AT&T INC. FINANCIAL REVIEW 2021

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).

Our Management's Discussion and Analysis of Financial Condition and Results of Operations included in this document generally discusses 2021 and 2020 items and year-to-year comparisons between 2021 and 2020. Discussions of 2019 items and year-to-year comparisons between 2020 and 2019 that are not included in this document can be found in "Management's Discussion and Analysis of Financial Condition and Results of Operations" in exhibit 99.1, revised Item 7 of our Annual Report on Form 10-K for the fiscal year ended December 31, 2020, filed on Form 8-K on June 21, 2021.

On July 31, 2021, we closed our transaction with TPG Capital (TPG) to form a new company named DIRECTV Entertainment Holdings, LLC (DIRECTV). With the close of the transaction, we separated our Video business, comprised of our U.S. video operations, and began accounting for our investment in DIRECTV under the equity method. On November 15, 2021, we sold or Latin America video operations, Vrio, to Grupo Werthein. (See Note 6)

We have three reportable segments: (1) Communications, (2) WarnerMedia and (3) Latin America. 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.

				Percent Change	
	2021	2020	2019	**2021 vs. 2020**	2020 vs. 2019
Operating Revenues					
Communications	**$ 114,730**	$ 109,965	$ 109,969	**4.3 %**	— %
WarnerMedia	**35,632**	30,442	35,259	**17.0**	(13.7)
Latin America	**5,354**	5,716	6,963	**(6.3)**	(17.9)
Corporate and Other:					
Corporate	**1,264**	2,207	2,131	**(42.7)**	3.6
Video	**15,513**	28,610	32,124	**(45.8)**	(10.9)
Eliminations and consolidation	**(3,629)**	(5,180)	(5,253)	**29.9**	1.4
AT&T Operating Revenues	**168,864**	171,760	181,193	**(1.7)**	(5.2)
Operating Contribution					
Communications	**28,279**	28,313	29,815	**(0.1)**	(5.0)
WarnerMedia	**7,277**	8,210	10,659	**(11.4)**	(23.0)
Latin America	**(430)**	(729)	(635)	**41.0**	(14.8)
Segment Operating Contribution	**$ 35,126**	$ 35,794	$ 39,839	**(1.9)**	(10.2)
Corporate and Other[1]	**(11,148)**	(29,294)	(11,878)	**61.9**	—
AT&T Operating Contribution	**$ 23,978**	$ 6,500	$ 27,961	**— %**	(76.8)%

[1] Includes the reclassification of prior service credit amortization and retained costs previously allocated to Video, the Video business separated in July 2021, acquisition-related and certain significant items, and eliminations and consolidations. See Note 4 for additional details and amounts included in Corporate and Other.

The ***Communications segment*** accounted for approximately 74% of our 2021 total segment operating revenues compared to 75% in 2020 and 81% of our 2021 total segment operating contribution as compared to 79% in 2020. 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.
- **Business Wireline** provides advanced IP-based services, as well as traditional voice and data services and related equipment to business customers.
- **Consumer Wireline** provides internet, including broadband fiber, and legacy telephony voice communication services to residential customers.

The ***WarnerMedia segment*** accounted for approximately 23% of our 2021 total segment operating revenues compared to 21% in 2020 and 21% of our 2021 total segment operating contribution compared to 23% in 2020. This segment develops, produces and distributes feature films, television, gaming and other content in various physical and digital formats globally. WarnerMedia content is distributed through basic networks, Direct-to-Consumer (DTC) or theatrical, TV content and games licensing. Segment results also include Xandr advertising and Otter Media Holdings (Otter Media). We disposed of substantially all of the Otter Media assets in the third quarter of 2021 (see Note 6).

The ***Latin America segment*** accounted for approximately 3% of our 2021 total segment operating revenues compared to 4% in 2020. This segment provides wireless services and equipment in Mexico, and prior to the November 2021 disposition of Vrio, video services in Latin America and the Caribbean (see Note 6).

RESULTS OF OPERATIONS

Consolidated Results Our financial results are summarized in the following table. We then discuss factors affecting our overall results. Additional analysis is discussed in our "Segment Results" section. We also discuss our expected revenue and expense trends for 2022 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.

				Percent Change	
	2021	2020	2019	**2021 vs. 2020**	2020 vs. 2019
Operating revenues					
Service	**$ 146,391**	$ 152,767	$ 163,499	**(4.2)%**	(6.6)%
Equipment	**22,473**	18,993	17,694	**18.3**	7.3
Total Operating Revenues	**168,864**	171,760	181,193	**(1.7)**	(5.2)
Operating expenses					
Operations and support	**117,751**	117,959	123,563	**(0.2)**	(4.5)
Asset impairments and abandonments	**4,904**	18,880	1,458	**(74.0)**	—
Depreciation and amortization	**22,862**	28,516	28,217	**(19.8)**	1.1
Total Operating Expenses	**145,517**	165,355	153,238	**(12.0)**	7.9
Operating Income	**23,347**	6,405	27,955	**—**	(77.1)
Interest expense	**6,884**	7,925	8,422	**(13.1)**	(5.9)
Equity in net income of affiliates	**631**	95	6	**—**	—
Other income (expense) – net	**9,853**	(1,431)	(1,071)	**—**	(33.6)
Income (Loss) Before Income Taxes	**26,947**	(2,856)	18,468	**—**	—
Net Income (Loss)	**21,479**	(3,821)	14,975	**—**	—
Net Income (Loss) Attributable to AT&T	**20,081**	(5,176)	13,903	**—**	—
Net Income (Loss) Attributable to Common Stock	**$ 19,874**	$ (5,369)	$ 13,900	**— %**	— %

OVERVIEW

Operating revenues decreased in 2021, with declines reflecting our July 31, 2021 separation of the U.S. video business, the completion of the sale of our Vrio business unit in November 2021 and the October 2020 sale of wireless and wireline operations in Puerto Rico and the U.S. Virgin Islands. Also contributing to revenue declines was lower Business Wireline revenues due in part to higher demand for pandemic-related connectivity in the prior year. Partially offsetting declines were higher Mobility equipment and service revenues and gains in broadband service in our Communications segment; higher content and DTC subscription revenues in our WarnerMedia segment; and growth in Mexico wireless operations including favorable foreign exchange impacts.

Operations and support expenses decreased in 2021, with declines reflecting our business divestitures, lower bad debt expense and lower personnel costs associated with our ongoing transformation initiatives. Declines were mostly offset by increased domestic wireless equipment expense from higher volumes, and higher WarnerMedia programming costs and marketing activities.

Asset impairments and abandonments decreased in 2021, with higher impairments in 2020. Noncash impairment charges in 2020 included $15,508, resulting from our assessment of the recoverability of the long-lived assets and goodwill associated with our U.S. video business (see Notes 7 and 9); $2,212 goodwill impairment at our Vrio business unit (see Note 9); and $780 from the impairment of production and other content inventory at WarnerMedia, with approximately $524 resulting from the continued shutdown of theaters during the pandemic and the hybrid distribution model for our 2021 film slate (see Note 11). In 2021, we took an additional Vrio impairment of $4,555, resulting from our assessment of the recoverability of the net assets of Vrio (see Note 6).

Depreciation and amortization expense decreased in 2021.

Amortization expense decreased $3,779, or 47.2%, in 2021 primarily due to ceasing amortization on Video and Vrio held-for-sale assets.

Depreciation expense decreased $1,875, or 9.1%, in 2021 primarily due to the lower cost basis of property, plant and equipment resulting from Video impairments taken in the fourth quarter of 2020 and ceasing depreciation on Video and Vrio held-for-sale assets in 2021.

Operating income increased in 2021 and decreased in 2020. Our operating margin was 13.8% in 2021, compared to 3.7% in 2020 and 15.4% in 2019.

Interest expense decreased in 2021, primarily due to lower interest rates and capitalized interest associated with the spectrum acquisitions, partially offset by higher debt balances.

Equity in net income (loss) of affiliates increased in 2021, primarily due to the close of our transaction with TPG related to the U.S. video business, which resulted in our accounting for our investment in DIRECTV under the equity method of accounting beginning August 1, 2021 (see Notes 6 and 20).

Other income (expense) – net increased in 2021, primarily due to the recognition of $4,140 in actuarial gains, compared to losses of $4,169 in 2020, and recognition of $1,405 of debt redemption costs in 2020. Also contributing to increased income were higher net pension and postretirement benefit credits from higher prior service credit amortization (see Note 15) and net gains on the sale of assets (see Note 6).

Income tax expense increased in 2021, primarily driven by increased income before income taxes, offset primarily by the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) benefit of U.S. federal Net Operating Loss (NOL) carryback and benefits on divestitures in 2021.

Our effective tax rate was 20.3% in 2021, (33.8)% in 2020, and 18.9% in 2019. The effective tax rate in 2020 was impacted by our impairment of Vrio and Video goodwill, which was not deductible for tax purposes.

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 depreciation and amortization expenses incurred in operating contribution nor is it burdened by 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

	2021	2020	2019	Percent Change 2021 vs. 2020	2020 vs. 2019
Segment Operating Revenues					
Mobility	**$ 78,254**	$ 72,564	$ 71,056	**7.8 %**	2.1 %
Business Wireline	**23,937**	25,083	25,901	**(4.6)**	(3.2)
Consumer Wireline	**12,539**	12,318	13,012	**1.8**	(5.3)
Total Segment Operating Revenues	**114,730**	109,965	109,969	**4.3**	—
Segment Operating Contribution					
Mobility	**23,312**	22,372	22,321	**4.2**	0.2
Business Wireline	**3,990**	4,564	5,137	**(12.6)**	(11.2)
Consumer Wireline	**977**	1,377	2,357	**(29.0)**	(41.6)
Total Segment Operating Contribution	**$ 28,279**	$ 28,313	$ 29,815	**(0.1)%**	(5.0)%

Selected Subscribers and Connections

	December 31, 2021	2020	2019
(000s)			
Mobility subscribers	**201,791**	182,558	165,889
Total domestic broadband connections	**15,504**	15,384	15,389
Network access lines in service	**6,177**	7,263	8,487
U-verse VoIP connections	**3,333**	3,816	4,370

Operating revenues increased in 2021, driven by increases in our Mobility and Consumer Wireline business units, partially offset by a decrease in our Business Wireline business unit. The increases are primarily driven by equipment and wireless service revenue growth and gains in broadband service.

Operating contribution decreased in 2021 and 2020. The 2021 operating contribution includes declines in our Business Wireline and Consumer Wireline business units, and reflects an increase in operating contribution from our Mobility business unit. Our Communications segment operating income margin was 24.6% in 2021, 25.7% in 2020 and 27.1% in 2019.

Communications Business Unit Discussion

Mobility Results

	2021	2020	2019	Percent Change 2021 vs. 2020	2020 vs. 2019
Operating revenues					
Service	**$ 57,590**	$ 55,542	$ 55,331	**3.7 %**	0.4 %
Equipment	**20,664**	17,022	15,725	**21.4**	8.2
Total Operating Revenues	**78,254**	72,564	71,056	**7.8**	2.1
Operating expenses					
Operations and support	**46,820**	42,106	40,681	**11.2**	3.5
Depreciation and amortization	**8,122**	8,086	8,054	**0.4**	0.4
Total Operating Expenses	**54,942**	50,192	48,735	**9.5**	3.0
Operating Income	**23,312**	22,372	22,321	**4.2**	0.2
Equity in Net Income (Loss) of Affiliates	**—**	—	—	**—**	—
Operating Contribution	**$ 23,312**	$ 22,372	$ 22,321	**4.2 %**	0.2 %

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

Subscribers

				Percent Change	
(in 000s)	**2021**	2020	2019	**2021 vs. 2020**	2020 vs. 2019
Postpaid	**81,534**	77,154	75,207	**5.7 %**	2.6 %
Postpaid phone	**67,260**	64,216	63,018	**4.7**	1.9
Prepaid	**19,028**	18,102	17,803	**5.1**	1.7
Reseller	**6,113**	6,535	6,893	**(6.5)**	(5.2)
Connected devices[1]	**95,116**	80,767	65,986	**17.8**	22.4
Total Mobility Subscribers	**201,791**	182,558	165,889	**10.5 %**	10.0 %

[1] Includes data-centric devices such as session-based tablets, monitoring devices and primarily wholesale automobile systems.

Mobility Net Additions

				Percent Change	
(in 000s)	**2021**	2020	2019	**2021 vs. 2020**	2020 vs. 2019
Postpaid Phone Net Additions	**3,196**	1,457	483	**— %**	— %
Total Phone Net Additions	**3,850**	1,640	989	**—**	65.8
Postpaid[2]	**4,482**	2,183	(435)	**—**	—
Prepaid	**956**	379	677	**—**	(44.0)
Reseller	**(534)**	(449)	(928)	**(18.9)**	51.6
Connected devices[3]	**14,328**	14,785	14,645	**(3.1)**	1.0
Mobility Net Subscriber Additions[1]	**19,232**	16,898	13,959	**13.8 %**	21.1 %
Postpaid Churn[4]	**0.94 %**	0.98 %	1.18 %	**(4) BP**	(20) BP
Postpaid Phone-Only Churn[4]	**0.76 %**	0.79 %	0.95 %	**(3) BP**	(16) BP

[1] Excludes acquisition-related additions during the period.
[2] In addition to postpaid phones, includes tablets and wearables and other. Tablet net (losses) were 28, (512) and (1,487) for the years ended December 31, 2021, 2020 and 2019, respectively. Wearables and other net adds were 1,257, 1,223 and 569 for the years ended December 31, 2021, 2020 and 2019, respectively.
[3] Includes data-centric devices such as session-based tablets, monitoring devices and primarily wholesale automobile systems. Excludes postpaid tablets and other postpaid data devices. Wholesale connected car net adds were 7.9 million for the year ended December 31, 2021.
[4] Calculated by dividing the aggregate number of wireless subscribers who canceled service during a month 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 2021, largely due to growth from subscriber gains.

ARPU
Average revenue per subscriber (ARPU) decreased in 2021 and reflects the impact of higher promotional discount amortization (see Note 5).

Churn
The effective management of subscriber churn is critical to our ability to maximize revenue growth and to maintain and improve margins. Postpaid churn and postpaid phone-only churn were lower in 2021 due to retention offers, migrations to unlimited plans, continued network performance and lower involuntary disconnects.

Equipment revenue increased in 2021 primarily driven by increased volumes, the sale of higher-priced smartphones and a mix of higher-priced postpaid smartphones.

Operations and support expenses increased in 2021, largely driven by growth in equipment sales and associated expenses, including costs associated with the upcoming first-quarter 2022 3G network shutdown, increased content costs associated with bundling HBO Max, increased amortization of deferred contract acquisition costs and higher network and technology costs. These expense increases were partially offset by lower sales costs and lower bad debt expense.

Depreciation expense increased in 2021, primarily due to ongoing capital spending for network upgrades and expansion partially offset by fully depreciated assets.

Operating income increased in 2021 and 2020. Our Mobility operating income margin was 29.8% in 2021, 30.8% in 2020 and 31.4% in 2019. Our Mobility EBITDA margin was 40.2% in 2021, 42.0% in 2020 and 42.7% in 2019.

Subscriber Relationships

As the wireless industry has matured, with nearly full penetration of smartphones in the U.S. population, future wireless growth will depend on our ability to offer innovative services, plans and devices that bundle product offerings and take advantage of our 5G wireless network, which went nationwide in July 2020. We believe 5G opens up vast possibilities of connecting sensors, devices, and autonomous things, commonly referred to as the Internet of Things (IoT). More and more, these devices are performing use cases that require high bandwidth, ultra-reliability and low latency that only 5G and edge computing can bring. 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. In January 2022, we began to deploy our C-band spectrum acquired in FCC Auction 107 (see Note 6).

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 services. Virtually all of our postpaid smartphone subscribers are on plans that provide for service on multiple devices at reduced rates, and subscribers to such plans tend to have higher retention and lower churn rates. We offer unlimited data plans and subscribers to such plans also tend to have higher retention and lower churn rates. Our 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. Subscribers that purchase two or more services from us have significantly lower churn than subscribers that purchase only one service.

Business Wireline Results

				Percent Change	
	2021	2020	2019	**2021 vs. 2020**	2020 vs. 2019
Operating revenues					
Services	**$ 23,224**	$ 24,313	$ 25,116	**(4.5)%**	(3.2)%
Equipment	**713**	770	785	**(7.4)**	(1.9)
Total Operating Revenues	**23,937**	25,083	25,901	**(4.6)**	(3.2)
Operating expenses					
Operations and support	**14,755**	15,303	15,839	**(3.6)**	(3.4)
Depreciation and amortization	**5,192**	5,216	4,925	**(0.5)**	5.9
Total Operating Expenses	**19,947**	20,519	20,764	**(2.8)**	(1.2)
Operating Income	**3,990**	4,564	5,137	**(12.6)**	(11.2)
Equity in Net Income (Loss) of Affiliates	**—**	—	—	**—**	—
Operating Contribution	**$ 3,990**	$ 4,564	$ 5,137	**(12.6)%**	(11.2)%

Service revenues decreased in 2021, driven by lower demand for legacy voice and data services in the current year, proactive rationalization of low profit margin products and higher demand for pandemic-related connectivity in the prior-year. We expect this trend to continue.

Equipment revenues decreased in 2021, driven by declines in legacy and non-core services which we expect to continue.

Operations and support expenses decreased in 2021, primarily due to our continued efforts to drive efficiencies in our network operations through automation and reductions in customer support expenses through digitization and proactive rationalization of low profit margin products.

Depreciation expense decreased in 2021, primarily due to certain network assets becoming fully depreciated.

Operating income decreased in 2021 and 2020. Our Business Wireline operating income margin was 16.7% in 2021, 18.2% in 2020 and 19.8% in 2019. Our Business Wireline EBITDA margin was 38.4% in 2021, 39.0% in 2020 and 38.8% in 2019.

Consumer Wireline Results

				Percent Change	
	2021	2020	2019	**2021 vs. 2020**	2020 vs. 2019
Operating revenues					
Broadband	**$ 9,085**	$ 8,534	$ 8,403	**6.5 %**	1.6 %
Legacy voice and data services	**1,977**	2,213	2,573	**(10.7)**	(14.0)
Other service and equipment	**1,477**	1,571	2,036	**(6.0)**	(22.8)
Total Operating Revenues	**12,539**	12,318	13,012	**1.8**	(5.3)
Operating expenses					
Operations and support	**8,467**	8,027	7,775	**5.5**	3.2
Depreciation and amortization	**3,095**	2,914	2,880	**6.2**	1.2
Total Operating Expenses	**11,562**	10,941	10,655	**5.7**	2.7
Operating Income	**977**	1,377	2,357	**(29.0)**	(41.6)
Equity in Net Income (Loss) of Affiliates	**—**	—	—	**—**	—
Operating Contribution	**$ 977**	$ 1,377	$ 2,357	**(29.0)%**	(41.6)%

The following tables highlight other key measures of performance for Consumer Wireline:

Connections

				Percent Change	
(in 000s)	**2021**	2020	2019	**2021 vs. 2020**	2020 vs. 2019
Broadband Connections					
Total Broadband and DSL Connections	**14,160**	14,100	14,119	**0.4 %**	(0.1)%
Fiber Broadband Connections	**5,992**	4,951	3,887	**21.0**	27.4
Voice Connections					
Retail Consumer Switched Access Lines	**2,423**	2,862	3,329	**(15.3)**	(14.0)
U-verse Consumer VoIP Connections	**2,736**	3,231	3,794	**(15.3)**	(14.8)
Total Retail Consumer Voice Connections	**5,159**	6,093	7,123	**(15.3)%**	(14.5)%

Net Additions

				Percent Change	
(in 000s)	**2021**	2020	2019	**2021 vs. 2020**	2020 vs. 2019
Broadband Net Additions					
Total Broadband and DSL Net Additions	**60**	(19)	(290)	**— %**	93.4 %
Fiber Broadband Net Additions	**1,041**	1,064	1,124	**(2.2)%**	(5.3)%

Broadband revenues increased in 2021, driven by an increase in fiber customers and pricing, which we expect to continue for the foreseeable future.

Legacy voice and data service revenues decreased in 2021, reflecting the continued decline in the number of customers, which we expect to continue.

Other service and equipment revenues decreased in 2021, reflecting the continued decline in the number of VoIP customers, which we expect to continue.

Operations and support expenses increased in 2021, primarily driven by higher advertising, technology and customer support costs, and content costs associated with plans bundling HBO Max. Partially offsetting these increases was lower amortization of deferred fulfillment costs, including updates to extend the estimated economic life of our subscribers.

Depreciation expense increased in 2021, primarily due to ongoing capital spending for network upgrades and expansion.

Operating income decreased in 2021 and 2020. Our Consumer Wireline operating income margin was 7.8% in 2021, 11.2% in 2020 and 18.1% in 2019. Our Consumer Wireline EBITDA margin was 32.5% in 2021, 34.8% in 2020 and 40.2% in 2019.

WARNERMEDIA SEGMENT

				Percent Change	
	2021	2020	2019	**2021 vs. 2020**	2020 vs. 2019
Segment Operating Revenues					
Subscription	**$ 15,596**	$ 13,765	$ 13,651	**13.3 %**	0.8 %
Content and other	**13,514**	10,552	14,930	**28.1**	(29.3)
Advertising	**6,522**	6,125	6,678	**6.5**	(8.3)
Total Segment Operating Revenues	**35,632**	30,442	35,259	**17.0**	(13.7)
Segment Operating Expenses					
Direct Costs					
Programming	**15,286**	11,678	13,949	**30.9**	(16.3)
Marketing	**4,137**	2,529	2,953	**63.6**	(14.4)
Other	**3,658**	3,211	3,060	**13.9**	4.9
Selling, general and administrative	**4,656**	4,161	4,210	**11.9**	(1.2)
Depreciation and amortization	**656**	671	589	**(2.2)**	13.9
Total Operating Expenses	**28,393**	22,250	24,761	**27.6**	(10.1)
Operating Income	**7,239**	8,192	10,498	**(11.6)**	(22.0)
Equity in Net Income (Loss) of Affiliates	**38**	18	161	**—**	(88.8)
Total Segment Operating Contribution	**$ 7,277**	$ 8,210	$ 10,659	**(11.4)%**	(23.0)%

Our WarnerMedia segment is operated as a content organization that distributes across various platforms, including basic networks, Direct-to-Consumer (DTC) or theatrical, TV content and games licensing.

HBO Latin America Group (HBO LAG) is included as an equity method investment prior to our acquiring the remaining interest in May 2020. It is included in the segment operating results following the date of acquisition.

On May 17, 2021, we entered into an agreement to combine our WarnerMedia segment, subject to certain exceptions, with a subsidiary of Discovery Inc. On December 21, 2021, we entered into an agreement to sell the marketplace component of Xandr to Microsoft Corporation (Microsoft). (See Note 6)

Operating revenues increased in 2021 and decreased in 2020. The increase in 2021 was primarily due to increases in content and other, reflecting the partial recovery from prior-year impacts of the pandemic, and also in subscription revenues. The decrease in 2020 was primarily due to lower content and advertising revenues, which were negatively impacted by the pandemic, partially offset by higher subscription revenues.

Subscription revenues increased in 2021 and 2020, reflecting growth of DTC domestic HBO Max and HBO subscribers and the May 2020 acquisition of the remaining interest in HBO Latin America Group. DTC subscription revenues were $7,723 in 2021, versus $6,090 and $5,814 in 2020 and 2019, respectively, and include growth from intercompany relationships with the Communications segment.

Content and other revenues increased in 2021 and decreased in 2020. The increase in 2021 was due to higher TV production and licensing, which represent a partial recovery from prior-year impacts of the pandemic, as well as higher theatrical, with 2020 including only five worldwide theatrical releases compared to 17 in 2021. The decrease in 2020 was primarily due to pandemic-related movie theater closures and television and theatrical production delays.

Dollars in millions except per share amounts

Advertising revenues increased in 2021 and decreased in 2020. The increase in 2021 was due to the return in 2021 of major sporting events, including the NCAA Division I Men's Championship Basketball Tournament. The decrease in 2020 was primarily due to the pandemic-related cancellation of sporting events, partially offset by higher news coverage of general elections and COVID-19 developments.

Direct costs increased in 2021 and decreased in 2020. The increase in 2021 was driven by higher film and programming costs and increased costs for HBO Max. Direct costs supporting DTC revenues were $7,934 in 2021, versus $5,452 and $3,824 in 2020 and 2019, respectively. The decrease in 2020 was primarily due to pandemic-related closures and production delays.

Selling, general and administrative expenses increased in 2021 and decreased in 2020. The increase in 2021 was primarily due to incremental selling costs associated with a DIRECTV advertising revenue sharing arrangement, partially offset by lower bad debt expense and integration of support functions. The decrease in 2020 was primarily due to lower print and advertising expenses from limited theatrical releases, lower distribution fees and cost-saving initiatives, partially offset by marketing costs associated with HBO Max.

Operating contribution decreased in 2021 and 2020. The WarnerMedia segment operating income margin was 20.3% in 2021, 26.9% in 2020 and 29.8% in 2019.

LATIN AMERICA SEGMENT

				Percent Change	
	2021	2020	2019	**2021 vs. 2020**	2020 vs. 2019
Segment Operating Revenues					
Mexico	**$ 2,747**	$ 2,562	$ 2,869	**7.2 %**	(10.7)%
Vrio	**2,607**	3,154	4,094	**(17.3)**	(23.0)
Total Segment Operating Revenues	**5,354**	5,716	6,963	**(6.3)**	(17.9)
Segment Operating Contribution					
Mexico	**(510)**	(587)	(718)	**13.1**	18.2
Vrio	**80**	(142)	83	**—**	—
Total Segment Operating Contribution	**$ (430)**	$ (729)	$ (635)	**41.0 %**	(14.8)%

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.

On November 15, 2021, we completed the sale of our Latin America video operations, Vrio, to Grupo Werthein (see Note 6).

Operating revenues decreased in 2021, reflecting the sale of Vrio partially offset by growth in the Mexico wireless operations. Foreign exchange pressure in Vrio was partially offset by improvements in Mexico.

Operating contribution improved in 2021, reflecting higher profitability in Mexico and lower depreciation resulting from Vrio assets being accounted for as held-for-sale. Our Latin America segment operating income margin was (8.1)% in 2021, (13.2)% in 2020 and (9.5)% in 2019.

Latin America Business Unit Discussion

Mexico Results

				Percent Change	
	2021	2020	2019	**2021 vs. 2020**	2020 vs. 2019
Operating revenues					
Service	**$ 1,834**	$ 1,656	$ 1,863	**10.7 %**	(11.1)%
Equipment	**913**	906	1,006	**0.8**	(9.9)
Total Operating Revenues	**2,747**	2,562	2,869	**7.2**	(10.7)
Operating expenses					
Operations and support	**2,652**	2,636	3,085	**0.6**	(14.6)
Depreciation and amortization	**605**	513	502	**17.9**	2.2
Total Operating Expenses	**3,257**	3,149	3,587	**3.4**	(12.2)
Operating Income (Loss)	**(510)**	(587)	(718)	**13.1**	18.2
Equity in Net Income (Loss) of Affiliates	**—**	—	—	**—**	—
Operating Contribution	**$ (510)**	$ (587)	$ (718)	**13.1 %**	18.2 %

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

				Percent Change	
(in 000s)	**2021**	2020	2019	**2021 vs. 2020**	2020 vs. 2019
Mexico Wireless Subscribers					
Postpaid	**4,807**	4,696	5,103	**2.4 %**	(8.0)%
Prepaid	**15,057**	13,758	13,584	**9.4**	1.3
Reseller	**498**	489	472	**1.8**	3.6
Mexico Wireless Subscribers	**20,362**	18,943	19,159	**7.5 %**	(1.1)%

				Percent Change	
(in 000s)	**2021**	2020	2019	**2021 vs. 2020**	2020 vs. 2019
Mexico Wireless Net Additions					
Postpaid	**111**	(407)	(608)	**— %**	33.1 %
Prepaid	**1,299**	174	1,919	**—**	(90.9)
Reseller	**9**	118	219	**(92.4)**	(46.1)
Mexico Wireless Net Additions	**1,419**	(115)	1,530	**— %**	— %

Service revenues increased in 2021, driven by improvements in foreign exchange and growth in other services.

Equipment revenues increased in 2021, driven by improvements in foreign exchange impact partly offset by lower equipment sales volumes.

Operations and support expenses increased in 2021, due to foreign exchange impact partially offset by lower expenses. Approximately 7% of Mexico expenses are U.S. dollar-based, with the remainder in the local currency.

Depreciation expense increased in 2021, reflecting higher in-service assets and foreign exchange impacts.

Operating income improved in 2021 and 2020. Our Mexico operating income margin was (18.6)% in 2021, (22.9)% in 2020 and (25.0)% in 2019. Our Mexico EBITDA margin was 3.5% in 2021, (2.9)% in 2020 and (7.5)% in 2019.

Dollars in millions except per share amounts

Vrio Results

				Percent Change	
	2021	2020	2019	**2021 vs. 2020**	2020 vs. 2019
Operating revenues	**$ 2,607**	$ 3,154	$ 4,094	**(17.3)%**	(23.0)%
Operating expenses					
Operations and support	**2,302**	2,800	3,378	**(17.8)**	(17.1)
Depreciation and amortization	**231**	520	660	**(55.6)**	(21.2)
Total Operating Expenses	**2,533**	3,320	4,038	**(23.7)**	(17.8)
Operating Income (Loss)	**74**	(166)	56	**—**	—
Equity in Net Income (Loss) of Affiliates	**6**	24	27	**(75.0)**	(11.1)
Operating Contribution	**$ 80**	$ (142)	$ 83	**— %**	— %

Operating revenues decreased in 2021, driven by the sale of Vrio and foreign exchange impacts.

Operations and support expenses decreased in 2021, driven by the sale of Vrio and foreign exchange impacts.

Depreciation expense decreased in 2021, due to ceasing depreciation on held-for-sale Vrio assets. We applied held-for-sale accounting to Vrio on June 30, 2021 and ceased depreciation beginning July 1, 2021.

Operating income improved in 2021 and 2020. Our Vrio operating income margin was 2.8% in 2021, (5.3)% in 2020 and 1.4% in 2019. Our Vrio EBITDA margin was 11.7% in 2021, 11.2% in 2020 and 17.5% in 2019.

OPERATING ENVIRONMENT AND TRENDS OF THE BUSINESS

2022 Revenue Trends We expect revenue growth in our wireless and broadband businesses as customers demand instant connectivity and higher speeds made possible by wireless network enhancements through 5G deployment and our fiber network expansion. We also expect revenue growth from continued investment in premium content and by expanding the international reach of HBO Max.

In our Communications segment, we expect that our simplified go-to-market strategy for 5G in underpenetrated markets will continue to contribute to wireless subscriber and service revenue growth and that expansion of our fiber footprint and our new multi-gig rollout will drive greater demand for broadband services on our fast-growing fiber network.

In our WarnerMedia segment, we expect our video streaming platform, HBO Max, and premium content will continue to drive revenue growth. The pandemic-related partial closure of movie theaters is expected to continue to pressure revenues; however, we are working towards a shorter but exclusive theatrical window for our 2022 film slate. The decline in viewing on our basic cable networks is expected to continue as consumers continue to increase their use of streaming platforms.

As we expand our fiber reach, we will be orienting our business portfolio to leverage this opportunity to offset continuing declines in legacy business wireline products by growing connectivity with small to mid-sized business. We plan to use our strong fiber and wireless assets, broad distribution and converged product offers to strengthen our overall market position. We will continue to deemphasize non-core services with a longer-term shift of the business to fiber and mobile connectivity, and growth in value-added services.

2022 Expense Trends We expect the spending required to support growth initiatives, primarily our continued deployment of fiber and 5G, including 3G shutdown costs in the first quarter of 2022, as well as continued investment into the HBO Max platform, to pressure expense trends in 2022. To the extent 5G handset introductions continue in 2022, and as anticipated, the expenses associated with those device sales are expected to contribute to higher costs. During 2022, we will also continue to prioritize efficiency, led by our cost transformation initiative and continued transition from our hardware-based network technology to more efficient and less expensive software-based technology. These investments will help 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 should result in a more efficient use of capital and lower network-related expenses in the coming years.

We continue to transform our operations to be more efficient and effective, reinvesting savings into growth areas of the business. We are restructuring businesses, sunsetting legacy networks, improving customer service and ordering functions through digital transformation, sizing our support costs and staffing with current activity levels, and reassessing overall benefit costs. Cost savings and asset sales align with our focus on debt reduction.

Market Conditions The U.S. stock market experienced steady growth in 2021; however, several factors, including the global pandemic, have resulted in changes in demand in business communication services. The global pandemic has caused, and could again cause, delays in the development, manufacturing (including the sourcing of key components) and shipment of products, as well as continued tight labor market and actual or perceived inflation. Most of our products and services are not directly affected by the imposition of tariffs on Chinese goods. However, we expect ongoing pressure on pricing during 2022 as we respond to the competitive marketplace, especially in wireless 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 2022. 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 2022 (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. We continue to support regulatory and legislative measures and efforts, at both the state and federal levels, to reduce inappropriate regulatory burdens that inhibit our ability to compete effectively and offer needed services to 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.

Communications Segment

Internet The FCC currently classifies fixed and mobile consumer broadband services as information services, subject to light-touch regulation. The D.C. Circuit upheld the FCC's current classification, although it remanded three discrete issues to the FCC for further consideration. These issues related to the effect of the FCC's decision to classify broadband services as information services on public safety, the regulation of pole attachments, and universal service support for low-income consumers through the Lifeline program. Because no party sought Supreme Court review of the D.C. Circuit's decision to uphold the FCC's classification of broadband as an information service, that decision is final.

In October 2020, the FCC adopted an order addressing the three issues remanded by the D.C. Circuit for further consideration. After considering those issues, the FCC concluded they provided no grounds to depart from its determination that fixed and mobile consumer broadband services should be classified as information services. An appeal of the FCC's remand decision is pending.

Some states have adopted legislation or issued executive orders that would reimpose net neutrality rules repealed by the FCC. Suits have been filed concerning such laws in California and Vermont. The California statute is now in effect, and the lawsuit regarding the Vermont statute has been stayed pending resolution of any appeal of the California lawsuit. We expect that going forward additional states may seek to impose net neutrality requirements.

On November 15, 2021, President Biden signed the Infrastructure Investment and Jobs Act (IIJA) into law. The legislation appropriates $65,000 to support broadband deployment and adoption. The National Telecommunications and Information Agency (NTIA) is responsible for distributing more than $48,000 of this funding, including $42,500 in state grants for broadband deployment projects in unserved and underserved areas. NTIA will establish rules for this program in the first half of 2022. The IIJA also appropriated $14,200 for establishment of the Affordable Connectivity Program (ACP), an FCC-administered monthly, low-income broadband benefit program, replacing the Emergency Broadband Benefit program (established in December 2020 by the Consolidated Appropriations Act 2021). Qualifying customers can receive up to thirty dollars per month (or seventy-five dollars per month for those on Tribal lands) to assist with their internet bill. AT&T is a participating provider in the ACP program and will consider participating in the deployment program where appropriate. The IIJA includes various provisions that will result in FCC proceedings regarding ACP program administration and consumer protection, reform of the existing universal support program, and broadband labeling and equal access.

Privacy-related legislation continues to be adopted or considered in a number of jurisdictions. Legislative, regulatory and litigation actions could result in increased costs of compliance, further regulation or claims against broadband internet access service providers and others, and increased uncertainty in the value and availability of data.

Wireless Industry-wide network densification and 5G technology expansion efforts, which are needed to satisfy extensive demand for video and internet access, will involve significant deployment of "small cell" equipment. This increases the importance of local permitting processes that allow for the placement of small cell equipment in the public right-of-way on reasonable timelines and terms. Between 2018 and 2020, the FCC adopted multiple Orders streamlining federal, state, and local wireless structure review processes that had the tendency to delay and impede deployment of small cell and related infrastructure used to provide telecommunications and broadband services. The key elements of these orders have been affirmed on judicial review. During 2020-2021, we have also deployed 5G nationwide on "low band" spectrum on macro towers. Executing on the recent spectrum purchase, we announced on-going construction and continuing deployment of 5G on C-band spectrum in 2022 and beyond.

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 which could impact WarnerMedia's activities in the EU. 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 and IP-based fiber broadband services. We provide integrated services to diverse groups of customers in the U.S. on an integrated telecommunications network utilizing different technological platforms. In 2022, our key initiatives include:

- Continuing our wireless subscriber momentum while increasing the pace of our 5G deployment and expansion of 5G service, including to underpenetrated markets.
- Improving fiber penetration, accelerating subscriber growth and increasing broadband revenues.
- Increasing international subscriber base for HBO Max, our platform for premium content and video offered directly to consumers, as well as through other distributors.
- Continuing to develop efficiencies and a competitive advantage through cost transformation initiatives and product simplification.

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. As of December 31, 2021, we served 222 million wireless subscribers in North America, with more than 202 million in the United States.

Our LTE technology covers over 434 million people in North America, and in the United States, we cover all major metropolitan areas and over 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 expanded that deployment nationwide in July 2020. At December 31, 2021, our network covers more than 250 million people with 5G technology in the United States and North America.

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 2021, we provided LTE coverage to over 104 million people in Mexico.

As the communications industry has evolved into internet-based technologies capable of blending wireline and wireless services, we plan to focus on expanding our wireless network capabilities and provide broadband offerings that allow customers to integrate their home or business fixed services with their mobile service. In January 2022, we launched our multi-gig rollout, which brings the fastest internet to AT&T Fiber customers with symmetrical 2 gig and 5 gig tiers. We will continue to develop and provide unique integrated mobile and broadband/fiber solutions.

REGULATORY DEVELOPMENTS

Set forth below is a summary of the most significant regulatory proceedings that directly affected our operations during 2021. 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) globally and wireless services in Mexico.

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. On October 1, 2019, the D.C. Circuit 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. Because no party sought Supreme Court review of the D.C. Circuit's decision to uphold the FCC's classification of broadband as an information service, that decision is final. While the court vacated the FCC's express preemption of any state regulation of net neutrality, it stressed that its ruling did 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 remanded the matter to the FCC for further consideration of the impact of reclassifying broadband services as information services on public safety, the Lifeline program, and pole attachment regulation. In October 2020, the FCC adopted an order concluding that those issues did not justify reversing its decision to reclassify broadband services as information services. An appeal of the FCC's remand decision is pending.

Following the FCC's 2017 decision to reclassify broadband as information services, a number of states 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 were 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. Because that order is now final, the California suit has returned to active status. In January 2021, a U.S. District Court in California denied a request for a preliminary injunction against enforcement of the California law. As a consequence, the California statute now is in effect. The trade associations challenging the statute have appealed the denial of their request for preliminary injunction to the Ninth Circuit; that appeal remains pending. The lawsuit regarding the Vermont statute has been stayed pending the Ninth Circuit's resolution of the appeal or April 15, 2022, whichever occurs first. 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.

Privacy-related legislation continues to be adopted or considered in a number of jurisdictions. Legislative, regulatory and litigation actions could result in increased costs of compliance, further regulation or claims against broadband internet access service providers and others, and increased uncertainty in the value and availability of data.

Wireless and Broadband In June and November 2020, the FCC issued a Declaratory Ruling clarifying the limits on state and local authority to deny applications to modify existing structures to accommodate wireless facilities. Appeals of the November 2020 order remain pending in the Ninth Circuit Court of Appeals, following multiple requests by the FCC to hold the appeal in abeyance until the Senate confirms a fifth FCC Commissioner. If sustained on appeal, these FCC decisions will remove state and local regulatory barriers and reduce the costs of the infrastructure needed for 5G and FirstNet deployments, which will enhance our ability to place small cell facilities on utility poles, expand existing facilities to accommodate public safety services, and replace legacy facilities and services with advanced broadband infrastructure and services. During 2020-2021, we have also deployed 5G nationwide on "low band" spectrum on macro towers. Executing on the recent spectrum purchase, we announced on-going construction and continuing deployment of 5G on C-band spectrum in 2022 and beyond.

In March 2020, the FCC released its order setting rules for certain spectrum bands (C-band) for 5G operations. In that order, the FCC concluded that C-band 5G services that met the agency's technical limits on power and emissions would not cause harmful interference with aircraft operations. In reliance on that order, AT&T bid a total of $23,406 and was awarded 1,621 C-band licenses, including 40 MHz nationwide available for deployment in December 2021, with the remainder available for deployment in December 2023. In late 2021, the Federal Aviation Administration (FAA) questioned whether the C-band launch could impact radio altimeter equipment on airplanes, which operate on spectrum bands over 400 MHz away from the spectrum AT&T is launching in 2022. In response, to allow the FAA more time to evaluate, AT&T and Verizon delayed their planned December 2021 5G C-band launch by six weeks and voluntarily committed to a series of temporary, precautionary measures, in addition to deferring turning on a limited number of towers around certain airports. On January 19, 2022, we launched 5G C-band services, subject to these voluntary temporary measures.

In recent years, the FCC took several actions to make spectrum available for 5G services, including the auction of 280 MHz of mid-band spectrum used for satellite service (the "C Band" auction) and 39 GHz band spectrum. AT&T obtained spectrum in these auctions (see "Other Business Matters"). The FCC also made 150 MHz of mid-band CBRS spectrum available, to be shared with Federal incumbents, which enjoy priority. In addition, the FCC recently completed Auction 110, in which AT&T won 40 MHz of spectrum nationwide at a cost of $9,079.

Following enactment in December 2019 of the Pallone-Thune Telephone Robocall Abuse Criminal Enforcement and Deterrence Act (TRACED Act) by Congress, the FCC adopted new rules requiring voice service providers to implement caller ID authentication protocols (known as STIR/SHAKEN) and adopt robocall mitigation measures. These measures apply to portions of their networks where STIR/SHAKEN is not enabled, in addition to other anti-robocall measures. The new rules contemplate ongoing FCC oversight and review of efforts related to STIR/SHAKEN implementation. Among other goals, the FCC has stated its intention to promote the IP transition through its rules.

In September 2019, the FCC released reformed aspects of its intercarrier compensation regime related to tandem switching and transport charges, with the goal of reducing the prevalence of telephone access arbitrage schemes. In October 2020, the FCC further reformed aspects of its intercarrier compensation regime by greatly reducing, and in some cases eliminating, the charges long distance carriers must pay to originating carriers for toll-free calls. Appeals of both orders are pending at the D.C. Circuit Court of Appeals.

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 two national wireless providers; a larger number of regional providers and resellers of those services; and certain cable companies. In addition, we face competition from providers who offer voice, text messaging and other services as applications on data networks. We are one of four facilities-based providers in Mexico (retail and wholesale), 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.

Broadband 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 fiber services or competitors' wireless, satellite and internet-based services. In most U.S. markets, we compete for customers with large cable companies for high-speed internet and voice services, wireless broadband providers, and other smaller telecommunications companies for both long-distance and local services.

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 and will continue to develop innovative and integrated services that capitalize on our wireless and IP-based network.

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 shifts in consumer viewing patterns, increased competition from streaming services and the expansion by other companies, in particular, technology companies. In May 2020, we launched HBO Max, our 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. In December 2021, we entered into an agreement to sell the marketplace component of Xandr (see Note 6).

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 3.00% and 2.80%, respectively, at December 31, 2021, 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 had an average rating of at least Aa3 or AA- by the nationally recognized statistical rating organizations, denominated in U.S. dollars, and neither callable, convertible nor index linked. For the year ended December 31, 2021, when compared to the year ended December 31, 2020, we increased our pension discount rate by 0.30%, resulting in a decrease in our pension plan benefit obligation of $1,645, and increased our postretirement discount rate by 0.40%, resulting in a decrease in our postretirement benefit obligation of $341.

Our expected long-term rate of return is 6.75% on pension plan assets and 4.50% on postretirement plan assets for 2022 and for 2021. 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 2022 combined pension and postretirement cost to increase $272, 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 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 $2,702 in our 2021 depreciation expense and that a one-year decrease would have resulted in an increase of approximately $3,700 in our 2021 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 on October 1 for impairment. For impairment testing, we estimate fair values using models that predominantly rely on the expected cash flows to be derived from the reporting unit or use of the asset. Long-lived assets are reviewed for impairment whenever events or circumstances indicate that the book value may not be recoverable over the remaining life. Inputs underlying the expected cash flows include, but are not limited to, subscriber counts, revenues from subscriptions, advertising and content, revenue per user, capital investment and acquisition costs per subscriber, production and content costs, and ongoing operating costs. We based our assumptions on a combination of our historical results, trends, business plans and marketplace participant data.

Annual Goodwill Testing

Goodwill is tested 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 model) and a market multiple approach. The income approach utilizes our future 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.

Effective January 1, 2021, we updated our reporting units to reflect changes in how WarnerMedia, an integrated content organization that distributes across various platforms, is managed and evaluated. With this operational change, the reporting unit is deemed to be the operating segment. The previous reporting units, Turner, Home Box Office, Warner Bros., and Xandr, and the new WarnerMedia reporting unit were tested for goodwill impairment on January 1, 2021, for which there was no impairment identified.

As of October 1, 2021, the calculated fair values of the reporting units exceeded their book values in all circumstances; however, the WarnerMedia segment fair value exceeded its book value by less than 10% with increased investment in content and distribution expenses affecting fair value. For all reporting units, if either the projected rate of long-term growth of cash flows or revenues declined by 0.5%, or if the weighted average cost of capital 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. For the WarnerMedia reporting unit as of October 1, 2021, if the projected rate of longer-term growth of cash flows or revenues declined by 4.4%, or if the weighted average cost of capital increased by 0.6%, it would have resulted in impairment of the goodwill.

U.S. Wireless Licenses

The fair value of U.S. wireless licenses is assessed using a discounted cash flow model (the Greenfield Approach) and a qualitative collaborative 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. 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 9.25%, 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%.

Other Finite-Lived Intangibles

Customer relationships, licenses in Mexico and other finite-lived intangible assets are reviewed 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. When the asset's book value exceeds undiscounted future cash flows, an impairment is recorded to reduce the book value of the asset to its estimated fair value (see Notes 7 and 9).

Vrio Business

In the second quarter of 2021, we classified the Vrio disposal group as held-for-sale and reported the disposal group at fair value less cost to sell, which resulted in a noncash, pre-tax impairment charge of $4,555, including approximately $2,100 related to accumulated foreign currency translation adjustments and $2,500 related to property, plant and equipment and intangible assets. Approximately $80 of the impairment was attributable to noncontrolling interest. Vrio was sold in November 2021, resulting in the release of the accumulated foreign currency translation adjustments from accumulated other comprehensive income. (See Notes 3, 7 and 9)

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

See Note 1 for discussion of recently issued or adopted accounting standards.

OTHER BUSINESS MATTERS

Spectrum Auction On February 24, 2021, the FCC announced that AT&T was the winning bidder for 1,621 C-Band licenses, comprised of a total of 80 MHz nationwide, including 40 MHz in Phase I. We provided to the FCC an upfront deposit of $550 in 2020 and cash payments totaling $22,856 in the first quarter of 2021, for a total of $23,406. We received the licenses in July 2021 and classified the auction deposits, related capitalized interest and billed relocation costs as "Licenses – Net" on our December 31, 2021 consolidated balance sheet. In December 2021, we paid $955 of Incentive Payments for the clearing of Phase I spectrum and estimate that we will be responsible for an additional $2,112 upon clearing of Phase II spectrum, expected by the end of 2023. Additionally, we are responsible for approximately $1,000 of compensable relocation costs over the next several years as the spectrum is being cleared by satellite operators, of which $650 was paid in the fourth quarter of 2021.

On January 14, 2022, the FCC announced that we were the winning bidder for 1,624 3.45 GHz licenses in Auction 110. We provided the FCC an upfront deposit of $123 in the third quarter of 2021 and will pay the remaining $8,956 in the first quarter of 2022, for a total of $9,079. We intend to fund the purchase price using cash and short-term investments.

Video Business On July 31, 2021, we closed our transaction with TPG to form a new company named DIRECTV, which is jointly governed by a board with representation from both AT&T and TPG, with TPG having tie-breaking authority on certain key decisions. With the close of the transaction, we separated our Video business, comprised of our U.S. video operations, and began accounting for our investment in DIRECTV under the equity method.

In connection with the transaction, we contributed our U.S. Video business unit to DIRECTV for $4,250 of junior preferred units, an additional distribution preference of $4,200 and a 70% economic interest in common units (collectively "equity considerations"). Upon close, we received approximately $7,170 in cash from DIRECTV ($7,600, net of $430 cash on hand) and transferred $195 of DIRECTV debt. TPG contributed approximately $1,800 in cash to DIRECTV for $1,800 of senior preferred units and a 30% economic interest in common units. As part of this transaction, we agreed to cover net losses under the NFL SUNDAY TICKET contract up to a cap of $2,100 over the remaining period of the contract, of which $1,800 was a note payable to DIRECTV.

Under separate transition services agreements, we will provide DIRECTV certain operational support for up to three years. We also have entered into commercial arrangements, for up to five years, to provide network transport for U-verse products and sales services.

WarnerMedia On May 17, 2021, we entered into an agreement to combine our WarnerMedia segment, subject to certain exceptions, with a subsidiary of Discovery, Inc. (Discovery). The agreement is structured as a Reverse Morris Trust transaction, under which WarnerMedia will be distributed to AT&T's shareholders via a pro rata dividend, an exchange offer, or a combination of both, followed by its combination with Discovery. The transaction is expected to be tax-free to AT&T and AT&T's shareholders. AT&T will receive approximately $43,000 (subject to working capital and other adjustments) in a combination of cash, debt securities, and WarnerMedia's retention of certain debt. AT&T's shareholders will receive stock representing approximately 71% of the new company; Discovery shareholders will own approximately 29% of the new company.

On February 1, 2022, we announced that we will structure the distribution as a spin-off rather than an exchange offer. Upon closing of the transaction, each AT&T shareholder will receive, on a tax-free basis, an estimated 0.24 shares of the new company for each share of AT&T common stock held as of the record date for the pro rata distribution. The exact number of shares to be received by AT&T shareholders for each AT&T common share will be determined closer to the closing based on the number of shares of AT&T common stock outstanding and the number of shares of Discovery common stock outstanding on an as-converted and as-exercised basis. AT&T shareholders will continue to hold the same number of shares of AT&T common stock after the transaction closes.

The transaction is expected to close in the second quarter of 2022, subject to approval by Discovery shareholders and customary closing conditions, including receipt of regulatory approvals. No vote is required by AT&T shareholders. Upon close of the transaction, WarnerMedia will be deconsolidated.

The merger agreement contains certain customary termination rights for AT&T and Discovery, including, without limitation, a right for either party to terminate if the transaction is not completed on or before July 15, 2023. Termination fees under specified circumstances will require Discovery to pay AT&T $720 or AT&T to pay Discovery $1,770.

Magallanes, Inc. (Spinco), a subsidiary of AT&T, entered into a $41,500 commitment letter (Bridge Loan) on May 17, 2021. On June 4, 2021, Spinco entered into a $10,000 term loan credit agreement (Spinco Term Loan) and reduced the aggregate commitment amount under the Bridge Loan to $31,500. There have been no draws on the Bridge Loan or the Spinco Term Loan. In the event advances are made under the Bridge Loan or Spinco Term Loan, those advances will be used by Spinco to finance a portion of the cash distribution to AT&T in connection with the transaction.

On September 20, 2021, we sold WarnerMedia's mobile games app studio, Playdemic Ltd. for approximately $1,370 in cash and recognized a pre-tax gain of $706. Playdemic was excluded from the pending WarnerMedia/Discovery transaction.

On December 21, 2021, we entered into an agreement to sell the marketplace component of Xandr, our WarnerMedia advertising business that was not included in the WarnerMedia/Discovery transaction, to Microsoft, which is expected to close in 2022, subject to customary regulatory approvals.

Vrio On November 15, 2021, we sold our Latin America video operations, Vrio, to Grupo Werthein. In the second quarter of 2021, we classified the Vrio disposal group as held-for-sale and reported the disposal group at fair value less cost to sell, which resulted in a noncash, pre-tax impairment charge of $4,555, including approximately $2,100 related to accumulated foreign currency translation adjustments and $2,500 related to property, plant and equipment and intangible assets. Approximately $80 of the impairment was attributable to noncontrolling interest. We retained our 41.3% interest in SKY Mexico, a leading pay-TV provider in Mexico.

Labor Contracts As of January 31, 2022, we employed approximately 203,000 persons. Approximately 37% 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. The main contracts included the following:

- A contract covering approximately 12,000 Mobility employees in 36 states and the District of Columbia is set to expire in February 2022.
- A contract covering approximately 6,000 wireline employees in five Midwest states that was set to expire in April 2022 was extended for a four-year period until April 2026.
- A contract covering approximately 3,000 MW IBEW employees is set to expire in June 2022.
- A contract covering approximately 2,000 AT&T Corp. employees nationwide that was set to expire in April 2022 was extended for a four-year period until April 2026.
- A contract covering approximately 170 Teamsters Alascom employees in Alaska is set to expire in February 2022.

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 three 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.

LIQUIDITY AND CAPITAL RESOURCES

For the years ended December 31,	**2021**	2020	2019
Cash provided by operating activities	**$ 41,957**	$ 43,130	$ 48,668
Cash used in investing activities	**(32,089)**	(13,548)	(16,690)
Cash provided by (used in) financing activities	**1,578**	(32,007)	(25,083)

At December 31,	**2021**	2020
Cash and cash equivalents	**$ 21,169**	$ 9,740
Total debt	**177,354**	157,245

We had $21,169 in cash and cash equivalents available at December 31, 2021. Cash and cash equivalents included cash of $5,204 and money market funds and other cash equivalents of $15,965. Approximately $2,706 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 $11,429 since December 31, 2020. In 2021, cash inflows were primarily provided by cash receipts from operations, including cash from our sale and transfer of our receivables to third parties, the disposition of businesses, including our recently completed U.S. video business transaction, and issuance of long-term debt and commercial paper. These inflows were offset by cash used to meet the needs of the business, including, but not limited to, payment of operating expenses, spectrum acquisitions, funding capital expenditures and vendor financing payments, investment in WarnerMedia content and dividends to stockholders.We maintain significant availability under our credit facilities and our commercial paper program to meet our short-term liquidity requirements.

Our cash and debt management will be impacted by the WarnerMedia/Discovery transaction. During this time, we plan to maintain cash and cash equivalent balances above historical thresholds.

Refer to "Contractual Obligations" discussion below for additional information regarding our cash requirements, including payments required for Auction 110 which was completed in January 2022. We will make the remaining payment of $8,956 for Auction 110 spectrum in the first quarter of 2022, funded with cash and short-term investments.

Cash Provided by or Used in Operating Activities

During 2021, cash provided by operating activities was $41,957 compared to $43,130 in 2020, reflecting higher content investment and the separation of the U.S. video business, partially offset by higher receivable securitizations in 2021. Total cash paid for WarnerMedia's content investment was $19,164 in 2021, an increase of $4,266 over 2020.

We actively manage the timing of our supplier payments for operating 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, as part of our working capital initiatives, 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 was to improve cash from operating activities $25 in 2021 and $432 in 2020. All supplier financing payments are due within one year.

Cash Used in or Provided by Investing Activities

During 2021, cash used in investing activities totaled $32,089, and consisted primarily of $16,527 (including interest during construction) for capital expenditures, and acquisitions of $25,453, which includes C-Band spectrum licenses won in Auction 107, associated capitalized interest, clearing and compensable relocation costs. Investing activities also included cash receipts of approximately $5,370 (excluding cash on hand and $1,800 of financing activities) from the separation of our Video business and $2,910 from the sale of Otter Media assets and Playdemic. In 2021, we received a return of investment of $1,323 from DIRECTV representing distributions in excess of cumulative equity in earnings from DIRECTV (see Note 10).

On January 14, 2022, the FCC announced that we were the winning bidder for 1,624 3.45 GHz licenses in Auction 110. We provided the FCC an upfront deposit of $123 in the third quarter of 2021 and will pay the remaining $8,956 in the first quarter of 2022, for a total of $9,079. We intend to fund the purchase price using cash and short-term investments. (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 $4,596 in 2021, compared to $2,966 in 2020. Capital expenditures in 2021 were $16,527, and when including $4,596 cash paid for vendor financing and excluding $515 of FirstNet reimbursements, gross capital investment was $21,638 ($1,934 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 2021, we placed $5,282 of equipment in service under vendor financing arrangements (compared to $4,664 in 2020) and approximately $750 of assets related to the FirstNet build (compared to $1,230 in 2020). Total reimbursements from the government for FirstNet were $865 for 2021 and $1,626 for 2020, predominantly for capital expenditures.

The amount of our capital expenditures is influenced by demand for services and products, capacity needs and network enhancements. In 2022, we expect that our gross capital investment, which includes capital expenditures and cash paid for vendor financing, will be in the $24,000 range with capital expenditures in the $20,000 range.

Cash Used in or Provided by Financing Activities

In 2021, cash provided by financing activities totaled $1,578 and was comprised of debt issuances and repayments, payments of dividends, and vendor financing payments. We also paid approximately $459 in cash on the $1,800 note payable to DIRECTV (see Note 6 and Note 20).

A tabular summary of our debt activity during 2021 is as follows:

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Full Year 2021
Net commercial paper borrowings[1]	$ 7,072	$ (513)	$ (2)	$ 4	$ 6,561
Issuance of Notes and Debentures[2]:					
U.S. dollar denominated global notes	$ 6,000	$ —	$ —	$ —	$ 6,000
Initial average rate of 1.27%					
Euro denominated global notes (converted to USD at issuance)	1,461	—	—	—	1,461
Rate of 0.00%					
2021 Syndicated Term Loan	7,350	—	—	—	7,350
BAML Bilateral Term Loan	2,000	—	—	—	2,000
Private financing	750	—	—	—	750
Other	636	—	835	—	1,471
Debt Issuances	$ 18,197	$ —	$ 835	$ —	$ 19,032
Repayments:					
Private financing	$ (649)	$ —	$ —	$ —	$ (649)
2.650% Euro denominated global notes due 2021	—	—	—	(1,349)	(1,349)
Other	(253)	(253)	(498)	(140)	(1,144)
Repayments of long-term debt	$ (902)	$ (253)	$ (498)	$ (1,489)	$ (3,142)

[1] Includes $1,316 net issuance of commercial paper with original maturities of three months or less, $12,755 of commercial paper issued greater than 90 days and $7,510 of commercial paper repaid greater than 90 days.
[2] Includes credit agreement borrowing.

The weighted average interest rate of our long-term debt portfolio, including, credit agreement borrowings and the impact of derivatives, was approximately 3.8% as of December 31, 2021 and 4.1% as of December 31, 2020. We had $169,147 of total notes and debentures outstanding at December 31, 2021, which included Euro, British pound sterling, Canadian dollar, Mexican peso, Australian dollar, and Swiss franc denominated debt that totaled approximately $41,249.

At December 31, 2021, we had $24,630 of debt maturing within one year, consisting of $6,586 of commercial paper borrowings, $10,100 of credit agreement borrowings, and $7,944 of long-term debt issuances.

During 2021, we paid $4,596 of cash under our vendor financing program, compared to $2,966 in 2020. Total vendor financing payables included in our December 31, 2021 consolidated balance sheet were approximately $5,000, with $3,950 due within one year (in "Accounts payable and accrued liabilities") and the remainder predominantly due within five years (in "Other noncurrent liabilities").

At December 31, 2021, we had approximately 178 million shares remaining from our share repurchase authorizations approved by the Board of Directors in 2014.

We paid dividends on common shares and preferred shares of $15,068 in 2021, compared with $14,956 in 2020.

Dividends on common stock declared by our Board of Directors totaled $2.08 per share in both 2021 and 2020. Our dividend policy considers the expectations and requirements of stockholders, capital funding requirements of AT&T and long-term growth opportunities. On February 1, 2022, we announced that our Board of Directors approved an expected annual dividend level of $1.11 per share, or approximately $8,000 per year, following the close of the WarnerMedia/Discovery transaction.

Our 2022 financing activities will focus on managing our debt level 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, 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 November 2020, we amended one of our $7,500 revolving credit agreements by extending the termination date. In total, we have two $7,500 revolving credit agreements, totaling $15,000, with one terminating on December 11, 2023 and the other terminating on November 17, 2025. No amounts were outstanding under either agreement as of December 31, 2021.

On January 29, 2021, we entered into a $14,700 Term Loan Credit Agreement (2021 Syndicated Term Loan), with Bank of America, N.A., as agent. On March 23, 2021, we borrowed

$7,350 under the 2021 Syndicated Term Loan, and the remaining $7,350 of lenders' commitments was terminated. As of December 31, 2021, $7,350 was outstanding and is due on March 22, 2022.

In March 2021, we entered into and drew on a $2,000 term loan credit agreement (BAML Bilateral Term Loan) consisting of (i) a $1,000 facility originally due December 31, 2021 (BAML Tranche A Facility) and subsequently extended to December 31, 2022 in the fourth quarter of 2021, and (ii) a $1,000 facility due December 31, 2022 (BAML Tranche B Facility), with Bank of America, N.A., as agent. At December 31, 2021, $2,000 was outstanding under these facilities.

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 through June 30, 2023, a ratio of not more than 4.0-to-1, and a ratio of not more than 3.5-to-1 for any fiscal quarter thereafter. As of December 31, 2021, we were in compliance with the covenants for our credit facilities.

Collateral Arrangements

Most of our counterparty collateral arrangements require cash collateral posting by AT&T only when derivative market values exceed certain thresholds. Under these arrangements, which cover approximately 97% of our approximate $41,000 derivative portfolio, counterparties are still required to post collateral. During 2021, we posted approximately $770 of cash collateral, on a net basis. 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 investments. At December 31, 2021, our debt ratio was 49.1%, compared to 46.7% at December 31, 2020 and 44.7% at December 31, 2019. Our net debt ratio was 43.2% at December 31, 2021, compared to 43.8% at December 31, 2020 and 41.4% at December 31, 2019. The debt ratio is affected by the same factors that affect total capital, and reflects our recent debt issuances and repayments.

A significant amount of our cash outflows is related to tax items, acquisition of spectrum through FCC auctions and benefits paid for current and former employees:

- Total taxes incurred, collected and remitted by AT&T during 2021 and 2020, were $21,739 and $21,967. These taxes include income, franchise, property, sales, excise, payroll, gross receipts and various other taxes and fees.
- Total domestic spectrum acquired primarily through FCC auctions, including cash, exchanged spectrum and auction deposits was approximately $25,400 in 2021, $2,800 in 2020 and $1,300 in 2019.
- Total health and welfare benefits provided to certain active and retired employees and their dependents totaled $3,617 in 2021 and $3,656 in 2020, with $1,163 paid from plan assets in 2021 compared to $1,029 in 2020. Of those benefits, $3,210 related to medical and prescription drug benefits in 2021 compared to $3,293 in 2020. In addition, in 2021, we prefunded $685 for future benefit payments versus $745 in 2020. We paid $5,942 of pension benefits out of plan assets in 2021 compared to $5,124 in 2020.

On May 17, 2021, we entered into an agreement to combine our WarnerMedia segment with a subsidiary of Discovery. The transaction is anticipated to close in the second quarter of 2022, subject to approval by Discovery shareholders and customary closing conditions, including receipt of regulatory approvals. We expect to receive $43,000 (subject to working capital and other adjustments) in a combination of cash, debt securities, and WarnerMedia's retention of certain debt. (See Note 6)

On May 17, 2021, in anticipation of the separation of WarnerMedia business from us, Spinco entered into a $41,500 commitment letter (Bridge Loan). On June 4, 2021, Spinco entered into a $10,000 term loan credit agreement (Spinco Term Loan) consisting of (i) an 18 month $3,000 tranche (Tranche 1 Facility), and (ii) a 3 year $7,000 tranche (Tranche 2 Facility), with JPMorgan Chase Bank, N.A., as agent. In connection with the execution of the Spinco Term Loan, the aggregate commitment amount under the Bridge Loan was reduced to $31,500. No amounts were outstanding as of December 31, 2021.

Contractual Obligations

Our contractual obligations as of December 31, 2021, and the estimated timing of payment, are in the following table:

	Payments Due By Period				
	Total	Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years
Long-term debt obligations[1]	$ 181,449	$ 18,185	$ 19,301	$ 17,041	$ 126,922
Interest payments on long-term debt[2]	117,454	6,710	12,624	11,400	86,720
Purchase obligations[3]	77,621	28,860	24,585	11,636	12,540
Operating lease obligations[4]	29,852	4,922	8,472	5,772	10,686
FirstNet sustainability payments[5]	17,400	195	390	1,785	15,030
Unrecognized tax benefits[6]	10,108	268	—	—	9,840
Other finance obligations[7]	12,724	4,635	2,414	1,524	4,151
Note payable to DIRECTV	1,341	1,245	96	—	—
Total Contractual Obligations	$ 447,949	$ 65,020	$ 67,882	$ 49,158	$ 265,889

[1] Represents principal or payoff amounts of notes, debentures and credit agreement borrowings at maturity or, for puttable debt, the next put opportunity (see Note 12). Foreign debt includes the impact from hedges, when applicable.
[2] Includes credit agreement borrowings.
[3] We expect to fund the purchase obligations with cash provided by operations or through incremental borrowings. Consists of commitments primarily related to network programming at WarnerMedia, spectrum acquisitions and other commercial commitments. The minimum commitment for certain obligations is based on termination penalties that could be paid to exit the contracts. (See Note 22)
[4] Represents operating lease payments (see Note 8).
[5] 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 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 21)
[6] 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).
[7] Represents future minimum payments under the Crown Castle and other arrangements (see Note 19), payables subject to extended payment terms (see Note 23) and finance lease payments (see Note 8).

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, we believe 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 $65,226 (see Note 14); net postemployment benefit obligations of $13,927 (including current portion); and other noncurrent liabilities of $13,409.

Contractual obligations at December 31, 2021 include approximately $36,912 of commitments related to our WarnerMedia segment, which we have entered into an agreement to combine with Discovery (see Note 6).

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.

We had no interest rate swaps and no interest rate locks at December 31, 2021.

Foreign Exchange Risk

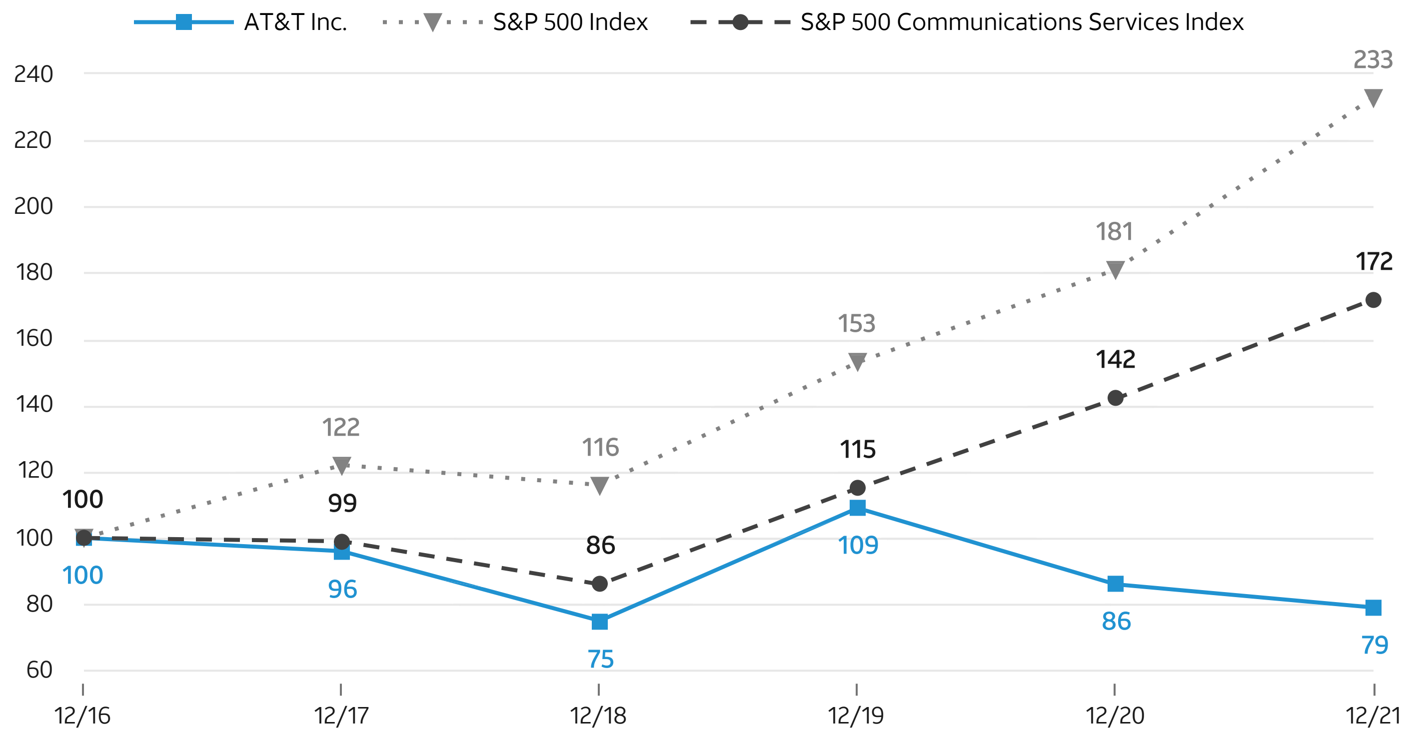
We principally use foreign exchange contracts to hedge certain film production costs denominated in foreign currencies. We are also exposed to foreign currency exchange risk through our foreign affiliates and equity investments in foreign companies. We have designated €1,450 million aggregate principal 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. We had cross-currency swaps with a notional value of $40,737 and a fair value of $(2,959) outstanding at December 31, 2021.

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 $30 and a fair value of $(33) outstanding at December 31, 2021.

STOCK PERFORMANCE GRAPH

Comparison of Five Year Cumulative Return
AT&T Inc., S&P 500 Index and S&P 500 Communications Services Index



The comparison above assumes $100 invested on December 31, 2016, in AT&T common stock and the following Standard & Poor's (S&P) Indices: S&P 500 Index and S&P 500 Communications Services Index. Total return equals stock price appreciation plus reinvestment of dividends.

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 the U.S. securities markets, interest rates and medical costs could materially increase our benefit plan costs and future funding requirements.

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 assets held by our pension and other benefit plans, which are reflected in our financial statements for that year. In calculating the recognized benefit costs, we have made certain assumptions regarding future investment returns, interest rates and medical costs. These assumptions could change significantly over time and could be materially different than originally projected. Lower than assumed investment returns, a decline in interest rates with a corresponding increase in our benefit obligations, and higher than assumed medical and prescription drug costs will increase expenses.

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 their 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.

Significant adverse changes in capital markets could result in the deterioration of our defined benefit plans' funded status and result in increased contribution requirements for such plans, which could be material.

Inflationary pressures on costs, such as inputs for devices we sell and network components, labor and distribution costs may impact our network construction, our financial condition or results of operations.

As a provider of telecommunications and technology services, we sell handsets, wireless data cards, wireless computing devices and customer premises equipment manufactured by various suppliers for use with our voice and data services and depend on suppliers to provide us, directly or through other suppliers, with items such as network equipment, customer premises equipment, and wireless-related equipment such as mobile hotspots, handsets, wirelessly enabled computers, wireless data cards and other connected devices for our customers. In 2021 and the early part of 2022, the costs of these inputs and the costs of labor necessary to develop and maintain our networks and our products and services have rapidly increased. In addition, many of these inputs are subject to price fluctuations from a number of factors, including, but not limited to, market conditions, demand for raw materials used in the production of these devices and network components, weather, climate change, energy costs, currency fluctuations, supplier capacities, governmental actions, import and export requirements (including tariffs), and other factors beyond our control. Although we are unable to predict the impact on our ability to source materials in the future, we expect these supply pressures to continue into 2022. We also expect the pressures of input cost inflation to continue into 2022.

Our attempts to offset these cost pressures, such as through increases in the selling prices of some of our products and services, may not be successful. Higher product prices may result in reductions in sales volume. Consumers may be less willing to pay a price differential for our products and may increasingly purchase lower-priced offerings, or may forego some purchases altogether, during an economic downturn. To the extent that price increases are not sufficient to offset these increased costs adequately or in a timely manner, and/or if they result in significant decreases in sales volume, our business, financial condition or operating results may be adversely affected. Furthermore, we may not be able to offset any cost increases through productivity and cost-saving initiatives.

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 2021, uncertainty surrounding global growth rates and the impact of the COVID-19 pandemic continued to produce volatility in the credit, currency and equity markets. Volatility 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 loan portfolios, which may hamper their ability to provide credit or raise the cost of providing such credit.

The U.K. Financial Conduct Authority, which regulates LIBOR, has announced that it intends to phase out LIBOR in 2023. 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. Additionally, downgrades of our credit rating by the major credit rating agencies could increase our cost of borrowing and also impact the collateral we would be required to post under certain agreements we have entered into with our derivative counterparties, which could negatively impact our liquidity. Further, valuation changes in our derivative portfolio due to interest rates and foreign exchange rates could require us to post collateral and thus may negatively impact our liquidity.

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, including in Mexico, and worldwide through WarnerMedia's content distribution. 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, increased inflation, currency devaluation, foreign exchange controls, instability in the banking sector and high unemployment. 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:

Our business is subject to risks arising from the outbreak of the COVID-19 virus.

The COVID-19 pandemic and resulting mitigation measures have caused, and may continue to cause, a negative effect on our operating results. At the onset in 2020, mitigation measures caused sports leagues to modify their seasons and suspend certain operations, which adversely affected our advertising revenues and, resulted in contract disputes concerning carriage rights that caused us to incur expenses relating to certain of these sporting events notwithstanding their cancellation. The closure or avoidance of theaters, and the interruptions in movie production and other programming caused by COVID-19 are expected to continue to impact the timing of revenues and may cause a loss of revenue to our WarnerMedia business over the long term. The COVID-19 pandemic also drove higher costs for our WarnerMedia business in 2021 based on the hybrid distribution model for releasing films in 2021 and costs associated with safety measures put in place to help provide a safe environment for content production. If the mitigation measures or the associated effects are prolonged, we expect business customers in industries most significantly impacted will continue to reduce or terminate services, having a negative effect on the performance of our Business Wireline business unit. Further, concerns over the COVID-19 pandemic could again result in the closure of many of our retail stores, temporarily or permanently, and deter customers from accessing our stores even as the pandemic subsides. These pandemic concerns may also result in continued impact to our customers' ability to pay for our products and services. We may also continue to see significant impact on roaming revenues due to a downturn in international travel. The COVID-19 pandemic has caused and could further cause reduced staffing levels at our call centers and field operations, resulting in delays in service. Further reductions in staffing levels could additionally limit our ability to provide services, adversely impacting our competitive position. We may also incur significantly higher expenses attributable to infrastructure investments required to meet higher network utilization from more customers consuming bandwidth from changes in work from home trends; extended cancellation periods; and increased labor costs if the COVID-19 pandemic continues for an extended period.

The COVID-19 pandemic and mitigation measures have caused, and may continue to cause, adverse impacts on global economic conditions and consumer confidence, spending and consumer behavior, which could affect demand for our products and services. The extent to which the COVID-19 pandemic impacts our business, results of operations, cash flows and financial condition will depend on future developments that are highly uncertain and cannot be predicted, including new information that may emerge concerning other strains of the virus and the actions to contain its impact. Due to the speed with which the situation continues to develop and change, we are not able at this time to estimate the additional impact of COVID-19 on our financial or operational results, but the impact could be material.

Changes to federal, state and foreign government regulations and decisions in regulatory proceedings, as well as private litigation, 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 and wireless deployment 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, in response to the FAA questioning whether our 5G C-band launch could impact radio altimeter equipment on airplanes, we voluntarily committed to a series of temporary, precautionary measures, in addition to deferring turning on a limited number of towers around certain airports to allow the FAA more time to evaluate. The FAA's continued evaluation may impact our planned 5G C-band launch in certain areas. 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 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.

Effects of climate change may impose risk of damage to our infrastructure, our ability to provide services, and may cause changes in federal, state and foreign government regulation, all of which may result in potential adverse impact to our financial results.

Extreme weather events precipitated by long-term climate change have the potential to directly damage network facilities or disrupt our ability to build and maintain portions of our network and could potentially disrupt suppliers' ability to provide products and services required to provide reliable network coverage. Any such disruption could delay network deployment plans, interrupt service for our customers, increase our costs and have a negative effect on our operating results. The potential physical effects of climate change, such as increased frequency and severity of storms, floods, fires, freezing conditions, sea-level rise, and other climate-related events, could adversely affect our operations, infrastructure, and financial results. Operational impacts resulting from the potential physical effects of climate change, such as damage to our network infrastructure, could result in increased costs and loss of revenue. We could incur significant costs to improve the climate resiliency of our infrastructure and otherwise prepare for, respond to, and mitigate such physical effects of climate change. We are not able to accurately predict the materiality of any potential losses or costs associated with the physical effects of climate change.

Further, customers, consumers, investors and other stakeholders are increasingly focusing on environmental issues, including climate change, water use, deforestation, plastic waste, and other sustainability concerns. Concern over climate change or other environmental, social and governance (ESG) matters may result in new or increased legal and regulatory requirements to reduce or mitigate impacts to the environment and reduce the impact of our business on climate change. Further, climate change regulations may require us to alter our proposed business plans or increase our operating costs due to increased regulation or environmental considerations, and could adversely affect our business and reputation.

Continuing growth in and the converging nature of wireless 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 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 data, including video, across mobile and fixed devices. The COVID-19 pandemic has accelerated these changes and also resulted in higher network utilization, as more customers consume bandwidth from changes in work from home trends. We must continually invest in our networks in order to improve our wireless and broadband services to meet this increasing demand and changes in customer expectations, while remaining 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 data, including video, and voice between cell and fixed landline sites. To this end, we participate 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 reasonable costs, 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. Our share of industry sales could be reduced due to aggressive pricing strategies pursued by competitors. 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 and our ability to price our products and services competitively 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.

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 operations, will decrease revenues. 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.

Incidents leading to damage to our reputation, and any resulting lawsuits, claims or other legal proceedings, could have a material adverse effect on our business.

We believe that our brand image, awareness and reputation strengthen our relationship with consumers and contribute significantly to the success of our business. We strive to create a culture in which our colleagues act with integrity and respect and feel comfortable speaking up to report instances of misconduct or other concerns. Our ability to attract and retain employees is highly dependent upon our commitment to a diverse and inclusive workplace, ethical business practices and other qualities. Acts of misconduct by any employee, and particularly by senior management, could erode trust and confidence and damage our reputation. Negative public opinion could result from actual or alleged conduct by us or those currently or formerly associated with us, and from any number of activities or circumstances, including operations, employment-related offenses (such as sexual harassment and discrimination), regulatory compliance and actions taken by regulators or others in response to such conduct. We have in the past been, and may in the future be, named as a defendant in lawsuits, claims and other legal proceedings that arise in the ordinary course of our business based on alleged acts of misconduct by employees. These actions seek, among other things, compensation for alleged personal injury (including claims for loss of life), workers' compensation, employment discrimination, sexual harassment, workplace misconduct, wage and hour claims and other employment-related damages, compensation for breach of contract, statutory or regulatory claims, negligence or gross negligence, punitive damages, consequential damages, and civil penalties or other losses or injunctive or declaratory relief. The outcome of any allegations, lawsuits, claims or legal proceedings is inherently uncertain and could result in significant costs, damage to our brands or reputation and diversion of management's attention from our business. Additionally, our news organization makes editorial judgments around what is covered and how it is covered in the normal course of business. Although we have disciplined practices that are used to make such editorial judgments, it is possible that our news coverage alienates some consumers, adversely impacts our reputation and therefore impacts demand for our other products and services. Any damage to our reputation or payments of significant amounts, even if reserved, could materially and adversely affect our business, reputation, financial condition, results of operations and cash flows.

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. We have spent, and continue to spend, significant capital to shift our wired network to software-based technology to manage this demand and are expanding 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.

We depend on various suppliers to provide equipment to operate our business and satisfy customer demand and interruption or delay in supply can adversely impact our operating results.

We depend on suppliers to provide us, directly or through other suppliers, with items such as network equipment, customer premises equipment, and wireless-related equipment such as mobile hotspots, handsets, wirelessly enabled computers, wireless data cards and other connected devices for our customers. These suppliers could fail to provide equipment on a timely basis, or fail to meet our performance expectations, for a number of reasons, including difficulties in obtaining export licenses for certain technologies, inability to secure component parts, general business disruption, natural disasters, safety issues, economic and political instability and public health emergencies such as the COVID-19 pandemic. The COVID-19 pandemic has caused, and may again cause, delays in the development, manufacturing (including the sourcing of key components) and shipment of products. In certain limited circumstances, suppliers have been unable to supply products in a timely fashion. In such limited circumstances, we have been unable to provide products and services precisely as and when requested by our customers. It is possible that, in some circumstances, we could be forced to switch to a different key supplier. Because of the cost and time lag that can be associated with transitioning from one supplier to another, our business could be substantially disrupted if we were required to, or chose to, replace the products of one or more key suppliers with products from another source, especially if the replacement became necessary on short notice. Any such disruption could increase our costs, decrease our operating efficiencies and have a negative effect on our operating results.

Increasing costs to provide services and failure to renew agreements on favorable terms or at all, 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.

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 with a nonunionized workforce, lower employee benefits and fewer retirees. We are transitioning services from our old copper-based network and seeking regulatory approvals, where needed, at both the state and federal levels. 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.

Our WarnerMedia operations, which create and license content to other providers, may experience increasing difficulties securing 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 offerings by third parties.

We may not realize or sustain the expected benefits from our business transformation initiatives, and these efforts could have a materially adverse effect on our business, operations, financial condition, results of operations and competitive position.

We have been and will be undertaking certain transformation initiatives, which are designed to reduce costs, streamline and modernize distribution and customer service, remove redundancies and simplify and improve processes and support functions. Our focus is on supporting added customer value with an improved customer experience. We intend for these efficiencies to enable increased investments in our strategic areas of focus, which consist of improving broadband connectivity (for example, fiber and 5G), developing software-based entertainment (such as HBO Max) and utilizing WarnerMedia's storytelling legacy to engage consumers and gain insights across multiple distribution points. We also expect these initiatives to drive efficiencies and improved margins. If we do not successfully manage and execute these initiatives, or if they are inadequate or ineffective, we may fail to meet our financial goals and achieve anticipated benefits, improvements may be delayed, not sustained or not realized, and our business, operations and competitive position could be adversely affected.

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

HBO Max's future success is subject to inherent uncertainty. Our ability to continue 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. 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 or retain 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 any reason, 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, data and privacy breaches, 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 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 inability to deploy or operate our networks or customer support systems or protect sensitive personal information of customers or employees 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 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, managing our debt level going forward. Any failure to successfully execute this plan could adversely affect our cost of funds, liquidity, competitive position and access to capital markets.

Our business may be impacted by changes in tax laws and regulations, judicial interpretations of same or administrative actions by federal, state, local and foreign taxing authorities.

Tax laws are dynamic and subject to change as new laws are passed and new interpretations of the law are issued or applied. In many cases, the application of existing, newly enacted or amended tax laws (such as the U.S. Tax Cuts and Jobs Act of 2017) may be uncertain and subject to differing interpretations, especially when evaluated against ever changing products and services provided by our global telecommunications, media, and technology businesses. In addition, tax legislation has been introduced or is being considered in various jurisdictions that could significantly impact our tax rate, tax liabilities, and carrying value of deferred tax assets or deferred tax liabilities. Any of these changes could materially impact our financial performance and our tax provision, net income and cash flows.

We are also subject to ongoing examinations by taxing authorities in various jurisdictions. Although we regularly assess the likelihood of an adverse outcome resulting from these examinations to determine the adequacy of provisions for taxes, there can be no assurance as to the outcome of these examinations. In the event that we have not accurately or fully described, disclosed or determined, calculated or remitted amounts that were due to taxing authorities or if the ultimate determination of our taxes owed is for an amount in excess of amounts previously accrued, we could be subject to additional taxes, penalties and interest, which could materially impact our business, financial condition and operating results.

The proposed separation and combination of our WarnerMedia business with Discovery may not be completed on the currently contemplated timeline or at all.

On May 17, 2021, we announced a definitive agreement with Discovery, Inc. (Discovery) to combine our WarnerMedia business with Discovery (the "WarnerMedia/ Discovery Transaction"), which, if consummated, would result in our stockholders owning 71% of the combined company's Discovery's outstanding common stock on a fully diluted basis (computed using the treasury stock method). The WarnerMedia/Discovery Transaction is expected to close in the second quarter of 2022, subject to certain customary closing conditions including, among others, the approval of Discovery's stockholders, the receipt of certain regulatory approvals and the finalization of a private letter ruling from the Internal Revenue Service (IRS) to the effect that the separation of the WarnerMedia business and certain related transactions will qualify for tax-free treatment under the Internal Revenue Code (the "Private Letter Ruling").

There can be no assurance that such closing conditions will be satisfied or waived, or that the WarnerMedia/ Discovery Transaction will be consummated. Required regulatory approvals may not be received in a timely manner or at all. Further, while we have entered into voting agreements with certain stockholders of Discovery representing, in the aggregate, approximately 43% of the voting power of the issued and outstanding shares of Discovery capital stock as of May 14, 2021, pursuant to which they have agreed to vote in favor of certain aspects of the WarnerMedia/Discovery Transaction, we cannot assure you that the approval of Discovery's stockholders will be obtained. We and Discovery may be subject to shareholder lawsuits, or other actions filed in connection with or in opposition to the WarnerMedia/Discovery Transaction, which could prevent or delay the consummation of the WarnerMedia/Discovery Transaction.

If the distribution of WarnerMedia, together with certain related transactions, were to fail to qualify for non-recognition treatment for U.S. federal income tax purposes, then we could be subject to significant tax liability.

Under the Merger Agreement, receipt of the Private Letter Ruling from the IRS is a condition to close the WarnerMedia/Discovery Transaction. On December 28, 2021, AT&T received a favorable Private Letter Ruling from the IRS. As long as the Private Letter Ruling continues to be in full force and effect until closing, AT&T expects that the receipt of the Private Letter Ruling satisfies the closing condition for an IRS ruling. While not anticipated, situations where a Private Letter Ruling could cease to be in full force and effect may include situations where there is a material change in applicable tax law, or a material change to the terms or structure of the transaction. Reliance on the ruling is also subject to certain facts, representations and undertakings made in connection with the request for the ruling.

Accordingly, the IRS or another applicable tax authority could determine on audit that the distribution by us of WarnerMedia to our stockholders and certain related transactions should be treated as taxable transactions if it determines that any of these facts, representations or undertakings are incorrect or have been violated. We may be entitled to indemnification from Discovery in the case of certain breaches of representations or undertakings by Discovery under the tax matters agreement related to the WarnerMedia/Discovery Transaction. However, we could potentially be required to pay such tax prior to reimbursement from Discovery, and such indemnification is subject to Discovery's credit risk. If the IRS or another tax authority were to so conclude, there could be a material adverse impact on our business, financial condition, results of operations and cash flows.

In addition, in the event that we are unable to effectuate a Spinco Debt Exchange, we could incur significant incremental tax liability associated with the WarnerMedia/Discovery Transaction. If certain conditions are met, Discovery generally will be responsible for 50% of such incremental tax liability that does not exceed $4,000. For more information regarding the Spinco Debt Exchange, refer to the risk factor titled "Even if the WarnerMedia/Discovery Transaction is completed, we may not realize some or all of the expected benefits of the transaction" below.

The announcement and pendency of the WarnerMedia/Discovery Transaction could cause disruptions in our business.

The WarnerMedia/Discovery Transaction will require significant amounts of time and effort, which could divert management's attention from operating, growing our business and other strategic endeavors. Further, our employees may be distracted due to uncertainty regarding their future roles with us or the WarnerMedia business pending the consummation of the WarnerMedia/Discovery Transaction. In the event that the WarnerMedia/Discovery Transaction does not close, we will be required to bear a number of non-recurring costs in connection with the transaction, including financial, legal, accounting, consulting and other advisory fees and expenses, reorganization and restructuring costs, severance/employee benefit-related expenses, regulatory and SEC filing fees and expenses, printing expenses and other related charges. Until the consummation or termination of the WarnerMedia/Discovery Transaction, we are also required to operate the WarnerMedia business in the ordinary course and we are restricted from taking certain specified actions with respect to our WarnerMedia business without Discovery's consent. Any of the foregoing could adversely affect our operating results.

Even if the WarnerMedia/Discovery Transaction is completed, we may not realize some or all of the expected benefits of the transaction.

Even if the WarnerMedia/Discovery Transaction is completed, the anticipated operational, financial, strategic and other benefits of such transaction to the Company and our stockholders may not be achieved. There are many factors that could impact the anticipated benefits from the WarnerMedia/Discovery Transaction, including, among others, strategic adjustments required to reflect the nature of our business following the WarnerMedia/Discovery Transaction and any negative reaction to the WarnerMedia/Discovery Transaction by our customers and business partners. In addition, we have agreed to provide certain transition services to the combined company, which may result in additional expenses and may divert our focus and resources that would otherwise be invested into maintaining or growing our businesses.

In connection with the WarnerMedia/Discovery Transaction, we will receive approximately $43,000, subject to certain adjustments, in the form of a combination of (i) the assumption by the WarnerMedia business of certain existing debt, (ii) a cash dividend distributed to us from the WarnerMedia business (the "Spinco Special Cash Payment"), and (iii) debt instruments of the WarnerMedia business (the "Spinco Debt Distribution"). We expect to deliver such debt instruments of WarnerMedia in exchange for certain of our outstanding debt obligations (the "Spinco Debt Exchange"), and to use the proceeds of the Spinco Special Cash Payment to repay certain of our other outstanding debt obligations. This process will be complex and may require significant time and resources. Depending on various variables (such as interest rates and timing) at the time of the Spinco Debt Exchange, AT&T's transaction costs relating to the Spinco Debt Exchange may be significantly higher than expected. Additionally, if market conditions change in advance of the Spinco Debt Exchange such that it is no longer feasible for the WarnerMedia business to issue debt securities with a fair market value at least equal to their face value, we may be required to take an additional distribution of cash from the WarnerMedia business in lieu of effecting the Spinco Debt Exchange, which could result in potentially significant incremental tax liability. If certain conditions are met, Discovery generally will be responsible for 50% of such incremental tax liability that does not exceed $4,000.

An inability to realize the full extent of the anticipated benefits of the WarnerMedia/Discovery Transaction, as well as any delays encountered in the process, could have an adverse effect on our revenues, level of expenses and operating results.

In connection with the separation of the WarnerMedia business and the completed transaction involving our Video business unit, certain liabilities will be or were allocated to or retained by us and we will be subject to indemnification obligations in respect of those liabilities.

In connection with the separation of the WarnerMedia business and the completed transaction involving our Video business unit (the "DTV Transaction"), we have agreed to assume or retain, and indemnify the WarnerMedia business and the Video business unit for, certain liabilities. Payments pursuant to these indemnities may be significant and could negatively impact our business, particularly indemnities relating to our actions that could impact the tax-free nature of the distribution of the WarnerMedia business. Third parties could also seek to hold us responsible for any liabilities allocated to the WarnerMedia business and the Video business unit and such third parties could seek damages, other monetary penalties (whether civil or criminal) and other remedies.

The separation of the WarnerMedia business and the Video business unit may result in an increase in our costs and expenses.

Following the consummation of the WarnerMedia/Discovery Transaction and the DTV Transaction, we will no longer benefit from economies of scale and synergies we currently have or expected to realize between our WarnerMedia business, our Video business unit and our remaining businesses, including through intercompany arrangements and combined agreements with third parties. There can be no assurance that we will be able to continue any of these arrangements, or that any such continuing arrangements will be on the same or more favorable terms, following the separation of the WarnerMedia business and the Video business unit. Additionally, there can be no assurance that costs retained by AT&T after the WarnerMedia/Discovery Transaction and the DTV Transaction will be fully recovered through transition service agreements or business transformation initiatives. As a result, our costs and expenses may increase following the consummation of the WarnerMedia/Discovery Transaction and the DTV Transaction.

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:

- The severity, magnitude and duration of the COVID-19 pandemic and containment, mitigation and other measures taken in response, including the potential impacts of these matters on our business and operations.
- Our inability to predict the extent to which the COVID-19 pandemic and related impacts will continue to impact our business operations, financial performance and results of operations.
- 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.
- Disruption in our supply chain for a number of reasons, including, difficulties in obtaining export licenses for certain technology, inability to secure component parts, general business disruption, workforce shortage, natural disasters, safety issues, economic and political instability and public health emergencies.
- The continued development and delivery of attractive and profitable wireless, video content and broadband offerings and devices, and, in particular, the success of our 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 subscription and advertising revenue from attractive video content, especially from WarnerMedia, in the face of unpredictable and rapidly evolving public viewing habits and legal restrictions on using personal data for advertising.
- 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 or claims based on alleged misconduct by employees.
- The impact from major equipment or software failures on our networks; 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; 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.
- Changes in our corporate strategies to respond to competition and regulatory, legislative and technological developments.
- The uncertainty surrounding further congressional action regarding spending and taxation, which may result in changes in government spending and affect the ability and willingness of businesses and consumers to spend in general.
- Our ability to realize or sustain the expected benefits of our business transformation initiatives, which are designed to reduce costs, streamline distribution, remove redundancies and simplify and improve processes and support functions.
- Our ability to successfully complete divestitures, including the separation of the WarnerMedia business, as well as achieve our expectations regarding the financial impact of the completed and/or pending transactions.

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

	2021	2020	2019
Operating Revenues			
Service	**$ 146,391**	$ 152,767	$ 163,499
Equipment	**22,473**	18,993	17,694
Total operating revenues	**168,864**	171,760	181,193
Operating Expenses			
Cost of revenues			
Equipment	**23,778**	19,706	18,653
Broadcast, programming and operations	**24,797**	27,305	31,132
Other cost of revenues (exclusive of depreciation and amortization shown separately below)	**31,232**	32,909	34,356
Selling, general and administrative	**37,944**	38,039	39,422
Asset impairments and abandonments	**4,904**	18,880	1,458
Depreciation and amortization	**22,862**	28,516	28,217
Total operating expenses	**145,517**	165,355	153,238
Operating Income	**23,347**	6,405	27,955
Other Income (Expense)			
Interest expense	**(6,884)**	(7,925)	(8,422)
Equity in net income of affiliates	**631**	95	6
Other income (expense) – net	**9,853**	(1,431)	(1,071)
Total other income (expense)	**3,600**	(9,261)	(9,487)
Income (Loss) Before Income Taxes	**26,947**	(2,856)	18,468
Income tax expense	**5,468**	965	3,493
Net Income (Loss)	**21,479**	(3,821)	14,975
Less: Net Income Attributable to Noncontrolling Interest	**(1,398)**	(1,355)	(1,072)
Net Income (Loss) Attributable to AT&T	**$ 20,081**	$ (5,176)	$ 13,903
Less: Preferred Stock Dividends	**(207)**	(193)	(3)
Net Income (Loss) Attributable to Common Stock	**$ 19,874**	$ (5,369)	$ 13,900
Basic Earnings Per Share Attributable to Common Stock	**$ 2.77**	$ (0.75)	$ 1.90
Diluted Earnings Per Share Attributable to Common Stock	**$ 2.76**	$ (0.75)	$ 1.89

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

Consolidated Statements of Comprehensive Income
Dollars in millions except per share amounts

	2021	2020	2019
Net income (loss)	**$ 21,479**	$ (3,821)	$ 14,975
Other comprehensive income (loss), net of tax:			
Foreign Currency:			
Translation adjustment (includes $(2), $(59) and $(9) attributable to noncontrolling interest), net of taxes of $(44), $(42) and $18	**(127)**	(929)	19
Reclassification adjustment included in net income (loss), net of taxes of $204, $0 and $0	**2,087**	—	—
Securities:			
Net unrealized gains (losses), net of taxes of $(21), $27 and $17	**(63)**	78	50
Reclassification adjustment included in net income (loss), net of taxes of $(1), $(5) and $0	**(3)**	(15)	—
Derivative Instruments:			
Net unrealized gains (losses), net of taxes of $(192), $(212) and $(240)	**(715)**	(811)	(900)
Reclassification adjustment included in net income (loss), net of taxes of $19, $18 and $12	**72**	69	45
Defined benefit postretirement plans:			
Net prior service (cost) credit arising during period, net of taxes of $(8), $735 and $1,134	**(34)**	2,250	3,457
Amortization of net prior service credit included in net income (loss), net of taxes of $(660), $(601) and $(475)	**(2,020)**	(1,841)	(1,459)
Other comprehensive income (loss)	**(803)**	(1,199)	1,212
Total comprehensive income (loss)	**20,676**	(5,020)	16,187
Less: Total comprehensive income attributable to noncontrolling interest	**(1,396)**	(1,296)	(1,063)
Total Comprehensive Income (Loss) Attributable to AT&T	**$ 19,280**	$ (6,316)	$ 15,124

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

Consolidated Balance Sheets
Dollars in millions except per share amounts

	December 31,	
	2021	2020
Assets		
Current Assets		
Cash and cash equivalents	**$ 21,169**	$ 9,740
Accounts receivable – net of related allowance for credit loss of $771 and $1,221	**17,571**	20,215
Inventories	**3,464**	3,695
Prepaid and other current assets	**17,793**	18,358
Total current assets	**59,997**	52,008
Noncurrent Inventories and Theatrical Film and Television Production Costs	**18,983**	14,752
Property, Plant and Equipment – Net	**125,904**	127,315
Goodwill	**133,223**	135,259
Licenses – Net	**113,830**	93,840
Trademarks and Trade Names – Net	**21,938**	23,297
Distribution Networks – Net	**11,942**	13,793
Other Intangible Assets – Net	**11,783**	15,386
Investments in and Advances to Equity Affiliates	**7,274**	1,780
Operating Lease Right-Of-Use Assets	**24,180**	24,714
Other Assets	**22,568**	23,617
Total Assets	**$ 551,622**	$ 525,761
Liabilities and Stockholders' Equity		
Current Liabilities		
Debt maturing within one year	**$ 24,630**	$ 3,470
Note payable to DIRECTV	**1,245**	—
Accounts payable and accrued liabilities	**50,661**	50,051
Advanced billings and customer deposits	**5,303**	6,176
Dividends payable	**3,749**	3,741
Total current liabilities	**85,588**	63,438
Long-Term Debt	**152,724**	153,775
Deferred Credits and Other Noncurrent Liabilities		
Deferred income taxes	**65,226**	60,472
Postemployment benefit obligation	**12,649**	18,276
Operating lease liabilities	**21,261**	22,202
Other noncurrent liabilities	**30,223**	28,358
Noncurrent portion of note payable to DIRECTV	**96**	—
Total deferred credits and other noncurrent liabilities	**129,455**	129,308
Stockholders' Equity		
Preferred stock ($1 par value, 10,000,000 authorized at December 31, 2021 and December 31, 2020):		
Series A (48,000 issued and outstanding at December 31, 2021 and December 31, 2020)	**—**	—
Series B (20,000 issued and outstanding at December 31, 2021 and December 31, 2020)	**—**	—
Series C (70,000 issued and outstanding at December 31, 2021 and December 31, 2020)	**—**	—
Common stock ($1 par value, 14,000,000,000 authorized at December 31, 2021 and December 31, 2020: issued 7,620,748,598 at December 31, 2021 and December 31, 2020)	**7,621**	7,621
Additional paid-in capital	**130,112**	130,175
Retained earnings	**42,350**	37,457
Treasury stock (479,684,705 at December 31, 2021 and 494,826,583 at December 31, 2020, at cost)	**(17,280)**	(17,910)
Accumulated other comprehensive income	**3,529**	4,330
Noncontrolling interest	**17,523**	17,567
Total stockholders' equity	**183,855**	179,240
Total Liabilities and Stockholders' Equity	**$ 551,622**	$ 525,761

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

Consolidated Statements of Cash Flows

Dollars in millions except per share amounts

	2021	2020	2019
Operating Activities			
Net income (loss)	**$ 21,479**	$ (3,821)	$ 14,975
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Depreciation and amortization	**22,862**	28,516	28,217
Amortization of film and television costs	**11,006**	8,603	9,587
Distributed (undistributed) earnings from investments in equity affiliates	**184**	38	295
Provision for uncollectible accounts	**1,240**	1,972	2,575
Deferred income tax expense	**5,246**	1,675	1,806
Net (gain) loss on investments, net of impairments	**(927)**	(742)	(1,218)
Pension and postretirement benefit expense (credit)	**(3,848)**	(2,992)	(2,002)
Actuarial (gain) loss on pension and postretirement benefits	**(4,140)**	4,169	5,171
Asset impairments and abandonments	**4,904**	18,880	1,458
Changes in operating assets and liabilities:			
Receivables	**(634)**	2,216	2,812
Other current assets, inventories and theatrical film and television production costs	**(16,472)**	(13,070)	(12,852)
Accounts payable and other accrued liabilities	**1,636**	(1,410)	(1,524)
Equipment installment receivables and related sales	**(265)**	(1,429)	548
Deferred customer contract acquisition and fulfillment costs	**52**	376	(910)
Postretirement claims and contributions	**(822)**	(985)	(1,008)
Other – net	**456**	1,134	738
Total adjustments	**20,478**	46,951	33,693
Net Cash Provided by Operating Activities	**41,957**	43,130	48,668
Investing Activities			
Capital expenditures	**(16,527)**	(15,675)	(19,635)
Acquisitions, net of cash acquired	**(25,453)**	(1,851)	(1,809)
Dispositions	**8,740**	3,641	4,684
Distributions from DIRECTV in excess of cumulative equity in earnings	**1,323**	—	—
Other – net	**(172)**	337	70
Net Cash Used in Investing Activities	**(32,089)**	(13,548)	(16,690)
Financing Activities			
Net change in short-term borrowings with original maturities of three months or less	**1,316**	(17)	(276)
Issuance of other short-term borrowings	**21,856**	9,440	4,012
Repayment of other short-term borrowings	**(7,510)**	(9,467)	(6,904)
Issuance of long-term debt	**9,931**	31,988	17,039
Repayment of long-term debt	**(3,142)**	(39,964)	(27,592)
Note payable to DIRECTV, net of payments of $459	**1,341**	—	—
Payment of vendor financing	**(4,596)**	(2,966)	(3,050)
Issuance of preferred stock	**—**	3,869	1,164
Purchase of treasury stock	**(202)**	(5,498)	(2,417)
Issuance of treasury stock	**96**	105	631
Issuance of preferred interests in subsidiaries	**—**	1,979	7,876
Redemption of preferred interest in subsidiary	**—**	(1,950)	—
Dividends paid	**(15,068)**	(14,956)	(14,888)
Other – net	**(2,444)**	(4,570)	(678)
Net Cash Provided by (Used) in Financing Activities	**1,578**	(32,007)	(25,083)
Net increase (decrease) in cash and cash equivalents and restricted cash	**11,446**	(2,425)	6,895
Cash and cash equivalents and restricted cash beginning of year	**9,870**	12,295	5,400
Cash and Cash Equivalents and Restricted Cash End of Year	**$ 21,316**	$ 9,870	$ 12,295

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

	2021		2020		2019	
	Shares	**Amount**	Shares	Amount	Shares	Amount
Preferred Stock – Series A						
Balance at beginning of year	**—**	**$ —**	—	$ —	—	$ —
Issuance of stock	**—**	**—**	—	—	—	—
Balance at end of year	**—**	**$ —**	—	$ —	—	$ —
Preferred Stock – Series B						
Balance at beginning of year	**—**	**$ —**	—	$ —	—	$ —
Issuance of stock	**—**	**—**	—	—	—	—
Balance at end of year	**—**	**$ —**	—	$ —	—	$ —
Preferred Stock – Series C						
Balance at beginning of year	**—**	**$ —**	—	$ —	—	$ —
Issuance of stock	**—**	**—**	—	—	—	—
Balance at end of year	**—**	**$ —**	—	$ —	—	$ —
Common Stock						
Balance at beginning of year	**7,621**	**$ 7,621**	7,621	$ 7,621	7,621	$ 7,621
Issuance of stock	**—**	**—**	—	—	—	—
Balance at end of year	**7,621**	**$ 7,621**	7,621	$ 7,621	7,621	$ 7,621
Additional Paid-In Capital						
Balance at beginning of year		**$ 130,175**		$ 126,279		$ 125,525
Repurchase and acquisition of common stock		**—**		67		—
Issuance of preferred stock		**—**		3,869		1,164
Issuance of treasury stock		**(76)**		(62)		(125)
Share-based payments		**13**		18		(271)
Changes related to acquisition of interests held by noncontrolling owners		**—**		4		(14)
Balance at end of year		**$ 130,112**		$ 130,175		$ 126,279
Retained Earnings						
Balance at beginning of year		**$ 37,457**		$ 57,936		$ 58,753
Cumulative effect of accounting changes and other adjustments		**—**		(293)		316
Adjusted beginning balance		**37,457**		57,643		59,069
Net income (loss) attributable to AT&T		**20,081**		(5,176)		13,903
Preferred stock dividends		**(224)**		(139)		(8)
Common stock dividends ($2.08, $2.08, and $2.05 per share)		**(14,964)**		(14,871)		(15,028)
Balance at end of year		**$ 42,350**		$ 37,457		$ 57,936

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

Consolidated Statements of Changes in Stockholders' Equity – continued
Dollars and shares in millions except per share amounts

	2021		2020		2019	
	Shares	**Amount**	Shares	Amount	Shares	Amount
Treasury Stock						
Balance at beginning of year	**(495)**	**$ (17,910)**	(366)	$ (13,085)	(339)	$ (12,059)
Repurchase and acquisition of common stock	**(8)**	**(237)**	(150)	(5,631)	(67)	(2,492)
Issuance of treasury stock	**23**	**867**	21	806	40	1,466
Balance at end of year	**(480)**	**$ (17,280)**	(495)	$ (17,910)	(366)	$ (13,085)
Accumulated Other Comprehensive Income Attributable to AT&T, net of tax:						
Balance at beginning of year		**$ 4,330**		$ 5,470		$ 4,249
Other comprehensive income (loss) attributable to AT&T		**(801)**		(1,140)		1,221
Balance at end of year		**$ 3,529**		$ 4,330		$ 5,470
Noncontrolling Interest:						
Balance at beginning of year		**$ 17,567**		$ 17,713		$ 9,795
Cumulative effect of accounting changes and other adjustments		**—**		(7)		29
Adjusted beginning balance		**17,567**		17,706		9,824
Net income attributable to noncontrolling interest		**1,398**		1,355		1,072
Issuance and acquisition of noncontrolling owners		**7**		1,979		7,881
Redemption of noncontrolling interest		**—**		(1,950)		—
Distributions		**(1,447)**		(1,464)		(1,055)
Translation adjustments attributable to noncontrolling interest, net of taxes		**(2)**		(59)		(9)
Balance at end of year		**$ 17,523**		$ 17,567		$ 17,713
Total Stockholders' Equity at beginning of year		**$ 179,240**		$ 201,934		$ 193,884
Total Stockholders' Equity at end of year		**$ 183,855**		$ 179,240		$ 201,934

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