impact revenue trends. Other service revenues include project-based revenue, which is nonrecurring in nature, as well as revenues from customer premises equipment.

Operations and support expenses decreased in 2019. The 2019 decrease was primarily due to our continued efforts to shift to a software-based network and automate

and digitize our customer support activities, partially offset by higher fulfillment deferral amortization.

Depreciation expense increased in 2019, primarily due to increases in capital spending for network upgrades and expansion.

Operating income decreased in 2019 and 2018. Our Business Wireline operating income margin was 19.4% in 2019, 21.8% in 2018 and 20.6% in 2017. Our Business Wireline EBITDA margin was 38.5% in 2019, 39.4% in 2018 and 36.9% in 2017.

WARNERMEDIA SEGMENT

	2019	2018	2017
Segment Operating Revenues			
Turner	\$13,122	\$ 6,979	\$430
Home Box Office	6,749	3,598	—
Warner Bros.	14,358	8,703	—
Eliminations & Other	(730)	(339)	—
Total Segment Operating Revenues	33,499	18,941	430
Segment Operating Contribution			
Turner	5,199	3,108	140
Home Box Office	2,365	1,384	—
Warner Bros.	2,350	1,449	—
Eliminations & Other	(588)	(246)	(78)
Total Segment Operating Contribution	\$ 9,326	\$ 5,695	\$ 62

Our WarnerMedia segment consists of our Turner, Home Box Office and Warner Bros. business units. The order of presentation reflects the consistency of revenue streams, rather than overall magnitude as that is subject to timing and frequency of studio releases. WarnerMedia also includes our financial results for regional sports networks (RSNs).

The WarnerMedia segment does not include results from Time Warner operations for the periods prior to our June 14, 2018 acquisition. Otter Media is included as an equity method investment for periods prior to our August 7, 2018 acquisition of the remaining interest and

is in the segment operating results following the acquisition. Consistent with our past practice, many of the impacts of the fair value adjustments from the application of purchase accounting required under GAAP have not been allocated to the segment, instead they are reported as acquisition-related items in the reconciliation to consolidated results.

Due to the June 2018 acquisition of Time Warner, segment and business unit results for 2019 are not comparable to prior periods, and, therefore, comparative results are not discussed.

WarnerMedia Business Unit Discussion
Turner Results

	2019	2018	2017
Operating revenues			
Subscription	\$ 7,736	\$4,207	\$365
Advertising	4,566	2,330	65
Content and other	820	442	—
Total Operating Revenues	13,122	6,979	430
Operating expenses			
Operations and support	7,740	3,794	331
Depreciation and amortization	235	131	4
Total Operating Expenses	7,975	3,925	335
Operating Income	5,147	3,054	95
Equity in Net Income of Affiliates	52	54	45
Operating Contribution	\$ 5,199	\$3,108	\$140

Turner includes the WarnerMedia businesses managed by Turner as well as our financial results for RSNs.

Operating revenues are generated primarily from licensing programming to distribution affiliates and from selling advertising on its networks and digital properties. We expect strong advertising revenue growth in 2020 as Turner advertising revenues are expected to benefit from

presidential election political spend and from airing the NCAA Final Four and Championship games.

Operating income increased in 2019. Our Turner operating income margin was 39.2% for 2019 and 43.8% for 2018. Our Turner EBITDA margin was 41.0% for 2019 and 45.6% for 2018.

Home Box Office Results

	2019	2018	2017
Operating revenues			
Subscription	\$5,814	\$3,201	\$—
Content and other	935	397	—
Total Operating Revenues	6,749	3,598	—
Operating expenses			
Operations and support	4,312	2,187	—
Depreciation and amortization	102	56	—
Total Operating Expenses	4,414	2,243	—
Operating Income	2,335	1,355	—
Equity in Net Income of Affiliates	30	29	—
Operating Contribution	\$2,365	\$1,384	\$—

Operating revenues are generated from the exploitation of original and licensed programming through distribution outlets.

Operating income increased in 2019. Our Home Box Office operating income margin was 34.6% for 2019 and 37.7% for 2018. Our Home Box Office EBITDA margin was 36.1% for 2019 and 39.2% for 2018.

Management's Discussion and Analysis of Financial Condition and Results of Operations (continued)

Dollars in millions except per share amounts

Warner Bros. Results

	2019	2018	2017
Operating revenues			
Theatrical product	\$ 5,978	\$4,002	\$—
Television product	6,367	3,621	—
Games and other	2,013	1,080	—
Total Operating Revenues	14,358	8,703	—
Operating expenses			
Operations and support	11,816	7,130	—
Depreciation and amortization	162	96	—
Total Operating Expenses	11,978	7,226	—
Operating Income	2,380	1,477	—
Equity in Net Income (Loss) of Affiliates	(30)	(28)	—
Operating Contribution	\$ 2,350	\$1,449	\$—

Operating revenues primarily relate to theatrical product (which is content made available for initial exhibition in theaters) and television product (which is content made available for initial airing on television or OTT services). During 2019, fourth-quarter revenues were pressured from foregone content licensing revenues as we prepare for our launch of HBO Max in 2020 and lower theatrical product resulting from a more favorable mix of box office and home entertainment releases in the prior year. The timing of theatrical releases varies from year to year and is based

on several factors. The variability of the release schedule and the difficulty in predicting the popularity of content can result in meaningful/material changes in quarterly revenue results as well as difficult year-over-year comparisons.

Operating income increased in 2019. Our Warner Bros. operating income margin was 16.6% for 2019 and 17.0% for 2018. Our Warner Bros. EBITDA margin was 17.7% for 2019 and 18.1% for 2018.

LATIN AMERICA SEGMENT

	2019	2018	2017	Percent Change	
				2019 vs. 2018	2018 vs. 2017
Segment Operating Revenues					
Vrio	\$4,094	\$ 4,784	\$5,456	(14.4)%	(12.3)%
Mexico	2,869	2,868	2,813	—	2.0
Total Segment Operating Revenues	6,963	7,652	8,269	(9.0)	(7.5)
Segment Operating Contribution					
Vrio	83	347	522	(76.1)	(33.5)
Mexico	(718)	(1,057)	(788)	32.1	(34.1)
Total Segment Operating Contribution	\$ (635)	\$ (710)	\$ (266)	10.6%	—%

Operating Results

Our Latin America operations conduct business in their local currency and operating results are converted to U.S. dollars using official exchange rates, subjecting results to foreign currency fluctuations.

Operating revenues decreased in 2019, driven by lower revenues for Vrio, primarily resulting from foreign exchange pressure related to Argentina's hyperinflationary economy.

Mexico revenues were stable, with service revenue growth offset by lower equipment sales.

Operating contribution increased in 2019 and decreased in 2018, reflecting foreign exchange pressure, offset by improvement in Mexico. Our Latin America segment operating income margin was (9.5)% in 2019, (9.7)% in 2018 and (4.3)% in 2017.

Latin America Business Unit Discussion
Mexico Results

	2019	2018	2017	Percent Change	
				2019 vs. 2018	2018 vs. 2017
Operating revenues					
Service	\$1,863	\$ 1,701	\$2,047	9.5%	(16.9)%
Equipment	1,006	1,167	766	(13.8)	52.3
Total Operating Revenues	2,869	2,868	2,813	—	2.0
Operating expenses					
Operations and support	3,085	3,415	3,232	(9.7)	5.7
Depreciation and amortization	502	510	369	(1.6)	38.2
Total Operating Expenses	3,587	3,925	3,601	(8.6)	9.0
Operating Income (Loss)	(718)	(1,057)	(788)	32.1	(34.1)
Equity in Net Income of Affiliates	—	—	—	—	—
Operating Contribution	\$ (718)	\$(1,057)	\$ (788)	32.1%	(34.1)%

The following tables highlight other key measures of performance for Mexico:

(in 000s)	2019	2018	2017	Percent Change	
				2019 vs. 2018	2018 vs. 2017
Mexico Wireless Subscribers ¹					
Postpaid	5,103	5,805	5,498	(12.1)%	5.6%
Prepaid	13,584	12,264	9,397	10.8	30.5
Reseller	472	252	204	87.3	23.5
Total Mexico Wireless Subscribers	19,159	18,321	15,099	4.6%	21.3%

(in 000s)	2019	2018	2017	Percent Change	
				2019 vs. 2018	2018 vs. 2017
Mexico Wireless Net Additions					
Postpaid	(608)	307	533	—%	(42.4)%
Prepaid	1,919	2,867	2,670	(33.1)	7.4
Reseller	219	48	(77)	—	—
Mexico Wireless Net Subscriber Additions	1,530	3,222	3,126	(52.5)%	3.1%

¹ 2019 excludes the impact of 692 subscriber disconnections resulting from the churn of customers related to sales by certain third-party distributors and the sunset of 2G services in Mexico, which are reflected in beginning of period subscribers.

Service revenues increased in 2019, primarily due to growth in our subscriber base.

Equipment revenues decreased in 2019, reflecting higher demand in the prior year for our initial offering of equipment installment programs.

Operations and support expenses decreased in 2019, driven by lower equipment costs. Approximately 6% of Mexico expenses are U.S. dollar-based, with the remainder in the local currency.

Depreciation expense decreased in 2019, primarily due to changes in the useful lives of certain assets, partially offset by the amortization of spectrum licenses and higher in-service assets.

Operating income increased in 2019 and decreased in 2018. Our Mexico operating income margin was (25.0)% in 2019, (36.9)% in 2018 and (28.0)% in 2017. Our Mexico EBITDA margin was (7.5)% in 2019, (19.1)% in 2018 and (14.9)% in 2017.

Management's Discussion and Analysis of Financial Condition and Results of Operations (continued)

Dollars in millions except per share amounts

Vrio Results

	2019	2018	2017	Percent Change	
				2019 vs. 2018	2018 vs. 2017
Operating revenues	\$4,094	\$4,784	\$5,456	(14.4)%	(12.3)%
Operating expenses					
Operations and support	3,378	3,743	4,172	(9.8)	(10.3)
Depreciation and amortization	660	728	849	(9.3)	(14.3)
Total Operating Expenses	4,038	4,471	5,021	(9.7)	(11.0)
Operating Income	56	313	435	(82.1)	(28.0)
Equity in Net Income of Affiliates	27	34	87	(20.6)	(60.9)
Operating Contribution	\$ 83	\$ 347	\$ 522	(76.1)%	(33.5)%

The following tables highlight other key measures of performance for Vrio:

(in 000s)	2019	2018	2017	Percent Change	
				2019 vs. 2018	2018 vs. 2017
Vrio Video Subscribers^{1,2}	13,331	13,838	13,629	(3.7)%	1.5%

(in 000s)	2019	2018	2017	Percent Change	
				2019 vs. 2018	2018 vs. 2017
Vrio Video Net Subscriber Additions³	(285)	250	42	—%	—%

¹ Excludes subscribers of our equity investment in SKY Mexico, in which we own a 41.3% stake. SKY Mexico had 7.4 million subscribers at September 30, 2019 and 7.6 million and 8.0 million at December 31, 2018 and 2017, respectively.

² 2019 excludes the impact of 222 subscriber disconnections resulting from conforming our video credit policy across the region, which is reflected in beginning of period subscribers.

³ Excludes SKY Mexico net subscriber losses of 225 in the nine months ended September 30, 2019 and losses of 366 and 23 for years ended December 31, 2018 and 2017, respectively.

Operating revenues decreased in 2019, due to foreign exchange pressures.

Operations and support expenses decreased in 2019, reflecting changes in foreign currency exchange rates. Approximately 19% of Vrio expenses are U.S. dollar-based, with the remainder in the local currency.

Depreciation expense decreased in 2019, primarily due to changes in foreign currency exchange rates.

Operating income decreased in 2019 and 2018. Our Vrio operating income margin was 1.4% in 2019, 6.5% in 2018 and 8.0% in 2017. Our Vrio EBITDA margin was 17.5% in 2019, 21.8% in 2018 and 23.5% in 2017.

XANDR SEGMENT

	2019	2018	2017	Percent Change	
				2019 vs. 2018	2018 vs. 2017
Segment Operating Revenues	\$2,022	\$1,740	\$1,373	16.2%	26.7%
Segment Operating Expenses					
Operations and support	646	398	169	62.3	—
Depreciation and amortization	58	9	2	—	—
Total Segment Operating Expenses	704	407	171	73.0	—
Segment Operating Income	1,318	1,333	1,202	(1.1)	10.9
Equity in Net Income of Affiliates	—	—	—	—	—
Segment Operating Contribution	\$1,318	\$1,333	\$1,202	(1.1)%	10.9%

Operating revenues increased in 2019 due to growth in subscription-based advertising revenue and our acquisition of AppNexus in August 2018 (see Note 6).

Operations and support expenses increased in 2019 reflecting our acquisition of AppNexus and our ongoing development of the platform supporting Xandr's business.

Operating income decreased in 2019 and increased 2018. Our Xandr segment operating income margin was 65.2% in 2019, 76.6% in 2018 and 87.5% in 2017.

SUPPLEMENTAL TOTAL ADVERTISING REVENUE INFORMATION

As a supplemental presentation to our Xandr segment operating results, we are providing a view of total advertising revenues generated by AT&T. This combined view presents the entire portfolio of advertising revenues reported across all operating segments and represents a significant strategic initiative and growth opportunity for AT&T. See the revenue categories table in Note 5 for a reconciliation.

Total Advertising Revenues

	2019	2018	2017	Percent Change	
				2019 vs. 2018	2018 vs. 2017
Advertising Revenues					
WarnerMedia	\$ 4,676	\$ 2,461	\$ 65	90.0%	—%
Communications	1,963	1,827	1,513	7.4	20.8
Xandr	2,022	1,740	1,373	16.2	26.7
Eliminations	(1,672)	(1,595)	(1,357)	(4.8)	(17.5)
Total Advertising Revenues	\$ 6,989	\$ 4,433	\$ 1,594	57.7%	—%

SUPPLEMENTAL COMMUNICATIONS OPERATING INFORMATION

As a supplemental presentation to our Communications segment operating results, we are providing a view of our AT&T Business Solutions results which includes both wireless and wireline operations. This combined view presents a complete profile of the entire business customer relationship, including mobile solutions for our business customers. Wireless business relationships include FirstNet customers, IoT connections and other company paid-for devices. See "Discussion and Reconciliation of Non-GAAP Measure" for a reconciliation of these supplemental measures to the most directly comparable financial measures calculated and presented in accordance with GAAP.

Business Solutions Results

	2019	2018	2017	Percent Change	
				2019 vs. 2018	2018 vs. 2017
Operating revenues					
Wireless service	\$ 7,925	\$ 7,323	\$ 7,928	8.2%	(7.6)%
Strategic and managed services	15,440	14,660	13,880	5.3	5.6
Legacy voice and data services	9,180	10,674	13,791	(14.0)	(22.6)
Other service and equipment	1,557	1,406	1,532	10.7	(8.2)
Wireless equipment	2,757	2,510	1,532	9.8	63.8
Total Operating Revenues	36,859	36,573	38,663	0.8	(5.4)
Operating expenses					
Operations and support	22,735	22,608	24,376	0.6	(7.3)
Depreciation and amortization	6,213	5,900	5,859	5.3	0.7
Total Operating Expenses	28,948	28,508	30,235	1.5	(5.7)
Operating Income	7,911	8,065	8,428	(1.9)	(4.3)
Equity in Net Income (Loss) of Affiliates	—	—	—	—	—
Operating Contribution	\$ 7,911	\$ 8,065	\$ 8,428	(1.9)%	(4.3)%

Management's Discussion and Analysis of Financial Condition and Results of Operations (continued)

Dollars in millions except per share amounts

OPERATING ENVIRONMENT AND TRENDS OF THE BUSINESS

2020 Revenue Trends We expect revenue growth in our wireless and broadband businesses as customers demand premium content, instant connectivity and higher speeds made possible by our fiber network expansion and wireless network enhancements through 5G deployment. In our Communications segment, we expect that our network quality and First Responder Network Authority (FirstNet) deployment will contribute to wireless subscriber and service revenue growth, and that 5G handset introductions during 2020 will drive wireless equipment revenue growth. We anticipate that applications like video streaming will also drive greater demand for broadband. In our WarnerMedia segment, we expect our premium content to drive revenue growth from both the current wholesale distribution through traditional pay-TV providers and our new video streaming platform, HBO Max, to be launched in May 2020. Across AT&T, we expect to provide consumers with a broad variety of video entertainment services, from mobile-centric and OTT live-TV streaming packages, to traditional full-size linear video. We expect growth in our advertising businesses from combining the data insights from our 170 million direct-to-consumer relationships with our premium video and digital advertising inventory. Revenue from business customers will continue to grow for mobile and IP-based services, but decline for legacy wireline services. Overall, we believe growth in wireless, broadband and WarnerMedia's premium content should offset pressure from our linear video and legacy voice and data services.

2020 Expense Trends We expect the spending required to support growth initiatives, primarily our 5G deployment and FirstNet build, as well as the launch of the HBO Max platform, to pressure expense trends in 2020. To the extent 5G handset introductions in 2020 are as expected, the expenses associated with those device sales will also contribute to higher costs. In addition, we expect the second-quarter 2019 update to estimated economic customer lives, and our launch of AT&T TV, our new streaming premium TV product, to contribute to expense pressure in the first half of the year. During 2020, we will also continue to transition our hardware-based network technology to more efficient and less expensive software-based technology. These investments will prepare us to meet increased customer demand for enhanced wireless and broadband services, including video streaming, augmented reality and "smart" technologies. The software benefits of our 5G wireless technology and new video delivery platforms should result in a more efficient use of capital and lower network-related expenses in the coming years.

To offset the costs of these initiatives, we anticipate savings from corporate initiatives to lower labor-related costs and corporate overhead, digital transformation of customer service

and ordering functions, vendor discounts and WarnerMedia merger synergies. Cost savings and non-strategic asset sales should help to further reduce our debt level.

Market Conditions The U.S. stock market experienced a positive year although general business investment remained modest, which affected our business services. Most of our products and services are not directly affected by the imposition of tariffs on Chinese goods. To date, we have not experienced any disruptions from our wireless handset supply chain due to the coronavirus epidemic in China but we continue to monitor the situation. While unemployment remains historically low, our residential customers continue to be price sensitive in selecting offerings, especially in the video area, and continue to focus on products that give them efficient access to video and broadcast services. We expect ongoing pressure on pricing during 2020 as we respond to the competitive marketplace, especially in wireless and video services.

Included on our consolidated balance sheets are assets held by benefit plans for the payment of future benefits. Our pension plans are subject to funding requirements of the Employee Retirement Income Security Act of 1974, as amended (ERISA). We expect only minimal ERISA contribution requirements to our pension plans for 2020. Investment returns on these assets depend largely on trends in the economy, and a weakness in the equity, fixed income and real asset markets could require us to make future contributions to the pension plans. In addition, our policy of recognizing actuarial gains and losses related to our pension and other postretirement plans in the period in which they arise subjects us to earnings volatility caused by changes in market conditions; however, these actuarial gains and losses do not impact segment performance as they are required to be recorded in other income (expense) – net. Changes in our discount rate, which are tied to changes in the bond market, and changes in the performance of equity markets, may have significant impacts on the valuation of our pension and other postretirement obligations at the end of 2020 (see "Critical Accounting Policies and Estimates").

OPERATING ENVIRONMENT OVERVIEW

AT&T subsidiaries operating within the United States are subject to federal and state regulatory authorities. AT&T subsidiaries operating outside the United States are subject to the jurisdiction of national and supranational regulatory authorities in the markets where service is provided.

In the Telecommunications Act of 1996 (Telecom Act), Congress established a national policy framework intended to bring the benefits of competition and investment in advanced telecommunications facilities

and services to all Americans by opening all telecommunications markets to competition and reducing or eliminating regulatory burdens that harm consumer welfare. Nonetheless, over the ensuing two decades, the Federal Communications Commission (FCC) and some state regulatory commissions have maintained or expanded certain regulatory requirements that were imposed decades ago on our traditional wireline subsidiaries when they operated as legal monopolies. More recently, the FCC has pursued a more deregulatory agenda, eliminating a variety of antiquated and unnecessary regulations and streamlining its processes in a number of areas. In addition, we are pursuing, at both the state and federal levels, additional legislative and regulatory measures to reduce regulatory burdens that are no longer appropriate in a competitive telecommunications market and that inhibit our ability to compete more effectively and offer services wanted and needed by our customers, including initiatives to transition services from traditional networks to all IP-based networks. At the same time, we also seek to ensure that legacy regulations are not further extended to broadband or wireless services, which are subject to vigorous competition.

We have organized the following discussion by reportable segment.

Communications Segment

Internet The FCC currently classifies fixed and mobile consumer broadband services as information services, subject to light-touch regulation. Although the D.C. Circuit upheld the FCC's current classification, challenges to that decision remain pending. A more detailed discussion can be found under "Regulatory Developments".

A number of states have adopted legislation or issued executive orders that would reimpose net neutrality rules repealed by the FCC, and in some cases, established additional requirements. Suits have been filed concerning laws in certain states, but have been stayed pursuant to agreements by those states not to enforce their laws pending final resolution of all appeals. We will continue to support congressional action to codify a set of standard consumer rules for the internet. A more detailed discussion can be found under "Regulatory Developments".

In October 2016, the FCC adopted new rules governing the use of customer information by providers of broadband internet access service. Those rules were more restrictive in certain respects than those governing other participants in the internet economy, including so-called "edge" providers such as Google and Facebook. In April 2017, the president signed a resolution passed by Congress repealing the new rules under the Congressional Review Act.

Privacy-related legislation has been considered or adopted in a number of states. Legislative and regulatory action

could result in increased costs of compliance, claims against broadband internet access service providers and others, and increased uncertainty in the value and availability of data. Effective as of January 1, 2020, a California state law gives consumers the right to know what personal information is being collected about them, and whether and to whom it is sold or disclosed, and to access and request deletion of this information. Subject to certain exceptions, it also gives California consumers the right to opt out of the sale of personal information.

Wireless The industry-wide deployment of 5G technology, which is needed to satisfy extensive demand for video and internet access, will involve significant deployment of "small cell" equipment and therefore increase the need for local permitting processes that allow for the placement of small cell equipment on reasonable timelines and terms. Federal regulations also can delay and impede the deployment of infrastructure used to provide telecommunications and broadband services, including small cell equipment. In March, August and September 2018, the FCC adopted orders to streamline federal and local wireless infrastructure review processes in order to facilitate deployment of next-generation wireless facilities. Specifically, the FCC's March 2018 Order streamlined historical, tribal, and environmental review requirements for wireless infrastructure, including by excluding most small cell facilities from such review. The Order was appealed and in August 2019, the D.C. Circuit Court of Appeals vacated the FCC's finding that most small cell facilities are excluded from review, but otherwise upheld the FCC's Order. The FCC's August and September 2018 Orders simplified the regulations for attaching telecommunications equipment to utility poles and clarified when local government right-of-way access and use restrictions can be preempted because they unlawfully prohibit the provision of telecommunications services. Those orders were appealed to the 9th Circuit Court of Appeals, where they remain pending. In addition to the FCC's actions, to date, 28 states and Puerto Rico have adopted legislation to facilitate small cell deployment.

In December 2018, we introduced the nation's first commercial mobile 5G service. We expect to have mobile 5G service available nationwide to more than 200 million people by the second quarter of 2020; we anticipate the introduction of 5G handsets and devices will contribute to a renewed interest in equipment upgrades.

As the U.S. wireless industry has matured, we believe future wireless growth will depend on our ability to offer innovative services, plans and devices and to provide these services in bundled product offerings to best utilize a wireless network that has sufficient spectrum and capacity to support these innovations on as broad a geographic basis as possible.

Management's Discussion and Analysis of Financial Condition and Results of Operations (continued)

Dollars in millions except per share amounts

We continue to invest significant capital in expanding our network capacity, as well as to secure and utilize spectrum that meets our long-term needs. We secured the FirstNet contract, which provides us with access to 20 MHz of nationwide low band spectrum, and invested in 5G and millimeter-wave technologies with our acquisition of Fiber-Tower Corporation, which holds significant amounts of spectrum in the millimeter wave bands (39 GHz) that the FCC reallocated for mobile broadband services. We were also awarded 24 GHz licenses covering a nationwide footprint in a recent FCC auction. These bands will help to accelerate our entry into 5G services.

Video We provide domestic satellite video service through our subsidiary DIRECTV, whose satellites are licensed by the FCC. The Communications Act of 1934 and other related acts give the FCC broad authority to regulate the U.S. operations of DIRECTV, and some of WarnerMedia's businesses are also subject to obligations under the Communications Act and related FCC regulations.

WarnerMedia Segment

We create, own and distribute intellectual property, including copyrights, trademarks and licenses of intellectual property. To protect our intellectual property, we rely on a combination of laws and license agreements. Outside of the U.S., laws and regulations relating to intellectual property protection and the effective enforcement of these laws and regulations vary greatly from country to country. The European Union Commission is pursuing legislative and regulatory initiatives that could impair Warner Bros.' current country-by-country licensing approach in the European Union. Piracy, particularly of digital content, continues to threaten WarnerMedia's revenues from products and services, and we work to limit that threat through a combination of approaches, including technological and legislative solutions. Outside the U.S., various laws and regulations, as well as trade agreements with the U.S., also apply to the distribution or licensing of feature films for exhibition in movie theaters and on broadcast and cable networks. For example, in certain countries, including China, laws and regulations limit the number of foreign films exhibited in such countries in a calendar year.

EXPECTED GROWTH AREAS

Over the next few years, we expect our growth to come from wireless, software-based video offerings like HBO Max, IP-based broadband services and advertising and data insights (especially with WarnerMedia). We now provide integrated services to diverse groups of customers in the U.S. on an integrated telecommunications network utilizing

different technological platforms, including wireless, satellite and wireline. In 2020, our key initiatives include:

- Launching 5G service nationwide on our premier wireless network.
- Generating mobile subscriber growth from FirstNet and our premier network quality.
- Launching HBO Max, our new platform for premium content and video offered directly to consumers, as well as through our traditional distributors.
- Increasing fiber penetration and growing broadband revenues.
- Continuing to develop a competitive advantage through our industry-leading network cost structure.
- Growing profitability in our Mexico business unit.

Wireless We expect to continue to deliver revenue growth in the coming years. We are in a period of rapid growth in wireless video usage and believe that there are substantial opportunities available for next-generation converged services that combine technologies and services. We secured the FirstNet contract, which provides us with access to 20 MHz of nationwide low band spectrum and the opportunity to grow subscribers through the first responder agencies served, and invested in 5G and millimeter-wave technologies with our acquisition of FiberTower Corporation, which currently holds significant amounts of spectrum in the millimeter wave bands (39 GHz) that the FCC reallocated for mobile broadband services. These bands will help to accelerate our entry into 5G services.

As of December 31, 2019, we served 185 million wireless subscribers in North America, with 166 million in the United States. Our LTE technology covers over 430 million people in North America, and in the United States, we cover all major metropolitan areas and more than 330 million people. We also provide 4G coverage using another technology (HSPA+), and when combined with our upgraded backhaul network, we provide enhanced network capabilities and superior mobile broadband speeds for data and video services. In December 2018, we introduced the nation's first commercial mobile 5G service and plan to expand that deployment nationwide by the second quarter of 2020 to cover approximately 200 million people.

Our networks covering both the U.S. and Mexico have enabled our customers to use wireless services without roaming on other companies' networks. We believe this seamless access will prove attractive to customers and provide a significant growth opportunity. As of the end of 2019, we provided LTE coverage to approximately 100 million people in Mexico.

Integration of Data/Broadband and Entertainment Services As the communications industry has evolved into internet-based technologies capable of blending wireline, satellite and wireless services, we plan to focus on expanding our wireless network capabilities and provide high-speed internet and video offerings that allow customers to integrate their home or business fixed services with their mobile service. During 2020, we will continue to develop and provide unique integrated video, mobile and broadband solutions. The launch of the HBO Max platform will facilitate our customers' desire to view video anywhere on demand and encourage customer retention.

REGULATORY DEVELOPMENTS

Set forth below is a summary of the most significant regulatory proceedings that directly affected our operations during 2019. Industry-wide regulatory developments are discussed above in Operating Environment Overview. While these issues may apply only to certain subsidiaries, the words "we," "AT&T" and "our" are used to simplify the discussion. The following discussions are intended as a condensed summary of the issues rather than as a comprehensive legal analysis and description of all of these specific issues.

International Regulation Our subsidiaries operating outside the United States are subject to the jurisdiction of regulatory authorities in the territories in which the subsidiaries operate. Our licensing, compliance and advocacy initiatives in foreign countries primarily enable the provision of enterprise (i.e., large business), wireless and satellite television services. AT&T is engaged in multiple efforts with foreign regulators to open markets to competition, foster conditions favorable to investment and increase our scope of services and products.

The General Data Protection Regulation went into effect in Europe in May of 2018. AT&T processes and handles personal data of its customers and subscribers, employees of its enterprise customers and its employees. This regulation created a range of new compliance obligations and significantly increased financial penalties for noncompliance.

Federal Regulation We have organized our following discussion by service impacted.

Internet In February 2015, the FCC released an order classifying both fixed and mobile consumer broadband internet access services as telecommunications services, subject to Title II of the Communications Act. The Order, which represented a departure from longstanding bipartisan precedent, significantly expanded the FCC's authority to regulate broadband internet access services, as well as

internet interconnection arrangements. In December 2017, the FCC reversed its 2015 decision by reclassifying fixed and mobile consumer broadband services as information services and repealing most of the rules that were adopted in 2015. In lieu of broad conduct prohibitions, the order requires internet service providers to disclose information about their network practices and terms of service, including whether they block or throttle internet traffic or offer paid prioritization. Several parties appealed the FCC's December 2017 decision and the D.C. Circuit heard oral argument on the appeals on February 1, 2019. On October 1, 2019, the court issued a unanimous opinion upholding the FCC's reclassification of broadband as an information service, and its reliance on transparency requirements and competitive marketplace dynamics to safeguard net neutrality. While the court vacated the FCC's express preemption of any state regulation of net neutrality, it nevertheless stressed that its ruling does not prevent the FCC or ISPs from relying on conflict preemption to invalidate particular state laws that are inconsistent with the FCC's regulatory objectives and framework. The court also concluded that the FCC failed to satisfy its obligation under the Administrative Procedure Act (APA) to consider the impact of its 2017 order in three discrete areas: public safety, the Lifeline program, and pole attachment regulation, and thus remanded it to the FCC for further proceedings on those issues, but without disturbing the operative effect of that order. Several petitions for rehearing of the D.C. Circuit's October 1 decision have been filed. Those petitions remain pending. A number of states have adopted legislation to reimpose the very rules the FCC repealed. In some cases, state legislation imposes requirements that go beyond the FCC's February 2015 order. Additionally, some state governors have issued executive orders that effectively reimpose the repealed requirements. Suits have been filed concerning laws in California and Vermont. Both lawsuits have been stayed pursuant to agreements by those states not to enforce their laws pending final resolution of all appeals of the FCC's December 2017 order. We expect that going forward additional states may seek to impose net neutrality requirements. We will continue to support congressional action to codify a set of standard consumer rules for the internet.

Wireless and Broadband Since November 2017, the FCC has adopted four significant rulings designed to accelerate broadband infrastructure deployment. In November 2017, the FCC updated and streamlined certain rules governing pole attachments, copper retirement, and service discontinuances. In March 2018, the FCC eliminated lengthy environmental, historical and tribal reviews for most small cell deployments and streamlined processes

Management's Discussion and Analysis of Financial Condition and Results of Operations (continued)

Dollars in millions except per share amounts

that must be followed when those reviews are required. The D.C. Circuit Court of Appeals vacated the FCC's finding in this Order that small cell facilities do not require environmental, historical and tribal reviews, but left intact all other processes adopted to streamline review when required. In August 2018, the FCC adopted more comprehensive pole attachment reform, including by simplifying the attaching process (i.e., one-touch make-ready) and clarified that the Communications Act precludes local governments from imposing moratoria on the deployment of communications facilities. And, in September 2018, the FCC restricted the ability of state and local governments to impede small cell deployments in rights-of-way and on government-owned structures, through exorbitant fees, unreasonable aesthetic requirements and other actions. These decisions will remove regulatory barriers and reduce the costs of the infrastructure needed for 5G deployment, which will enhance our ability to place small cell facilities on utility poles and to replace legacy facilities and services with advanced broadband infrastructure and services. Appeals of the August and September 2018 Orders remain pending in the 9th Circuit Court of Appeals.

In 2018, the FCC took several actions to make spectrum available for 5G services. In late 2018, the FCC adopted auction rules for the 39 GHz band that will allow the FCC to auction remaining unlicensed 39 GHz spectrum and realign the band to allow large, contiguous blocks of spectrum that will support 5G. This auction, which also includes spectrum in the 37 GHz and 47 GHz bands, is currently underway. The FCC has granted AT&T special temporary authority to launch its 5G service in 400 MHz of contiguous spectrum in the 37/39 GHz band in a total of 32 markets. In addition, the FCC completed auctions in 2019 of 24 and 28 GHz spectrum, two other bands that will support 5G. AT&T was awarded 24 GHz licenses covering a nationwide footprint.

COMPETITION

Competition continues to increase for communications, media entertainment and digital services from traditional and nontraditional competitors. Technological advances have expanded the types and uses of services and products available. In addition, lack of or a reduced level of regulation of comparable legacy services has lowered costs for alternative communications service providers. As a result, we face continuing competition as well as some new opportunities in significant portions of our business.

Wireless We face substantial competition in our wireless businesses. Under current FCC rules, multiple licensees, who provide wireless services on the cellular, PCS, Advanced Wireless Services, 700 MHz and other spectrum

bands, may operate in each of our U.S. service areas. Our competitors include three national wireless providers; a larger number of regional providers and resellers of those services; and specifically certain cable companies. In addition, we face competition from providers who offer voice, text messaging and other services as applications on data networks. Substantially all of the U.S. population lives in areas with at least three mobile telephone operators, with most of the population living in areas with at least four competing carriers. We are one of three facilities-based providers in Mexico, with the most significant market share controlled by América Móvil. We may experience significant competition from companies that provide similar services using other communications technologies and services. While some of these technologies and services are now operational, others are being developed or may be developed. We compete for customers based principally on service/device offerings, price, network quality, coverage area and customer service.

Video/Broadband Our subsidiaries providing communications and digital entertainment services will face continued competitive pressure in 2020 from multiple providers, including wireless, satellite, cable, online video providers, and resellers. In addition, the desire for high-speed data on demand, including video, is continuing to lead customers to terminate their traditional wired or linear services and use our or competitors' wireless, satellite and internet-based services. We have launched our own video OTT and/or streaming options to attract or retain customers that do not want a full-scale traditional video package. In most U.S. markets, we compete for customers with large cable companies for high-speed internet, video and voice services and other smaller telecommunications companies for both long-distance and local services. In addition, in Latin American countries served by our DIRECTV subsidiary, we also face competition from other video providers, including América Móvil and Telefónica.

Legacy Voice and Data We continue to lose legacy voice and data subscribers due to competitors (e.g., wireless, cable and VoIP providers) who can provide comparable services at lower prices because they are not subject to traditional telephone industry regulation (or the extent of regulation they are subject to is in dispute), utilize different technologies or promote a different business model (such as advertising based). In response to these competitive pressures, for a number of years we have used a bundling strategy that rewards customers who consolidate their services with us. We continue to focus on bundling services, including combined packages of wireless and video service through our satellite and IP-based services. We will continue to develop innovative and integrated services that capitalize on our wireless and IP-based network and satellites.

Additionally, we provide local and interstate telephone and switched services to other service providers, primarily large internet service providers using the largest class of nationwide internet networks (internet backbone), wireless carriers, other telephone companies, cable companies and systems integrators. These services are subject to additional competitive pressures from the development of new technologies, the introduction of innovative offerings and increasing satellite, wireless, fiber-optic and cable transmission capacity for services. We face a number of international competitors, including Orange Business Services, BT, Singapore Telecommunications Limited and Verizon Communications Inc., as well as competition from a number of large systems integrators.

Media Our WarnerMedia businesses face similar shifts in consumer viewing patterns, increased competition from streaming services and the expansion by other companies, in particular, technology companies. In May 2020, we plan to launch HBO Max, our new platform for premium content and video offered directly to consumers, as well as through our traditional distributors.

WarnerMedia competes with other studios and television production groups and independents to produce and sell programming. Many television networks and online platforms have affiliated production companies from which they are increasingly obtaining their programming, which has reduced their demand for programming from non-affiliated production companies. WarnerMedia also faces competition from other television networks, online platforms, and premium pay television services for distribution and marketing of its television networks and premium pay and basic tier television services by affiliates.

Our WarnerMedia businesses compete with other production companies and studios for the services of producers, directors, writers, actors and others and for the acquisition of literary properties. In recent years, technology companies also have begun to produce programming and compete with WarnerMedia for talent and property rights.

Advertising The increased amount of consumer time spent online and on mobile activities has resulted in the shift of advertising budgets away from traditional television to digital advertising. WarnerMedia's advertising-supported television networks and digital properties compete with streaming services, other networks and digital properties, print, radio and other media. Our programmatic advertising business faces competition from a variety of technology companies. Similar to all participants in the advertising technology sector, we contend with the dominance of Google, as well as the influence of Facebook, whose practices may result in the decreased ability and willingness of advertisers and programmers to adopt programmatic solutions offered by alternative suppliers.

ACCOUNTING POLICIES AND STANDARDS

Critical Accounting Policies and Estimates Because of the size of the financial statement line items they relate to or the extent of judgment required by our management, some of our accounting policies and estimates have a more significant impact on our consolidated financial statements than others. The following policies are presented in the order in which the topics appear in our consolidated statements of income.

Pension and Postretirement Benefits Our actuarial estimates of retiree benefit expense and the associated significant weighted-average assumptions are discussed in Note 15. Our assumed weighted-average discount rates for pension and postretirement benefits of 3.40% and 3.20%, respectively, at December 31, 2019, reflect the hypothetical rate at which the projected benefit obligations could be effectively settled or paid out to participants. We determined our discount rate based on a range of factors, including a yield curve composed of the rates of return on several hundred high-quality, fixed income corporate bonds available at the measurement date and corresponding to the related expected durations of future cash outflows for the obligations. These bonds were all rated at least Aa3 or AA- by one of the nationally recognized statistical rating organizations, denominated in U.S. dollars, and neither callable, convertible nor index linked. For the year ended December 31, 2019, when compared to the year ended December 31, 2018, we decreased our pension discount rate by 1.10%, resulting in an increase in our pension plan benefit obligation of \$8,018 and decreased our postretirement discount rate by 1.20%, resulting in an increase in our postretirement benefit obligation of \$2,399.

Our expected long-term rate of return on pension plan assets is 7.00% for 2020 and 2019. Our expected long-term rate of return on postretirement plan assets is 4.75% for 2020 and 5.75% for 2019. Our expected return on plan assets is calculated using the actual fair value of plan assets. If all other factors were to remain unchanged, we expect that a 0.50% decrease in the expected long-term rate of return would cause 2020 combined pension and postretirement cost to increase \$273, which under our accounting policy would be adjusted to actual returns in the current year as part of our fourth-quarter remeasurement of our retiree benefit plans.

We recognize gains and losses on pension and postretirement plan assets and obligations immediately in "Other income (expense) – net" in our consolidated statements of income. These gains and losses are generally measured annually as of December 31, and accordingly, will normally be recorded during the fourth quarter, unless an earlier remeasurement is required. Should actual experience differ from actuarial assumptions, the projected pension

Management's Discussion and Analysis of Financial Condition and Results of Operations (continued)

Dollars in millions except per share amounts

benefit obligation and net pension cost and accumulated postretirement benefit obligation and postretirement benefit cost would be affected in future years. See Note 15 for additional discussions regarding our assumptions.

Depreciation Our depreciation of assets, including use of composite group depreciation for certain subsidiaries and estimates of useful lives, is described in Notes 1 and 7.

If all other factors were to remain unchanged, we expect that a one-year increase in the useful lives of our plant in service would have resulted in a decrease of approximately \$3,027 in our 2019 depreciation expense and that a one-year decrease would have resulted in an increase of approximately \$4,196 in our 2019 depreciation expense. See Notes 7 and 8 for depreciation and amortization expense applicable to property, plant and equipment, including our finance lease right-of-use assets.

Asset Valuations and Impairments Goodwill and other indefinite-lived intangible assets are not amortized but tested at least annually for impairment. For impairment testing, we estimate fair values using models that predominantly rely on the expected cash flows to be derived from the use of the asset. We recorded an impairment in 2019 for our SKY Brasil trade name (see Note 9).

We test goodwill on a reporting unit basis by comparing the estimated fair value of each reporting unit to its book value. If the fair value exceeds the book value, then no impairment is measured. We estimate fair values using an income approach (also known as a discounted cash flow) and a market multiple approach. The income approach utilizes our 10-year cash flow projections with a perpetuity value discounted at an appropriate weighted average cost of capital. The market multiple approach uses the multiples of publicly traded companies whose services are comparable to those offered by the reporting units. In 2019, the calculated fair values of the reporting units exceeded their book values in all circumstances. If either the projected rate of long-term growth of cash flows or revenues declined by 0.5%, or if the discount rate increased by 0.5%, the fair values would still be higher than the book value of the goodwill. In the event of a 10% drop in the fair values of the reporting units, the fair values still would have exceeded the book values of the reporting units.

We assess fair value for U.S. wireless licenses using a discounted cash flow model (the Greenfield Approach) and a corroborative market approach based on auction prices, depending upon auction activity. The Greenfield Approach assumes a company initially owns only the wireless licenses and makes investments required to build an operation comparable to current use. Inputs to the model include subscriber growth, churn, revenue per user, capital investment and acquisition costs per subscriber,

ongoing operating costs and resulting EBITDA margins. We based our assumptions on a combination of average marketplace participant data and our historical results, trends and business plans. These licenses are tested annually for impairment on an aggregated basis, consistent with their use on a national scope for the United States. For impairment testing, we assume subscriber and revenue growth will trend up to projected levels, with a long-term growth rate reflecting expected long-term inflation trends. We assume churn rates will initially exceed our current experience, but decline to rates that are in line with industry-leading churn. We used a discount rate of 8.75%, based on the optimal long-term capital structure of a market participant and its associated cost of debt and equity for the licenses, to calculate the present value of the projected cash flows. If either the projected rate of long-term growth of cash flows or revenues declined by 0.5%, or if the discount rate increased by 0.5%, the fair values of these wireless licenses would still be higher than the book value of the licenses. The fair value of these wireless licenses exceeded their book values by more than 10%.

Orbital slots are also valued using the Greenfield Approach. The projected cash flows are based on various factors, including satellite cost, other capital investment per subscriber, acquisition costs per subscriber and usage per subscriber, as well as revenue growth, subscriber growth and churn rates. For impairment testing purposes, we assumed sustainable long-term growth assumptions consistent with the business plan and industry counterparts in the United States. We used a discount rate of 8.5% to calculate the present value of the projected cash flows. In 2019, the fair value of orbital slots was slightly lower than the prior year, which exceeded the book value by approximately 10% in 2018. The decrease in fair value was driven by the transition of the video business to OTT and streaming technology.

We review customer relationships, licenses in Mexico and other finite-lived intangible assets for impairment whenever events or circumstances indicate that the book value may not be recoverable over their remaining life. For this analysis, we compare the expected undiscounted future cash flows attributable to the asset to its book value.

We review operating lease right-of-use assets for impairment whenever events or circumstances indicated that the book value may not be recoverable over the remaining life.

We periodically assess our network assets for impairment (see Note 1).

Income Taxes Our estimates of income taxes and the significant items giving rise to the deferred assets and liabilities are shown in Note 14 and reflect our assessment of actual future taxes to be paid on items reflected in the

financial statements, giving consideration to both timing and probability of these estimates. Actual income taxes could vary from these estimates due to future changes in income tax law or the final review of our tax returns by federal, state or foreign tax authorities.

We use our judgment to determine whether it is more likely than not that we will sustain positions that we have taken on tax returns and, if so, the amount of benefit to initially recognize within our financial statements. We regularly review our uncertain tax positions and adjust our unrecognized tax benefits (UTBs) in light of changes in facts and circumstances, such as changes in tax law, interactions with taxing authorities and developments in case law. These adjustments to our UTBs may affect our income tax expense. Settlement of uncertain tax positions may require use of our cash.

New Accounting Standards

Beginning with 2019 interim and annual reporting periods, we adopted the FASB's new accounting guidance related to leasing. The most significant impact of the new guidance was to our balance sheet, as we recorded a right-of-use asset and corresponding liability for our operating leases existing at January 1, 2019. We adopted the new leasing standard using a modified retrospective transition method as of the beginning of the period of adoption, which did not require us to adjust the balance sheet for prior periods, therefore affecting the comparability of our financial statements. See Note 1 for discussion of the impact of the standard.

See Note 1 for discussion of the expected impact of other new standards.

OTHER BUSINESS MATTERS

Unlimited Data Plan Claims In October 2014, the FTC filed a civil suit in the U.S. District Court for the Northern District of California against AT&T Mobility, LLC seeking injunctive relief and unspecified money damages under Section 5 of the Federal Trade Commission Act. The FTC's allegations concern the application of AT&T's Maximum Bit Rate (MBR) program to customers who enrolled in our Unlimited Data Plan from 2007-2010. MBR temporarily reduces in certain instances the download speeds of a small portion of our legacy Unlimited Data Plan customers each month after the customer exceeds a designated amount of data during the customer's billing cycle. MBR is an industry-standard practice that is designed to affect only the most data-intensive applications (such as video streaming). Texts, emails, tweets, social media posts, internet browsing and many other applications are typically unaffected. Contrary to the FTC's allegations, our MBR program is permitted by our customer contracts, was fully disclosed

in advance to our Unlimited Data Plan customers, and was implemented to protect the network for the benefit of all customers. We reached a tentative agreement (Stipulated Order) with the FTC staff in August 2019, pending FTC approval. The FTC approved the Stipulated Order on November 4, 2019, and the Court approved and entered the Order on December 3, 2019. In the resolution of this matter, we did not admit the FTC's allegations, and the settlement amount is not material to our financial results. In addition to the FTC case, several class actions were filed challenging our MBR program. We have secured dismissals in each of these cases except *Roberts v. AT&T Mobility LLC*, which is ongoing.

Labor Contracts As of January 31, 2020, we employed approximately 246,000 persons. Approximately 40% of our employees are represented by the Communications Workers of America (CWA), the International Brotherhood of Electrical Workers (IBEW) or other unions. After expiration of the collective bargaining agreements, work stoppages or labor disruptions may occur in the absence of new contracts or other agreements being reached.

- A contract covering approximately 7,000 traditional wireline employees in our Midwest region expired in April 2018. In August 2019, a new four-year contract was ratified by employees and will expire in April 2022.
- A contract covering approximately 3,000 traditional wireline employees in our legacy AT&T Corp. business expired in April 2018. In August 2019, a new four-year contract was ratified by employees and will expire in April 2022.
- A contract covering approximately 18,000 traditional wireline employees in our Southeast region expired in August 2019. In October 2019, a new five-year contract was ratified by employees and will expire in August 2024.
- Contracts covering approximately 20,000 employees are scheduled to expire during 2020, including a contract expiring in February covering approximately 7,000 Mobility employees and a contract expiring in April covering approximately 13,000 traditional wireline employees in our West region.

Environmental We are subject from time to time to judicial and administrative proceedings brought by various governmental authorities under federal, state or local environmental laws. We reference in our Forms 10-Q and 10-K certain environmental proceedings that could result in monetary sanctions (exclusive of interest and costs) of one hundred thousand dollars or more. However, we do not believe that any of those currently pending will have a material adverse effect on our results of operations.

Management's Discussion and Analysis of Financial Condition and Results of Operations (continued)

Dollars in millions except per share amounts

LIQUIDITY AND CAPITAL RESOURCES

We had \$12,130 in cash and cash equivalents available at December 31, 2019. Cash and cash equivalents included cash of \$2,654 and money market funds and other cash equivalents of \$9,476. Approximately \$2,681 of our cash and cash equivalents were held by our foreign entities in accounts predominantly outside of the U.S. and may be subject to restrictions on repatriation.

Cash and cash equivalents increased \$6,926 since December 31, 2018. In 2019, cash inflows were primarily provided by cash receipts from operations, including cash from an increased amount of sales and transfers of our receivables to third parties, sale of investments, issuance of long-term debt, collateral received from banks and other participants in our derivative arrangements and issuances of nonconvertible perpetual preferred interests in subsidiaries and cumulative preferred stock. These inflows were offset by cash used to meet the needs of the business, including, but not limited to, payment of operating expenses, debt repayments, funding capital expenditures and vendor financing payments, spectrum purchases and dividends to stockholders.

Cash Provided by or Used in Operating Activities

During 2019, cash provided by operating activities was \$48,668 compared to \$43,602 in 2018. Higher operating cash flows in 2019 were primarily due to contributions from full year of WarnerMedia and higher cash flows from working capital initiatives, including sales of receivables (see Note 18), partly offset by higher spend on film and television production and net tax payments in 2019 compared to net tax refunds in 2018.

We actively manage the timing of our supplier payments for non-capital items to optimize the use of our cash. Among other things, we seek to make payments on 90-day or greater terms, while providing the suppliers with access to bank facilities that permit earlier payments at their cost. In addition, for payments to a key supplier, we have arrangements that allow us to extend payment terms up to 90 days at an additional cost to us (referred to as supplier financing). The net impact of supplier financing on cash from operating activities was to improve working capital \$909 in 2019, and \$1,869 in 2018. All supplier financing payments are due within one year.

Cash Used in or Provided by Investing Activities

During 2019, cash used in investing activities totaled \$16,690, and consisted primarily of \$19,635 (including interest during construction) for capital expenditures (\$1,616 lower than the prior-year), and \$982 of wireless spectrum offset by proceeds from the sales of our ownership interests in Hulu and WarnerMedia's headquarters (Hudson Yards) under a sale-leaseback arrangement (see Note 6).

For capital improvements, we have negotiated favorable vendor payment terms of 120 days or more (referred to as vendor financing) with some of our vendors, which are excluded from capital expenditures and reported as financing activities. Vendor financing payments were \$3,050 in 2019, compared to \$560 in 2018. Capital expenditures in 2019 were \$19,635, and when including \$3,050 cash paid for vendor financing and excluding \$1,005 of FirstNet reimbursements, gross capital investment was \$23,690 (\$450 higher than the prior-year). The vast majority of our capital expenditures are spent on our networks, including product development and related support systems. In 2019, we placed \$2,632 of equipment in service under vendor financing arrangements (compared to \$2,162 in 2018) and \$1,116 of assets related to the FirstNet build (compared to \$1,500 in 2018). Total reimbursements from the government for FirstNet were \$1,374 for 2019 and \$1,670 for 2018, predominately for capital expenditures.

The amount of capital expenditures is influenced by demand for services and products, capacity needs and network enhancements. In 2020, we expect that our gross capital investment, which includes capital expenditures and cash paid for vendor financing and excludes expected FirstNet reimbursement of approximately \$1,000, will be in the \$20,000 range.

Cash Used in or Provided by Financing Activities

For the full year, cash used in financing activities totaled \$25,083 and included net proceeds from debt issuances of \$17,039, which consisted primarily of the following issuances:

Issued and redeemed in 2019

- January draw of \$2,850 on an 11-month syndicated term loan agreement (repaid in the third quarter).
- January draw of \$750 on a private financing agreement (repaid in the first quarter).
- August borrowings of \$400 under a private financing agreement (repaid in the third quarter).

Issued and outstanding in 2019

- February issuance of \$3,000 of 4.350% global notes due 2029.
- February issuance of \$2,000 of 4.850% global notes due 2039.
- Borrowings of \$725 in January and \$525 in June that are supported by government agencies to support network equipment purchases.
- June draw of \$300 on a private financing agreement.

- September issuance of €1,000 of 0.25% global notes due 2026, €1,250 of 0.80% global notes due 2030 and €750 of 1.80% global notes due 2039 (when combined, \$3,308 at issuance).
- September draw of \$1,300 on a Bank of America term loan credit agreement.
- November draw of \$750 on a private financing agreement.
- December issuance of \$1,265 of 4.250% global notes due 2050.

During 2019, repayment of long-term debt totaled \$27,592. Repayments primarily consisted of the following:

Notes redeemed at maturity:

- \$1,850 of 2.300% AT&T global notes in the first quarter.
- \$400 of AT&T floating-rate notes in the first quarter.
- €1,500 of AT&T floating-rate notes in the second quarter (\$1,882 at maturity).
- \$650 of 2.100% Warner Media, LLC notes in the second quarter.
- CHF 450 0.500% senior fixed-rate notes in the fourth quarter (\$467 at maturity).

Notes redeemed or repurchased prior to maturity:

- \$2,010 of AT&T global notes with interest rates ranging from 5.000% to 5.200% and original maturities in 2020 and 2021, in the first quarter.
- \$2,000 of Warner Media, LLC notes with interest rates ranging from 4.700% to 4.750% and original maturities in 2021, in the first quarter.
- \$1,295 of 4.700% AT&T global notes with an original maturity in 2044, in the fourth quarter.
- \$590 of Warner Media, LLC and/or Historic TW Inc. notes that were tendered for cash in our second quarter obligor debt exchange. The notes had interest rates ranging between 6.500% and 9.150% and original maturities ranging from 2023 to 2036.
- \$1,409 of subsidiary notes that were tendered for cash in December 2019. The notes had interest rates ranging between 2.950% and 9.150% and original maturities ranging from 2022 to 2097.
- \$243 of open market repurchases of AT&T Corp, AT&T Mobility LLC, and New Cingular Wireless Services, Inc. notes, with interest rates ranging from 7.125% to 8.750% and original maturities in 2031, in the second quarter.
- \$154 of open market repurchases of Warner Media, LLC, Historic TW Inc., BellSouth LLC and AT&T Mobility LLC notes, with interest rates ranging from 2.95% to 7.625% and original maturities ranging from 2022 to 2097, in the third quarter.

Credit facilities repaid and other redemptions:

- \$2,625 of final amounts outstanding under our Acquisition Term Loan (defined below) in the first quarter.
- \$750 of January borrowings under a private financing agreement, in the first quarter.
- \$1,500 of four-year and five-year borrowings under the Nova Scotia Credit Agreement (defined below) in the second quarter and \$750 of three-year borrowings in the third quarter.
- \$600 of borrowings under our credit agreement with Canadian Imperial Bank of Commerce in the second quarter.
- \$500 of advances under our November 2018 Term Loan (defined below) in the second quarter, with payment of the remaining \$3,050 of advances in the third quarter.
- \$250 of borrowings under a U.S. Bank credit agreement in the second quarter.
- \$750 of borrowings under a private credit agreement in the third quarter.
- \$400 of borrowings under a private financing agreement in the third quarter.
- \$2,850 of borrowings under an 11-month syndicated term loan agreement from January 2019 in the third quarter.

Our weighted average interest rate of our entire long-term debt portfolio, including the impact of derivatives, was approximately 4.4% as of December 31, 2019 and 4.4% as of December 31, 2018. We had \$161,109 of total notes and debentures outstanding at December 31, 2019, which included Euro, British pound sterling, Canadian dollar, Mexican peso, Australian dollar, Brazilian real and Swiss franc denominated debt that totaled approximately \$42,485.

At December 31, 2019, we had \$11,838 of debt maturing within one year, consisting of \$4 of other short-term borrowings and \$11,834 of long-term debt issuances. Debt maturing within one year includes the following notes that may be put back to us by the holders:

- \$1,000 of annual put reset securities issued by BellSouth that may be put back to us each April until maturity in 2021.
- An accreting zero-coupon note that may be redeemed each May until maturity in 2022. If the remainder of the zero-coupon note (issued for principal of \$500 in 2007 and partially exchanged in the 2017 debt exchange offers) is held to maturity, the redemption amount will be \$592.

Management's Discussion and Analysis of Financial Condition and Results of Operations (continued)

Dollars in millions except per share amounts

During 2019, we paid \$3,050 of cash under our vendor financing program. Total vendor financing payables included in our December 31, 2019 consolidated balance sheet were approximately \$2,067, with \$1,625 due within one year (in "Accounts payable and accrued liabilities") and the remainder predominantly due within two to three years (in "Other noncurrent liabilities").

Financing activities in 2019 also included \$7,876 of capital from the issuance of nonconvertible preferred interests issued by subsidiaries and \$1,164 for the December issuance of cumulative 5.00% preferred stock. In February 2020, we issued Series B and Series C preferred stock for approximately \$3,900. (See Note 17)

At December 31, 2019, we had approximately 319 million shares remaining from share repurchase authorizations approved by the Board of Directors in 2013 and 2014 (see Note 17). For the year ended December 31, 2019, we repurchased approximately 56 million shares under these authorizations. In January 2020, we repurchased \$4,000 of AT&T common stock under an accelerated share repurchase agreement (see Note 2).

We paid dividends on common shares of \$14,888 in 2019 and \$13,410 in 2018, primarily reflecting the increase in the number of shares outstanding related to our acquisition of Time Warner as well as an increase in our quarterly dividend approved by our Board of Directors in December 2018. Dividends declared by our Board of Directors totaled \$2.05 per share in 2019 and \$2.01 per share in 2018. Our dividend policy considers the expectations and requirements of stockholders, capital funding requirements of AT&T and long-term growth opportunities. It is our intent to provide the financial flexibility to allow our Board of Directors to consider dividend growth and to recommend an increase in dividends to be paid in future periods. All dividends remain subject to declaration by our Board of Directors.

Our 2020 financing activities will focus on managing our debt level, repurchasing common stock and paying dividends, subject to approval by our Board of Directors. We plan to fund our financing uses of cash through a combination of cash from operations, issuance of debt, issuance of additional preferred stock and asset sales. The timing and mix of any debt issuance and/or refinancing will be guided by credit market conditions and interest rate trends.

Credit Facilities

The following summary of our various credit and loan agreements does not purport to be complete and is qualified in its entirety by reference to each agreement filed as exhibits to our Annual Report on Form 10-K.

We use credit facilities as a tool in managing our liquidity status. In December 2018, we amended our five-year revolving credit agreement (the "Amended and Restated Credit Agreement") and concurrently entered into a new five-year agreement (the "Five Year Credit Agreement") such that we now have two \$7,500 revolving credit agreements totaling \$15,000. The Amended and Restated Credit Agreement terminates on December 11, 2021 and the Five Year Credit Agreement terminates on December 11, 2023. No amounts were outstanding under either agreement as of December 31, 2019.

In September 2019, we entered into and drew on a \$1,300 term loan credit agreement containing (i) a 1.25 year \$400 facility due in 2020 (BAML Tranche A Facility), (ii) a 2.25 year \$400 facility due in 2021 (BAML Tranche B Facility), and (iii) a 3.25 year \$500 facility due in 2022 (BAML Tranche C Facility), with Bank of America, N.A., as agent. No repayment had been made under these facilities as of December 31, 2019.

We also utilize other external financing sources, which include various credit arrangements supported by government agencies to support network equipment purchases, as well as a commercial paper program.

Each of our credit and loan agreements contains covenants that are customary for an issuer with an investment grade senior debt credit rating as well as a net debt-to-EBITDA financial ratio covenant requiring AT&T to maintain, as of the last day of each fiscal quarter, a ratio of not more than 3.5-to-1. As of December 31, 2019, we were in compliance with the covenants for our credit facilities.

Collateral Arrangements

During the year, we amended collateral arrangements with certain counterparties to require cash collateral posting by AT&T only when derivative market values exceed certain thresholds. Under these arrangements, counterparties are still required to post collateral. During 2019, we received \$1,413 of cash collateral, on a net basis, primarily driven by the amended arrangements. Cash postings under these arrangements vary with changes in credit ratings and netting agreements. (See Note 13)

Other

Our total capital consists of debt (long-term debt and debt maturing within one year) and stockholders' equity. Our capital structure does not include debt issued by our equity method investees. At December 31, 2019, our debt ratio was 44.7%, compared to 47.7% at December 31, 2018 and 53.6% at December 31, 2017. Our net debt ratio was 41.4% at December 31, 2019, compared to 46.2% at December 31, 2018 and 37.2% at December 31, 2017. The debt ratio is affected by the same factors that affect

total capital, and reflects debt issuances, repayments and debt acquired in business combinations.

A significant amount of our cash outflows is related to tax items and benefits paid for current and former employees. Total taxes incurred, collected and remitted by AT&T during 2019 and 2018, were \$24,170 and \$22,172. These taxes include income, franchise, property, sales, excise, payroll, gross receipts and various other taxes and fees. Total health and welfare benefits provided to certain active and retired employees and their dependents totaled \$4,059 in 2019, with \$941 paid from plan assets. Of those benefits, \$3,707 related to medical and

prescription drug benefits. In addition, in 2019 we prefunded \$500 for future benefit payments. During 2019, we paid \$6,356 of pension benefits out of plan assets.

During 2019, we received \$4,684 from the disposition of assets, and when combined with capital received from issuing preferred interests to external investors, an amendment of collateral arrangements, and working capital monetization initiatives, which include the sale of receivables, total cash received from monetization efforts, net of spectrum acquisitions, was approximately \$18,000. We plan to continue to explore similar opportunities.

CONTRACTUAL OBLIGATIONS, COMMITMENTS AND CONTINGENCIES

Our contractual obligations as of December 31, 2019 are in the following table:

Contractual Obligations

	Payments Due By Period				
	Total	Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years
Long-term debt obligations ¹	\$168,065	\$12,149	\$22,225	\$21,262	\$112,429
Interest payments on long-term debt	108,976	7,204	13,259	11,847	76,666
Purchase obligations ²	67,807	16,590	21,121	11,153	18,943
Operating lease obligations ³	31,155	4,723	8,377	6,689	11,366
FirstNet sustainability payments ⁴	17,640	120	315	390	16,815
Unrecognized tax benefits ⁵	10,236	569	—	—	9,667
Other finance obligations ⁶	11,028	2,459	2,034	1,429	5,106
Authorized share repurchases ⁷	4,000	4,000	—	—	—
Total Contractual Obligations	\$418,907	\$47,814	\$67,331	\$52,770	\$250,992

¹ Represents principal or payoff amounts of notes and debentures at maturity or, for putable debt, the next put opportunity (see Note 12).

² The purchase obligations will be funded with cash provided by operations or through incremental borrowings. The minimum commitment for certain obligations is based on termination penalties that could be paid to exit the contracts. If we elect to exit these contracts, termination fees for all such contracts in the year of termination could be approximately \$257 in 2020, \$344 in the aggregate for 2021 and 2022, \$129 in the aggregate for 2023 and 2024, and \$22 in the aggregate thereafter. Certain termination fees are excluded from the above table, as the fees would not be paid every year and the timing of such payments, if any, is uncertain. (See Note 21)

³ Represents operating lease payments (see Note 8).

⁴ Represents contractual commitment to make sustainability payments over the 25-year contract. These sustainability payments represent our commitment to fund FirstNet's operating expenses and future reinvestment in the network, which we will own and operate. FirstNet has a statutory requirement to reinvest funds that exceed the agency's operating expenses, which we anticipate to be \$15,000. (See Note 20)

⁵ The noncurrent portion of the UTBs is included in the "More than 5 Years" column, as we cannot reasonably estimate the timing or amounts of additional cash payments, if any, at this time (see Note 14).

⁶ Represents future minimum payments under the Crown Castle and other arrangements (see Note 19), payables subject to extended payment terms (see Note 22) and finance lease payments (see Note 8).

⁷ Represents commitments to repurchase shares of common stock under an accelerated share repurchase program (see Note 2).

Certain items were excluded from this table, as the year of payment is unknown and could not be reliably estimated since past trends were not deemed to be an indicator of future payment, the obligations are immaterial or because the settlement of the obligation will not require the use of cash. These items include: deferred

income tax liability of \$59,502 (see Note 14); net postemployment benefit obligations of \$20,316; expected pension and postretirement payments (see Note 15); other noncurrent liabilities of \$13,412; third-party debt guarantees; and fair value of our interest rate swaps.

Management's Discussion and Analysis of Financial Condition and Results of Operations (continued)

Dollars in millions except per share amounts

MARKET RISK

We are exposed to market risks primarily from changes in interest rates and foreign currency exchange rates. These risks, along with other business risks, impact our cost of capital. It is our policy to manage our debt structure and foreign exchange exposure in order to manage capital costs, control financial risks and maintain financial flexibility over the long term. In managing market risks, we employ derivatives according to documented policies and procedures, including interest rate swaps, interest rate locks, foreign currency exchange contracts and combined interest rate foreign currency contracts (cross-currency swaps). We do not use derivatives for trading or speculative purposes. We do not foresee significant changes in the strategies we use to manage market risk in the near future.

One of the most significant assumptions used in estimating our postretirement benefit obligations is the assumed weighted-average discount rate, which is the hypothetical rate at which the projected benefit obligations could be effectively settled or paid out to participants. We determined our discount rate based on a range of factors, including a yield curve composed of the rates of return on several hundred high-quality, fixed income corporate bonds available at the measurement date and corresponding to the related expected durations of future cash outflows for the obligations. In recent years, the discount rates have been increasingly volatile, and on average have been lower than in historical periods. Lower discount rates used to measure our pension and postretirement plans result in higher obligations. Future increases in these rates could result in lower obligations, improved funded status and actuarial gains.

Interest Rate Risk

The majority of our financial instruments are medium- and long-term fixed-rate notes and debentures. Changes in interest rates can lead to significant fluctuations in the fair value of these instruments. The principal amounts by expected maturity, average interest rate and fair value of our liabilities that are exposed to interest rate risk are described in Notes 12 and 13. In managing interest expense, we control our mix of fixed and floating rate debt through term loans, floating rate notes, and interest rate swaps. We have established interest rate risk limits that we closely monitor by measuring interest rate sensitivities in our debt and interest rate derivatives portfolios.

Most of our foreign-denominated long-term debt has been swapped from fixed-rate or floating-rate foreign currencies to fixed-rate U.S. dollars at issuance through cross-currency swaps, removing interest rate risk and foreign currency exchange risk associated with the underlying interest and principal payments. Likewise, periodically we enter into interest rate locks to partially hedge the risk of increases in the benchmark interest rate during the period leading up to the probable issuance of fixed-rate debt. We expect gains or losses in our cross-currency swaps and interest rate locks to offset the losses and gains in the financial instruments they hedge.

Following are our interest rate derivatives subject to material interest rate risk as of December 31, 2019. The interest rates illustrated below refer to the average rates we expect to pay based on current and implied forward rates and the average rates we expect to receive based on derivative contracts. The notional amount is the principal amount of the debt subject to the interest rate swap contracts. The fair value asset (liability) represents the amount we would receive (pay) if we terminated the contracts as of December 31, 2019.

	Maturity						Total	Fair Value 12/31/19
	2020	2021	2022	2023	2024	Thereafter		
Interest Rate Derivatives								
Interest Rate Swaps:								
Receive Fixed/Pay								
Variable Notional								
Amount Maturing	\$ —	\$853	\$ —	\$ —	\$ —	\$ —	\$853	\$2
Weighted-Average								
Variable Rate Payable ¹	4.2%	4.1%	0.0%	0.0%	0.0%	0.0%		
Weighted-Average								
Fixed Rate Receivable	4.5%	4.5%	0.0%	0.0%	0.0%	0.0%		

¹ Interest payable based on current and implied forward rates for One Month LIBOR plus a spread ranging between approximately 254 and 274 basis points.

Foreign Exchange Risk

We principally use foreign exchange contracts to hedge certain film production costs denominated in foreign currencies. We are also exposed to foreign currency exchange risk through our foreign affiliates and equity investments in foreign companies. We have designated €1,450 million aggregate principal amount of debt as a hedge of the variability of certain Euro-denominated net investments of our subsidiaries. The gain or loss on the debt that is designated as, and is effective as, an economic hedge of the net investment in a foreign operation is recorded as a currency translation adjustment within accumulated other comprehensive income, net on the consolidated balance sheet.

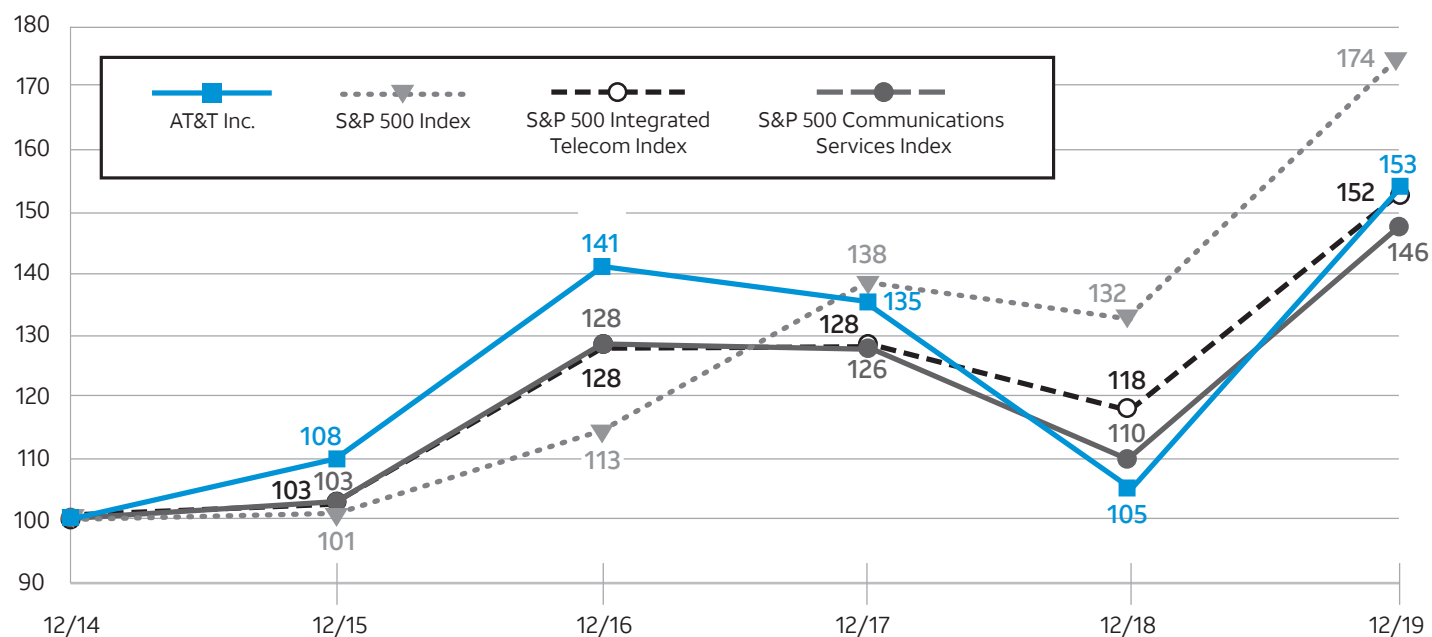
Through cross-currency swaps, most of our foreign-denominated debt has been swapped from fixed-rate or floating-rate foreign currencies to fixed-rate U.S. dollars at issuance, removing interest rate and foreign currency exchange risk associated with the underlying interest and principal payments. We expect gains or losses in our cross-currency swaps to offset the gains and losses in the financial instruments they hedge.

For the purpose of assessing specific risks, we use a sensitivity analysis to determine the effects that market risk exposures may have on the fair value of our financial instruments and results of operations. We had foreign exchange forward contracts with a notional value of \$269 and a fair value of \$89 outstanding at December 31, 2019.

STOCK PERFORMANCE GRAPH

Comparison of Five Year Cumulative Total Return

AT&T Inc., S&P 500 Index, S&P 500 Integrated Telecom Index, and S&P 500 Communications Services Index



The comparison above assumes \$100 invested on December 31, 2014, in AT&T common stock and the following Standard & Poor's (S&P) Indices: S&P 500 Index, S&P 500 Integrated Telecom Index and S&P 500 Communications Services Index. We have adopted the S&P 500 Communications Services Index, which permits us to use a more diversified set of companies in the communications and media sectors that are relevant to our businesses. Total return equals stock price appreciation plus reinvestment of dividends.

Management's Discussion and Analysis of Financial Condition and Results of Operations (continued)

Dollars in millions except per share amounts

DISCUSSION AND RECONCILIATION OF NON-GAAP MEASURE

We believe the following measure is relevant and useful information to investors as it is used by management as a method of comparing performance with that of many of our competitors. This supplemental measure should be considered in addition to, but not as a substitute of, our consolidated and segment financial information.

Business Solutions Reconciliation

We provide a supplemental discussion of our Business Solutions operations that is calculated by combining our Mobility and Business Wireline business units, and then adjusting to remove non-business operations. The following table presents a reconciliation of our supplemental Business Solutions results.

	Year Ended December 31, 2019			Business Solutions
	Mobility	Business Wireline	Adjustments ¹	
Operating revenues				
Wireless service	\$55,331	\$ —	\$(47,406)	\$ 7,925
Strategic and managed services	—	15,440	—	15,440
Legacy voice and data services	—	9,180	—	9,180
Other service and equipment	—	1,557	—	1,557
Wireless equipment	15,725	—	(12,968)	2,757
Total Operating Revenues	71,056	26,177	(60,374)	36,859
Operating expenses				
Operations and support	40,681	16,091	(34,037)	22,735
EBITDA	30,375	10,086	(26,337)	14,124
Depreciation and amortization	8,054	4,999	(6,840)	6,213
Total Operating Expenses	48,735	21,090	(40,877)	28,948
Operating Income	\$22,321	\$ 5,087	\$(19,497)	\$ 7,911

¹ Non-business wireless reported in the Communications segment under the Mobility business unit.

	Year Ended December 31, 2018			Business Solutions
	Mobility	Business Wireline	Adjustments ¹	
Operating revenues				
Wireless service	\$54,294	\$ —	\$(46,971)	\$ 7,323
Strategic managed services	—	14,660	—	14,660
Legacy voice and data services	—	10,674	—	10,674
Other service and equipment	—	1,406	—	1,406
Wireless equipment	16,227	—	(13,717)	2,510
Total Operating Revenues	70,521	26,740	(60,688)	36,573
Operating expenses				
Operations and support	40,690	16,201	(34,283)	22,608
EBITDA	29,831	10,539	(26,405)	13,965
Depreciation and amortization	8,263	4,714	(7,077)	5,900
Total Operating Expenses	48,953	20,915	(41,360)	28,508
Operating Income	\$21,568	\$ 5,825	\$(19,328)	\$ 8,065

¹ Non-business wireless reported in the Communications segment under the Mobility business unit.

	Year Ended December 31, 2017			Business Solutions
	Mobility	Business Wireline	Adjustments ¹	
Operating revenues				
Wireless service	\$57,023	\$ —	\$(49,095)	\$ 7,928
Strategic and managed services	—	13,880	—	13,880
Legacy voice and data services	—	13,791	—	13,791
Other service and equipment	—	1,532	—	1,532
Wireless equipment	13,236	—	(11,704)	1,532
Total Operating Revenues	70,259	29,203	(60,799)	38,663
Operating expenses				
Operations and support	42,317	18,441	(36,382)	24,376
EBITDA	27,942	10,762	(24,417)	14,287
Depreciation and amortization	7,931	4,756	(6,828)	5,859
Total Operating Expenses	50,248	23,197	(43,210)	30,235
Operating Income	\$20,011	\$ 6,006	\$(17,589)	\$ 8,428

¹ Non-business wireless reported in the Communications segment under the Mobility business unit.

RISK FACTORS

In addition to the other information set forth in this document, including the matters contained under the caption “Cautionary Language Concerning Forward-Looking Statements,” you should carefully read the matters described below. We believe that each of these matters could materially affect our business. We recognize that most of these factors are beyond our ability to control and therefore we cannot predict an outcome.

Macro-economic Factors:

Adverse changes in medical costs, the U.S. securities markets and interest rates could materially increase our benefit plan costs.

Our costs to provide current benefits and funding for future benefits are subject to increases, primarily due to continuing increases in medical and prescription drug costs, and can be affected by lower returns on funds held by our pension and other benefit plans, which are reflected in our financial statements for that year. Favorable market returns in 2019 have led to higher than assumed investment returns on our plan assets, with a lower end-of-period yield curve contributing to higher benefit obligations resulting in an insignificant change to our overall funding obligations. Should favorable market returns continue, we may need to adjust our assumed rate of return on plan assets. In calculating the costs included on our financial statements of providing benefits under our plans, we have made certain assumptions regarding future investment returns, medical costs and interest rates. While we have made some changes to the benefit plans to limit our risk from increasing medical costs, if actual investment returns, medical costs and interest rates are worse than those previously assumed, our expenses will increase.

The Financial Accounting Standards Board requires companies to recognize the funded status of defined benefit pension and postretirement plans as an asset or liability in our statement of financial position and to recognize changes in that funded status in the year in which the changes occur. We have elected to reflect the annual adjustments to the funded status in our consolidated statement of income. Therefore, an increase in our costs or adverse market conditions will have a negative effect on our operating results.

Adverse changes in global financial markets could limit our ability and our larger customers’ ability to access capital or increase the cost of capital needed to fund business operations.

During 2019, volatility in the credit, currency, equity and fixed income markets persisted due to continued uncertainty surrounding global growth rates. Uncertainty regarding ongoing U.S. tariffs on Chinese goods and vice versa, the withdrawal of the United Kingdom from the European Union and other political developments in Europe and Asia could significantly affect global financial markets in 2020. Volatility in other areas, such as in emerging markets, may affect companies’ access to the credit markets, leading to higher borrowing costs, or, in some cases, the inability to fund ongoing operations. In addition, we contract with large financial institutions to support our own treasury operations, including contracts to hedge our exposure on interest rates and foreign exchange and the funding of credit lines and other short-term debt obligations, including commercial paper. These financial institutions face stricter capital-related and other regulations in the United States and Europe, as well as ongoing legal and financial issues concerning their

Management's Discussion and Analysis of Financial Condition and Results of Operations (continued)

Dollars in millions except per share amounts

loan portfolios, which may hamper their ability to provide credit or raise the cost of providing such credit.

The interest rate used to calculate the rate of variable rate indebtedness, the LIBOR benchmark, will not be reported after 2021. Although our securities may provide for alternative methods of calculating the interest rate payable on such indebtedness, uncertainty as to the extent and manner of future changes may adversely affect the current trading market for LIBOR-based securities, and the value of variable rate indebtedness in general. A company's cost of borrowing is also affected by evaluations given by various credit rating agencies and these agencies have been applying tighter credit standards when evaluating debt levels and future growth prospects. While we have been successful in continuing to access the credit and fixed income markets when needed, adverse changes in the financial markets could render us either unable to access these markets or able to access these markets only at higher interest costs and with restrictive financial or other conditions, severely affecting our business operations.

Our international operations have increased our exposure to political instability, to changes in the international economy and to the level of regulation on our business and these risks could offset our expected growth opportunities.

We have international operations, particularly Latin America, including Mexico, and worldwide through WarnerMedia's content distribution as well as services to our large U.S.-based businesses. We need to comply with a wide variety of complex local laws, regulations and treaties. We are exposed to restrictions on cash repatriation, foreign exchange controls, fluctuations in currency values, changes in relationships between U.S. and foreign governments, trade restrictions including potential tariffs, differences in intellectual property protection laws, and other regulations that may affect materially our earnings. Our Mexico operations in particular rely on a continuation of a regulatory regime that fosters competition. While our foreign operations represent significant opportunities to sell our services, a number of foreign countries where we operate have experienced unstable growth patterns, high inflation, currency devaluation, foreign exchange controls, instability in the banking sector and high unemployment. In addition, several Latin America countries have experienced significant political turmoil during 2019. Should these conditions persist, our ability to offer service in one or more countries could be adversely affected and customers in these countries may be unable to purchase the services we offer or pay for services already provided.

In addition, operating in foreign countries also typically involves participating with local businesses, either to comply with local laws or, for example, to enhance product marketing, deploy networks or execute on other capital projects. Involvement with foreign firms exposes us to the risk of being unable to control the actions of those firms and therefore exposes us to risks associated with our obligation to comply with the Foreign Corrupt Practices Act (FCPA). Violations of the FCPA could have a material adverse effect on our operating results.

Industry-wide Factors:

Changes to federal, state and foreign government regulations and decisions in regulatory proceedings could further increase our operating costs and/or alter customer perceptions of our operations, which could materially adversely affect us.

Our subsidiaries providing wired services are subject to significant federal and state regulation while many of our competitors are not. In addition, our subsidiaries and affiliates operating outside the United States are also subject to the jurisdiction of national and supranational regulatory authorities in the market where service is provided. Our wireless and various video subsidiaries are regulated to varying degrees by the FCC and in some instances, by state and local agencies. Adverse regulations and rulings by the FCC relating to broadband, wireless deployment and satellite video issues could impede our ability to manage our networks and recover costs and lessen incentives to invest in our networks. The continuing growth of IP-based services, especially when accessed by wireless devices, has created or potentially could create conflicting regulation between the FCC and various state and local authorities, which may involve lengthy litigation to resolve and may result in outcomes unfavorable to us. In addition, increased public focus on a variety of issues related to our operations, such as privacy issues, government requests or orders for customer data, and concerns about global climate changes, have led to proposals or new legislation at state, federal and foreign government levels to change or increase regulation on our operations. Enactment of new privacy laws and regulations could, among other things, adversely affect our ability to collect and offer targeted advertisements, an expected growth area for the company, or result in additional costs of compliance or litigation. Should customers decide that our competitors offer a more customer-friendly environment, our competitive position, results of operations or financial condition could be materially adversely affected.

Continuing growth in and the converging nature of wireless, video and broadband services will require us to deploy significant amounts of capital and require ongoing access to spectrum in order to provide attractive services to customers.

Wireless, video and broadband services are undergoing rapid and significant technological changes and a dramatic increase in usage, in particular, the demand for faster and seamless usage of video and data across mobile and fixed devices. We must continually invest in our networks in order to improve our wireless, video and broadband services to meet this increasing demand and remain competitive. Improvements in these services depend on many factors, including continued access to and deployment of adequate spectrum and the capital needed to expand our wireline network to support transport of these services. In order to stem broadband subscriber losses to cable competitors in our non-fiber wireline areas, we have been expanding our all-fiber wireline network. We must maintain and expand our network capacity and coverage for transport of video, data and voice between cell and fixed landline sites. To this end, we have participated in spectrum auctions and continue to deploy software and other technology advancements in order to efficiently invest in our network.

Network service enhancements and product launches may not occur as scheduled or at the cost expected due to many factors, including delays in determining equipment and wireless handset operating standards, supplier delays, software issues, increases in network and handset component costs, regulatory permitting delays for tower sites or enhancements, or labor-related delays. Deployment of new technology also may adversely affect the performance of the network for existing services. If we cannot acquire needed spectrum or deploy the services customers desire on a timely basis with acceptable quality and at adequate cost, then our ability to attract and retain customers, and, therefore, maintain and improve our operating margins, could be materially adversely affected.

Increasing competition for wireless customers could materially adversely affect our operating results.

We have multiple wireless competitors in each of our service areas and compete for customers based principally on service/device offerings, price, network quality, coverage area and customer service. In addition, we are facing growing competition from providers offering services using advanced wireless technologies and IP-based networks. We expect market saturation to continue to cause the wireless

industry's customer growth rate to moderate in comparison with historical growth rates, leading to increased competition for customers. We also expect that our customers' growing demand for high-speed video and data services will place constraints on our network capacity. These competition and capacity constraints will continue to put pressure on pricing and margins as companies compete for potential customers. Our ability to respond will depend, among other things, on continued improvement in network quality and customer service as well as effective marketing of attractive products and services. These efforts will involve significant expenses and require strategic management decisions on, and timely implementation of, equipment choices, network deployment and service offerings.

Ongoing changes in the television industry and consumer viewing patterns could materially adversely affect our operating results.

Our video subsidiaries derive substantial revenues and profits from cable networks and premium pay television services and the production and licensing of television programming to broadcast and cable networks and premium pay television services. The U.S. television industry is continuing to evolve rapidly, with developments in technology leading to new methods for the distribution of video content and changes in when, where and how audiences consume video content. These changes have led to (1) new, internet-based OTT competitors, which are increasing in number and some of which have significant and growing subscriber/user bases, and (2) reduced viewers of traditional advertising-supported television resulting from increased video consumption through SVOD services, time-shifted viewing of television programming and the use of DVRs to skip advertisements. The number of subscribers to traditional linear programming in the U.S. has been declining in recent years and the U.S. television industry has generally experienced declines in ratings for programming, which have negatively affected subscription and advertising revenues, and these trends are expected to continue. The popularity of content, whether on television, on the internet, or through movies, is difficult to predict and can change rapidly, and low public acceptance of our television, OTT and movie content, including WarnerMedia's content, could adversely affect our results of operations. We are taking steps to mitigate the risks from these changes, such as our 2020 launch of our HBO Max direct-to-consumer streaming platform and new, enhanced advertising opportunities, but there can be no assurance that these and other efforts will be successful in responding to these changes.

Management's Discussion and Analysis of Financial Condition and Results of Operations (continued)

Dollars in millions except per share amounts

Intellectual property rights may be adversely affected by piracy or be inadequate to take advantage of business opportunities, such as new distribution platforms, which may materially adversely affect our operations.

Increased piracy of video content, products and other intellectual property, particularly in our foreign WarnerMedia and Latin American operations, will decrease revenues. Mobile and broadband technological developments have made it easier to reproduce and distribute high-quality unauthorized copies of content. Piracy is particularly prevalent in countries that lack effective copyright and other legal protections or enforcement measures and thieves can attract users throughout the world. Effective intellectual property protection may not be available in every country where we operate. We may need to spend significant amounts of money to protect our rights. We are also increasingly negotiating broader licensing agreements to expand our ability to use new methods to distribute content to customers. Any impairment of our intellectual property rights, including due to changes in U.S. or foreign intellectual property laws or the absence of effective legal protections or enforcement measures, or our inability to negotiate broader distribution rights, could materially adversely impact our operations.

Company-Specific Financial Factors:

Adoption of new software-based technologies may involve quality and supply chain issues and could increase capital costs.

The communications and digital entertainment industry has experienced rapid changes in the past several years. An increasing number of our customers are using mobile devices as the primary means of viewing video and an increasing number of nontraditional video providers are developing content and technologies to satisfy the desire for video entertainment demand. In addition, businesses and government bodies are broadly shifting to wireless-based services for homes and infrastructure to improve services to their respective customers and constituencies. In order to meet this demand and remain competitive, we now offer a mobile TV service and continue to upgrade our sophisticated wired and wireless networks, including satellites, as well as research other technologies. We are spending significant capital to shift our wired network to software-based technology to manage this demand and are launching 5G wireless technology to address these consumer demands. We are entering into a significant number of software licensing agreements and working with software developers to provide network functions in lieu of installing switches or other physical network equipment in order to respond to rapid developments in

video and wireless demand. While software-based functionality can be changed much more quickly than, for example, physical switches, the rapid pace of development means that we may increasingly need to rely on single-source and software solutions that have not previously been deployed in production environments. Should this software not function as intended or our license agreements provide inadequate protection from intellectual property infringement claims, we could be forced to either substitute (if available), or else spend time to develop alternative technologies at a much higher cost and incur harm to our reputation for reliability, and, as a result, our ability to remain competitive could be materially adversely affected.

Increasing costs to provide video and other services could adversely affect operating margins.

Our operating costs, including customer acquisition and retention costs, could continue to put pressure on margins and customer retention levels. In addition, most of our video programming that we distribute via our linear services is provided by other companies and historically the rates they charge us for programming have often increased more than the rate of inflation. In addition, as customer viewing habits shift to mobile and on-demand from linear programming, negotiating licensing rights is increasingly complicated. We are attempting to use our increased scale and access to wireless customers to change this trend but such negotiations are difficult and also may result in programming disruption. Our new HBO Max streaming platform is another component of our strategy to reach nontraditional video customers and we are investing heavily to launch a competitive and attractive offering. If we are unable to restrain these costs or provide programming desired by our customers, it could impact margins and our ability to attract and retain customers. Our WarnerMedia operations, which create and license content to other providers, also may experience increasing difficulties to secure favorable terms, including those related to pricing, positioning and packaging, during contract negotiations, which may lead to blackouts of WarnerMedia programming, and WarnerMedia may face greater difficulty in achieving placement of its networks and premium pay television services in smaller bundles or mobile offerings by third parties.

A number of our competitors offering comparable legacy services that rely on alternative technologies and business models are typically subject to less (or no) regulation, and therefore are able to operate with lower costs. These competitors generally can focus on discrete customer segments since they do not have regulatory obligations to provide universal service. Also, these competitors have cost advantages compared to us, due in part to operating on

newer, more technically advanced and lower-cost networks and a nonunionized workforce, lower employee benefits and fewer retirees. We have begun initiatives at both the state and federal levels to obtain regulatory approvals, where needed, to transition services from our older copper-based network to an advanced IP-based network. If we do not obtain regulatory approvals for our network transition or obtain approvals with onerous conditions, we could experience significant cost and competitive disadvantages.

If our efforts to attract and retain subscribers to our new HBO Max platform are not successful, our business will be adversely affected.

As with any new product launch, HBO Max's future success is subject to inherent uncertainty. Our ability to attract subscribers to the HBO Max platform will depend in part on our ability to consistently provide subscribers with compelling content choices, as well as a quality experience for selecting and viewing those content choices. Furthermore, the relative service levels, content offerings, promotions, and pricing and related features of competitors to HBO Max may adversely impact our ability to attract and retain subscribers. Competitors include other entertainment video providers, such as multichannel video programming distributors and internet-based movie and TV content providers. If consumers do not perceive our offerings to be of value, including if we introduce new or adjust existing features, adjust pricing or offerings, terminate or modify promotional or trial period offerings, experience technical issues, or change the mix of content in a manner that is not favorably received by them, we may not be able to attract and retain subscribers. In addition, many subscribers to these types of offerings originate from word-of-mouth advertising from then existing subscribers. If our efforts to satisfy subscribers are not successful, including because we terminate or modify promotional or trial-period offerings or because of technical issues with the platform, we may not be able to attract subscribers, and as a result, our ability to maintain and/or grow our business will be adversely affected.

If subscribers cancel or decide to not continue subscriptions for many reasons, including a perception that they do not use it sufficiently, the need to cut household expenses, unsatisfactory availability of content, promotions or trial-period offers expire or are modified, competitive services or promotions provide a better value or experience, and customer service or technical issues are not satisfactorily resolved, our business will be adversely affected. We must continually add new subscribers both to replace canceled subscribers and to grow our business. If we do not grow as expected, given,

in particular, that a significant portion of our content costs are committed and contracted over several years based on minimum subscriber delivery levels, we may not be able to adjust our expenditures or increase our (per subscriber) revenues commensurate with the lowered growth rate such that our margins, liquidity and results of operations may be adversely impacted. If we are unable to successfully compete with competitors in retaining and attracting new subscribers, our business will be adversely affected. Further, if excessive numbers of subscribers do cancel, we may be required to incur significantly higher marketing expenditures or offer significantly more generous promotions to replace these subscribers with new subscribers.

Unfavorable litigation or governmental investigation results could require us to pay significant amounts or lead to onerous operating procedures.

We are subject to a number of lawsuits both in the United States and in foreign countries, including, at any particular time, claims relating to antitrust; patent infringement; wage and hour; personal injury; customer privacy violations; regulatory proceedings; and selling and collection practices. We also spend substantial resources complying with various government standards, which may entail related investigations and litigation. In the wireless area, we also face current and potential litigation relating to alleged adverse health effects on customers or employees who use such technologies including, for example, wireless devices. We may incur significant expenses defending such suits or government charges and may be required to pay amounts or otherwise change our operations in ways that could materially adversely affect our operations or financial results.

Cyberattacks, equipment failures, natural disasters and terrorist acts may materially adversely affect our operations.

Cyberattacks, major equipment failures or natural disasters, such as flooding, hurricanes and forest fires, whether caused by discrete severe weather events and/or precipitated by long-term climate change and earthquakes, software problems, terrorist acts or other breaches of network or IT security that affect our networks, including software and switches, microwave links, third-party-owned local and long-distance networks on which we rely, our cell sites or other equipment, our satellites, our customer account support and information systems, or employee and business records could have a material adverse effect on our operations. Our wired network in particular is becoming increasingly reliant on software as it evolves to handle increasing demands for video transmission. While we have

Management's Discussion and Analysis of Financial Condition and Results of Operations (continued)

Dollars in millions except per share amounts

been subject to security incidents or cyberattacks, these did not result in a material adverse effect on our operations. However, as such attacks continue to increase in scope and frequency, we may be unable to prevent a significant attack in the future. Our ability to maintain and upgrade our video programming also depends on our ability to successfully deploy and operate video satellites. Our inability to deploy or operate our networks or customer support systems or protect sensitive personal information of customers or valuable technical and marketing information could result in significant expenses, potential legal liability, a loss of current or future customers and reputation damage, any of which could have a material adverse effect on our operations and financial condition.

Increases in our debt levels to fund acquisitions, additional spectrum purchases, or other strategic decisions could adversely affect our ability to finance future debt at attractive rates and reduce our ability to respond to competition and adverse economic trends.

We have incurred debt to fund significant acquisitions, as well as spectrum purchases needed to compete in our industry. While we believe such decisions were prudent and necessary to take advantage of both growth opportunities and respond to industry developments, we did experience credit-rating downgrades from historical levels. Banks and potential purchasers of our publicly traded debt may decide that these strategic decisions and similar actions we may take in the future, as well as expected trends in the industry, will continue to increase the risk of investing in our debt and may demand a higher rate of interest, impose restrictive covenants or otherwise limit the amount of potential borrowing. Additionally, our capital allocation plan is focused on, among other things, further reducing our debt going forward. Any failure to successfully execute this plan could adversely affect our cost of funds, liquidity, competitive position and access to capital markets.

CAUTIONARY LANGUAGE CONCERNING FORWARD-LOOKING STATEMENTS

Information set forth in this report contains forward-looking statements that are subject to risks and uncertainties, and actual results could differ materially. Many of these factors are discussed in more detail in the "Risk Factors" section. We claim the protection of the safe harbor for forward-looking statements provided by the Private Securities Litigation Reform Act of 1995.

The following factors could cause our future results to differ materially from those expressed in the forward-looking statements:

- Adverse economic, political and/or capital access changes in the markets served by us or in countries in which we have significant investments and/or operations, including the impact on customer demand and our ability and our suppliers' ability to access financial markets at favorable rates and terms.
- Increases in our benefit plans' costs, including increases due to adverse changes in the United States and foreign securities markets, resulting in worse-than-assumed investment returns and discount rates; adverse changes in mortality assumptions; adverse medical cost trends; and unfavorable or delayed implementation or repeal of healthcare legislation, regulations or related court decisions.
- The final outcome of FCC and other federal, state or foreign government agency proceedings (including judicial review, if any, of such proceedings) and legislative efforts involving issues that are important to our business, including, without limitation, pending Notices of Apparent Liability; the transition from legacy technologies to IP-based infrastructure, including the withdrawal of legacy TDM-based services; universal service; broadband deployment; wireless equipment siting regulations and, in particular, siting for 5G service; E911 services; competition policy; privacy; net neutrality; multichannel video programming distributor services and equipment; content licensing and copyright protection; availability of new spectrum on fair and balanced terms; and wireless and satellite license awards and renewals.
- Enactment of additional state, local, federal and/or foreign regulatory and tax laws and regulations, or changes to existing standards and actions by tax agencies and judicial authorities including the resolution of disputes with any taxing jurisdictions, pertaining to our subsidiaries and foreign investments, including laws and regulations that reduce our incentive to invest in our networks, resulting in lower revenue growth and/or higher operating costs.
- Potential changes to the electromagnetic spectrum currently used for broadcast television and satellite distribution being considered by the FCC could negatively impact WarnerMedia's ability to deliver linear network feeds of its domestic cable networks to its affiliates, and in some cases, WarnerMedia's ability to produce high-value news and entertainment programming on location.
- U.S. and foreign laws and regulations regarding intellectual property rights protection and privacy, personal data protection and user consent are complex and rapidly evolving and could result in adverse impacts to our business plans, increased costs, or claims against us that may harm our reputation.
- The ability of our competitors to offer product/service offerings at lower prices due to lower cost structures and regulatory and legislative actions adverse to us, including non-regulation of comparable alternative technologies and/or government-owned or subsidized networks.
- The continued development and delivery of attractive and profitable wireless, video and broadband offerings and devices, and, in particular, the success of our new HBO Max platform; the extent to which regulatory and build-out requirements apply to our offerings; our ability to match speeds offered by our competitors and the availability, cost and/or reliability of the various technologies and/or content required to provide such offerings.
- Our ability to generate advertising revenue from attractive video content, especially from WarnerMedia, in the face of unpredictable and rapidly evolving public viewing habits and legal restrictions on the use of personal data.
- The availability and cost and our ability to adequately fund additional wireless spectrum and network upgrades; and regulations and conditions relating to spectrum use, licensing, obtaining additional spectrum, technical standards and deployment and usage, including network management rules.
- Our ability to manage growth in wireless data services, including network quality and acquisition of adequate spectrum at reasonable costs and terms.
- The outcome of pending, threatened or potential litigation (which includes arbitrations), including, without limitation, patent and product safety claims by or against third parties.
- The impact from major equipment or software failures on our networks, including satellites operated by DIRECTV; the effect of security breaches related to the network or customer information; our inability to obtain handsets, equipment/software or have handsets, equipment/software serviced in a timely and cost-effective manner from suppliers; and in the case of satellites launched, timely provisioning of services from vendors; or severe weather conditions including flooding and hurricanes, natural disasters including earthquakes and forest fires, pandemics, energy shortages, wars or terrorist attacks.
- The issuance by the Financial Accounting Standards Board or other accounting oversight bodies of new accounting standards or changes to existing standards.
- Our ability to successfully integrate our WarnerMedia operations, including the ability to manage various businesses in widely dispersed business locations and with decentralized management.
- Changes in our corporate strategies, such as changing network-related requirements or acquisitions and dispositions, which may require significant amounts of cash or stock, to respond to competition and regulatory, legislative and technological developments.
- The uncertainty surrounding further congressional action to address spending reductions, which may result in a significant decrease in government spending and reluctance of businesses and consumers to spend in general.

Readers are cautioned that other factors discussed in this report, although not enumerated here, also could materially affect our future earnings.

Consolidated Statements of Income

Dollars in millions except per share amounts

	2019	2018	2017
Operating Revenues			
Service	\$163,499	\$152,345	\$145,597
Equipment	17,694	18,411	14,949
Total operating revenues	181,193	170,756	160,546
Operating Expenses			
Cost of revenues			
Equipment	18,653	19,786	18,709
Broadcast, programming and operations	31,132	26,727	21,159
Other cost of revenues (exclusive of depreciation and amortization shown separately below)	34,356	32,906	37,942
Selling, general and administrative	39,422	36,765	35,465
Asset abandonments and impairments	1,458	46	2,914
Depreciation and amortization	28,217	28,430	24,387
Total operating expenses	153,238	144,660	140,576
Operating Income	27,955	26,096	19,970
Other Income (Expense)			
Interest expense	(8,422)	(7,957)	(6,300)
Equity in net income (loss) of affiliates	6	(48)	(128)
Other income (expense) – net	(1,071)	6,782	1,597
Total other income (expense)	(9,487)	(1,223)	(4,831)
Income Before Income Taxes	18,468	24,873	15,139
Income tax (benefit) expense	3,493	4,920	(14,708)
Net Income	14,975	19,953	29,847
Less: Net Income Attributable to Noncontrolling Interest	(1,072)	(583)	(397)
Net Income Attributable to AT&T	\$ 13,903	\$ 19,370	\$ 29,450
Less: Preferred Stock Dividends	(3)	—	—
Net Income Attributable to Common Stock	\$ 13,900	\$ 19,370	\$ 29,450
Basic Earnings Per Share Attributable to Common Stock	\$ 1.90	\$ 2.85	\$ 4.77
Diluted Earnings Per Share Attributable to Common Stock	\$ 1.89	\$ 2.85	\$ 4.76

The accompanying notes are an integral part of the consolidated financial statements.

Consolidated Statements of Comprehensive Income

Dollars in millions

	2019	2018	2017
Net income	\$14,975	\$19,953	\$29,847
Other comprehensive income, net of tax:			
Foreign Currency:			
Translation adjustment (includes \$(9), \$(32) and \$(5) attributable to noncontrolling interest), net of taxes of \$18, \$(45) and \$123	19	(1,062)	15
Securities:			
Net unrealized gains (losses), net of taxes of \$17, \$(1) and \$109	50	(4)	187
Reclassification adjustment included in net income, net of taxes of \$0, \$0 and \$(117)	—	—	(185)
Derivative Instruments:			
Net unrealized gains (losses), net of taxes of \$(240), \$(156) and \$200	(900)	(597)	371
Reclassification adjustment included in net income, net of taxes of \$12, \$6 and \$21	45	13	39
Defined benefit postretirement plans:			
Net prior service credit arising during period, net of taxes of \$1,134, \$271 and \$675	3,457	830	1,083
Amortization of net prior service credit included in net income, net of taxes of \$(475), \$(431) and \$(604)	(1,459)	(1,322)	(988)
Other comprehensive income (loss)	1,212	(2,142)	522
Total comprehensive income	16,187	17,811	30,369
Less: Total comprehensive income attributable to noncontrolling interest	(1,063)	(551)	(392)
Total Comprehensive Income Attributable to AT&T	\$15,124	\$17,260	\$29,977

The accompanying notes are an integral part of the consolidated financial statements.

Consolidated Balance Sheets

Dollars in millions except per share amounts

	December 31,	
	2019	2018
Assets		
Current Assets		
Cash and cash equivalents	\$ 12,130	\$ 5,204
Accounts receivable – net of allowances for doubtful accounts of \$1,235 and \$907	22,636	26,472
Prepaid expenses	1,631	2,047
Other current assets	18,364	17,704
Total current assets	54,761	51,427
Noncurrent inventories and theatrical film and television production costs	12,434	7,713
Property, Plant and Equipment – Net	130,128	131,473
Goodwill	146,241	146,370
Licenses – Net	97,907	96,144
Trademarks and Trade Names – Net	23,567	24,345
Distribution Networks – Net	15,345	17,069
Other Intangible Assets – Net	20,798	26,269
Investments in and Advances to Equity Affiliates	3,695	6,245
Operating lease right-of-use assets	24,039	—
Other Assets	22,754	24,809
Total Assets	\$551,669	\$531,864
Liabilities and Stockholders' Equity		
Current Liabilities		
Debt maturing within one year	\$ 11,838	\$ 10,255
Accounts payable and accrued liabilities	45,956	43,184
Advanced billings and customer deposits	6,124	5,948
Accrued taxes	1,212	1,179
Dividends payable	3,781	3,854
Total current liabilities	68,911	64,420
Long-Term Debt	151,309	166,250
Deferred Credits and Other Noncurrent Liabilities		
Deferred income taxes	59,502	57,859
Postemployment benefit obligation	18,788	19,218
Operating lease liabilities	21,804	—
Other noncurrent liabilities	29,421	30,233
Total deferred credits and other noncurrent liabilities	129,515	107,310
Stockholders' Equity		
Preferred stock (\$1 par value, 5% cumulative, 10,000,000 authorized, 48,000 shares issued and outstanding at December 31, 2019 and 0 issued and outstanding at December 31, 2018)	—	—
Common stock (\$1 par value, 14,000,000,000 authorized at December 31, 2019 and December 31, 2018: issued 7,620,748,598 at December 31, 2019 and at December 31, 2018)	7,621	7,621
Additional paid-in capital	126,279	125,525
Retained earnings	57,936	58,753
Treasury stock (366,193,458 at December 31, 2019 and 339,120,073 at December 31, 2018, at cost)	(13,085)	(12,059)
Accumulated other comprehensive income	5,470	4,249
Noncontrolling interest	17,713	9,795
Total stockholders' equity	201,934	193,884
Total Liabilities and Stockholders' Equity	\$551,669	\$531,864

The accompanying notes are an integral part of the consolidated financial statements.

Consolidated Statements of Cash Flows

Dollars in millions

	2019	2018	2017
Operating Activities			
Net income	\$ 14,975	\$ 19,953	\$ 29,847
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	28,217	28,430	24,387
Amortization of film and television costs	9,587	3,772	—
Undistributed earnings from investments in equity affiliates	295	292	174
Provision for uncollectible accounts	2,575	1,791	1,642
Deferred income tax expense (benefit)	1,806	4,931	(15,265)
Net (gain) loss from sale of investments, net of impairments	(1,218)	(739)	(282)
Pension and postretirement benefit expense (credit)	(2,002)	(1,148)	(1,031)
Actuarial (gain) loss on pension and postretirement benefits	5,171	(3,412)	1,258
Asset abandonments and impairments	1,458	46	2,914
Changes in operating assets and liabilities:			
Receivables	2,812	(1,580)	(986)
Other current assets, inventories and theatrical film and television production costs	(12,852)	(6,442)	(778)
Accounts payable and other accrued liabilities	(1,524)	1,602	816
Equipment installment receivables and related sales	548	(490)	(1,239)
Deferred customer contract acquisition and fulfillment costs	(910)	(3,458)	(1,422)
Postretirement claims and contributions	(1,008)	(936)	(2,064)
Other – net	738	990	39
Total adjustments	33,693	23,649	8,163
Net Cash Provided by Operating Activities	48,668	43,602	38,010
Investing Activities			
Capital expenditures:			
Purchase of property and equipment	(19,435)	(20,758)	(20,647)
Interest during construction	(200)	(493)	(903)
Acquisitions, net of cash acquired	(1,809)	(43,309)	1,123
Dispositions	4,684	2,148	59
(Purchases), sales and settlement of securities and investments, net	435	(183)	449
Advances to and investments in equity affiliates	(365)	(1,050)	—
Cash collections of deferred purchase price	—	500	976
Net Cash Used in Investing Activities	(16,690)	(63,145)	(18,943)
Financing Activities			
Net change in short-term borrowings with original maturities of three months or less	(276)	(821)	(2)
Issuance of other short-term borrowings	4,012	4,898	—
Repayment of other short-term borrowings	(6,904)	(2,098)	—
Issuance of long-term debt	17,039	41,875	48,793
Repayment of long-term debt	(27,592)	(52,643)	(12,339)
Payment of vendor financing	(3,050)	(560)	(572)
Issuance of preferred stock	1,164	—	—
Purchase of treasury stock	(2,417)	(609)	(463)
Issuance of treasury stock	631	745	33
Issuance of preferred interests in subsidiary	7,876	—	—
Dividends paid	(14,888)	(13,410)	(12,038)
Other	(678)	(3,366)	2,518
Net Cash (Used in) Provided by Financing Activities	(25,083)	(25,989)	25,930
Net increase (decrease) in cash and cash equivalents and restricted cash	6,895	(45,532)	44,997
Cash and cash equivalents and restricted cash beginning of year	5,400	50,932	5,935
Cash and Cash Equivalents and Restricted Cash End of Year	\$ 12,295	\$ 5,400	\$ 50,932

The accompanying notes are an integral part of the consolidated financial statements.

Consolidated Statements of Changes in Stockholders' Equity

Dollars and shares in millions except per share amounts

	2019		2018		2017	
	Shares	Amount	Shares	Amount	Shares	Amount
Preferred Stock						
Balance at beginning of year	—	\$ —	—	\$ —	—	\$ —
Issuance of stock	—	—	—	—	—	—
Balance at end of year	—	\$ —	—	\$ —	—	\$ —
Common Stock						
Balance at beginning of year	7,621	\$ 7,621	6,495	\$ 6,495	6,495	\$ 6,495
Issuance of stock	—	—	1,126	1,126	—	—
Balance at end of year	7,621	\$ 7,621	7,621	\$ 7,621	6,495	\$ 6,495
Additional Paid-In Capital						
Balance at beginning of year		\$125,525		\$ 89,563		\$ 89,604
Issuance of preferred stock		1,164		—		—
Issuance of common stock		—		35,473		—
Issuance of treasury stock		(125)		(115)		2
Share-based payments		(271)		604		(43)
Changes related to acquisition of interest held by noncontrolling owners		(14)		—		—
Balance at end of year		\$126,279		\$125,525		\$ 89,563
Retained Earnings						
Balance at beginning of year		\$ 58,753		\$ 50,500		\$ 34,734
Net income attributable to AT&T (\$1.89, \$2.85 and \$4.76 per diluted share)		13,903		19,370		29,450
Preferred stock dividends		(8)		—		—
Common stock dividends (\$2.05, \$2.01 and \$1.97 per share)		(15,028)		(14,117)		(12,157)
Cumulative effect of accounting changes and other adjustments		316		3,000		(1,527)
Balance at end of year		\$ 57,936		\$ 58,753		\$ 50,500
Treasury Stock						
Balance at beginning of year	(339)	\$ (12,059)	(356)	\$ (12,714)	(356)	\$ (12,659)
Repurchase and acquisition of common stock	(67)	(2,492)	(20)	(692)	(14)	(551)
Issuance of treasury stock	40	1,466	37	1,347	14	496
Balance at end of year	(366)	\$ (13,085)	(339)	\$ (12,059)	(356)	\$ (12,714)
Accumulated Other Comprehensive Income						
Attributable to AT&T, net of tax:						
Balance at beginning of year		\$ 4,249		\$ 7,017		\$ 4,961
Other comprehensive income (loss) attributable to AT&T		1,221		(2,110)		527
Cumulative effect of accounting changes and other adjustments		—		(658)		1,529
Balance at end of year		\$ 5,470		\$ 4,249		\$ 7,017
Noncontrolling Interest:						
Balance at beginning of year		\$ 9,795		\$ 1,146		\$ 975
Net income attributable to noncontrolling interest		1,072		583		397
Interest acquired by noncontrolling owners		7,876		8,803		—
Acquisitions of noncontrolling interests		5		1		140
Distributions		(1,055)		(732)		(361)
Acquisition of interests held by noncontrolling owners		—		(9)		—
Translation adjustments attributable to noncontrolling interest, net of taxes		(9)		(32)		(5)
Cumulative effect of accounting changes and other adjustments		29		35		—
Balance at end of year		\$ 17,713		\$ 9,795		\$ 1,146
Total Stockholders' Equity at beginning of year		\$193,884		\$142,007		\$124,110
Total Stockholders' Equity at end of year		\$201,934		\$193,884		\$142,007

The accompanying notes are an integral part of the consolidated financial statements.