



2020 Annual Report

www.tdsinc.com



Dear Shareholders,

The challenges of 2020 underscored the essential services that TDS — and our industry — provide. Our responses to changes caused by the pandemic showcased the strength of our networks and the resilience of our talented associates, as they navigated the year and continued to provide outstanding communications services to our customers. The health and safety of our associates and customers was, and still is, our top priority.

Our long-term strategy of aggressively investing in our businesses showed results in 2020, and we are continuing this investment strategy throughout the TDS Family of Businesses, to bring our customers even higher-quality wireless and broadband services, which will position the company for long-term growth and sustainability.

UScellular In 2020, UScellular welcomed new CEO Laurent (“LT”) Therivel, who has seamlessly transitioned to his role with the invaluable assistance of Ken Meyers, who retired in September. We thank Ken for his significant contributions to the TDS Family of Businesses over many decades. LT has developed dynamic and innovative strategies to strengthen UScellular’s growth and financial performance. Like our peers in the wireless industry, UScellular felt the effects of the pandemic with a massive increase in demand for data on our network and significant declines in store traffic. UScellular successfully kept churn low throughout the year, acquired new subscribers, maintained a strong conversion rate, and produced good financial results. This provides a solid launch point for UScellular to pivot, in 2021, to a year focused on growth.

In 2021, UScellular continues significant investments in our network to ensure we are providing high-quality connections in all our markets, especially those underserved by other carriers. We are continuing our network modernization programs to increase capacity and speeds to deploy 5G. Our primary focus in 5G is to identify use cases that meet the needs of our customers, generate revenue, and reduce costs. We are pursuing opportunities to grow market share through lifecycle management and personalized sales and retention approaches. UScellular has adopted a regional model to further enable a community by community go-to-market approach and drive a deeper focus on our customers. In the B2B space, UScellular is placing an emphasis on new distribution opportunities and ramping up sales efforts.

We are working to ensure our capital investments lead to profitable growth by maintaining expense discipline through operational efficiency. Despite rapidly increasing data usage, we have kept system operations costs low. Increasing online transactions and self-service options will help to lower operating expenses as we ramp up our efforts to create outstanding digital experiences for our customers.

TDS Telecom 2020 was transformational for TDS Telecom, resulting in one of the most successful years in our history. The seismic shift to remote working and learning highlighted the importance of high-speed broadband in the home. Demand for increased home broadband data speeds and continued popularity of bundled video products, led to higher average revenue per user. TDS Telecom expanded its deployment of fiber technology into new markets. We significantly grew our Wireline fiber footprint 7% by adding 67,000 fiber service addresses passed. We significantly grew our Cable segment, including broadband connections from our year-end 2019 acquisition of cable company, Continuum.

TDS Telecom’s strategic imperatives for 2021 are focused on investments to further transform our product offerings and drive growth. TDS Telecom will continue to increase our fiber footprint outside and inside of our current markets. Our goal is to double our annual fiber growth from the previous year and to deliver 150,000 marketable new fiber service addresses across out-of-territory, in-territory fiber deeper and rural state broadband grant supported areas. This includes ramping up our fiber builds in Wisconsin and fast growing areas of the Pacific Northwest. We carefully analyze and evaluate additional out-of-territory markets, looking for growing communities with good population density, proven pre-sell demand, and attractive competitive environments. We are also leveraging regional support from our existing service territories. TDS Telecom is focused on operating lean to raise margins to support significant operational and capital investments. Examples of increased operational effectiveness include systems enhancements in supply chain management, network data analytics and customer self-service capabilities.

Increasing broadband market share in our cable markets remains a top priority. We are looking for cable acquisitions with little fiber competition and attractive growth potential.

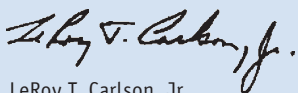
OneNeck IT Solutions OneNeck IT Solutions enhanced its performance in 2020. Process improvements and customer experience initiatives helped drive higher customer satisfaction. Growth in strategic services such as ReliaCloud and Professional Services, along with improvements in cost structure contributed to improvements in operating margin. OneNeck is building upon these accomplishments in 2021 and looking to drive strong business results and widen its customer base.

Diversity, Equity and Inclusion Events across our nation in 2020 stimulated us to take a closer look at our workforce and culture and to recognize the need to elevate our efforts to develop a more diverse, equitable and inclusive (D, E and I) workforce. The TDS Family of Businesses is committed to advancing D, E and I across the organization. Details about our efforts and progress are available on our sustainability site - tdsinc.com/sustainability.

Creating long-term shareholder value At TDS, we seek to maintain a financially sound foundation for the enterprise so that each of our businesses can take advantage of growth opportunities to enhance their competitive positions and long-term returns. We continue to return value to our shareholders, primarily through our cash dividends, which have increased every year for the past 47 years.

Thank you We are profoundly grateful to the associates of the TDS Family of Businesses, for their adaptability, resilience and their hard work and creativity in managing through one of the most challenging years we have ever experienced. Thank you to our shareholders and our debt holders for your continuing support of our long-term growth strategies.

Very truly yours,



LeRoy T. Carlson, Jr.
President and Chief Executive Officer



Walter C. D. Carlson
Chairman of the Board

TELEPHONE AND DATA SYSTEMS, INC.

ANNUAL REPORT TO SHAREHOLDERS FOR THE YEAR ENDED DECEMBER 31, 2020

Pursuant to SEC Rule 14a-3

The following audited financial statements and certain other financial information for the year ended December 31, 2020, represent Telephone and Data Systems, Inc.'s annual report to shareholders as required by the rules and regulations of the Securities and Exchange Commission (SEC).

The following information was filed with the SEC on February 18, 2021, as Exhibit 13 to Telephone and Data Systems, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2020. Such information has not been updated or revised since the date it was originally filed with the SEC. Accordingly, you are encouraged to review such information together with any subsequent information that we have filed with the SEC and other publicly available information.

Telephone and Data Systems, Inc.

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Telephone and Data Systems, Inc.
Management’s Discussion and Analysis of Financial Condition
and Results of Operations

Executive Overview

The following Management’s Discussion and Analysis (MD&A) should be read in conjunction with the audited consolidated financial statements and notes of Telephone and Data Systems, Inc. (TDS) for the year ended December 31, 2020, and with the description of TDS’ business included herein. Certain numbers included herein are rounded to millions for ease of presentation; however, certain calculated amounts and percentages are determined using the unrounded numbers.

This report contains statements that are not based on historical facts, including the words “believes,” “anticipates,” “estimates,” “expects,” “plans,” “intends,” “projects” and similar expressions. These statements constitute and represent “forward looking statements” as this term is defined in the Private Securities Litigation Reform Act of 1995. Such forward looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results, events or developments to be significantly different from any future results, events or developments expressed or implied by such forward looking statements. See Private Securities Litigation Reform Act of 1995 Safe Harbor Cautionary Statement for additional information.

TDS uses certain “non-GAAP financial measures” and each such measure is identified in the MD&A. A discussion of the reason TDS determines these metrics to be useful and reconciliations of these measures to their most directly comparable measures determined in accordance with accounting principles generally accepted in the United States of America (GAAP) are included in the Supplemental Information Relating to Non-GAAP Financial Measures section within the MD&A of this Form 10-K Report.

The following MD&A omits discussion of 2019 compared to 2018. Refer to Management’s Discussion and Analysis of Financial Condition and Results of Operations in TDS’ Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on February 25, 2020, for that discussion.

General

TDS is a diversified telecommunications company that provides high-quality communications services to approximately 6 million connections nationwide. TDS provides wireless services through its 82%-owned subsidiary, United States Cellular Corporation (UScellular). TDS also provides wireline and cable services, through its wholly-owned subsidiary, TDS Telecommunications LLC (TDS Telecom). TDS operates entirely in the United States. See Note 19 — Business Segment Information in the Notes to Consolidated Financial Statements for additional information about TDS’ segments.

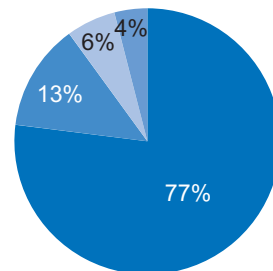
The impact of the global spread of the coronavirus disease (COVID-19) on TDS’ future operations is uncertain. There are many factors, including the severity and duration of the outbreak, as well as other direct and indirect impacts, that could impact TDS.

See the following areas within this MD&A for additional discussion of the direct and indirect impacts of COVID-19:

- Results of Operations — Income tax expense
- Business Overview — UScellular
- Operational Overview — UScellular
- Financial Overview — UScellular
- Business Overview — TDS Telecom

Also see the "Risk Factors" in TDS’ Form 10-K for the year ended December 31, 2020 for risks related to COVID-19.

2020 Operating Revenues by Segment



- Wireless
- Wireline
- Cable
- Other

TDS Mission and Strategy

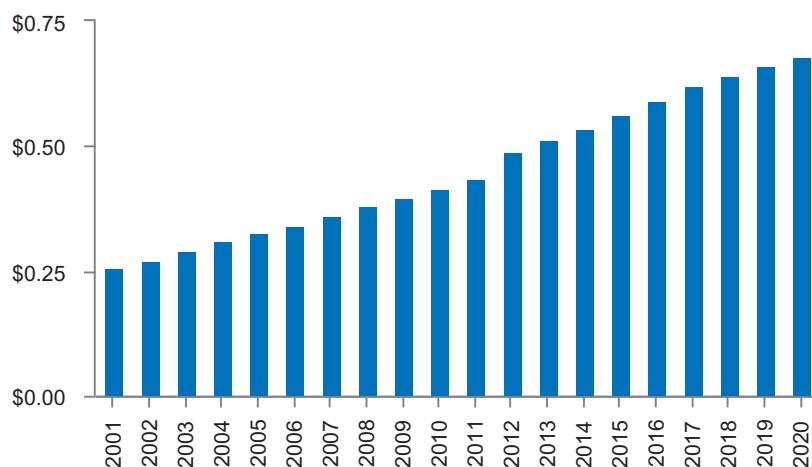
TDS' mission is to provide outstanding communications services to its customers and meet the needs of its shareholders, its people, and its communities. In pursuing this mission, TDS seeks to grow its businesses, create opportunities for its associates and employees, support the communities it serves, and build value over the long term for its shareholders. Across all of its businesses, TDS is focused on providing exceptional customer experiences through best-in-class services and products and superior customer service.

TDS' long-term strategy calls for the majority of its operating capital to be reinvested in its businesses to strengthen their competitive positions and financial performance, while also returning value to TDS shareholders primarily through the payment of a regular quarterly cash dividend.

In 2020, TDS continued to focus on investing in the networks that are the backbone of its commitment to provide outstanding communications services to its customers. TDS believes these investments strengthen its competitive position and improve operating performance. TDS expects to continue to execute on its strategies to build strong, competitive businesses providing high-quality, data-focused services and products.

During 2020, TDS paid \$78 million in regular quarterly cash dividends. TDS increased the dividend per share paid to its investors by 3% in 2020 which marks the 46th consecutive year of dividend increases and in February 2021, TDS increased its quarterly dividend per share from \$0.170 to \$0.175. During 2020, TDS repurchased 879,409 Common Shares for \$14 million at an average cost per share of \$15.53. As of December 31, 2020, the maximum dollar value of TDS Common Shares that may yet be purchased under TDS' program was \$185 million. There is no assurance that TDS will continue to increase the dividend rate or pay dividends and no assurance that TDS or UScellular will make any significant amount of share repurchases in the future.

Annual Dividends Per TDS Share



Terms Used by TDS

The following is a list of definitions of certain industry terms that are used throughout this document:

- **4G LTE** – fourth generation Long-Term Evolution, which is a wireless technology that enables more network capacity for more data per user as well as faster access to data compared to third generation (3G) technology.
- **5G** – fifth generation wireless technology that helps address customers' growing demand for data services and creates opportunities for new services requiring high speed and reliability as well as low latency.
- **Account** – represents an individual or business financially responsible for one or multiple associated connections. An account may include a variety of types of connections such as handsets and connected devices.
- **Alternative Connect America Cost Model (A-CAM)** – a USF support mechanism for rate-of-return carriers, which provides revenue support through 2028. This support comes with an obligation to build defined broadband speeds to a certain number of locations.
- **Auctions 101, 102, 103, 105 and 107** – Auction 101 was an FCC auction of 28 GHz wireless spectrum licenses that started in November 2018 and concluded in January 2019. Auction 102 was an FCC auction of 24 GHz wireless spectrum licenses that started in March 2019 and concluded in May 2019. Auction 103 was an FCC auction of 37, 39, and 47 GHz wireless spectrum licenses that started in December 2019 and concluded in March 2020. Auction 105 was an FCC auction of 3.5 GHz wireless spectrum licenses that started in July 2020 and concluded in September 2020. Auction 107 is an FCC auction of 3.7-3.98 GHz wireless spectrum licenses that started in December 2020 and is not complete as of the date of this report.
- **Broadband Connections** – refers to the number of Wireline customers provided high-capacity data circuits via various technologies, including DSL and dedicated internet circuit technologies or the Cable billable number of lines into a building for high-speed data services.
- **Churn Rate** – represents the percentage of the connections that disconnect service each month. These rates represent the average monthly churn rate for each respective period.
- **Connected Devices** – non-handset devices that connect directly to the UScellular network. Connected devices include products such as tablets, wearables, modems, and hotspots.
- **Coronavirus Aid, Relief, and Economic Security (CARES) Act** – economic relief package signed into law on March 27, 2020 to address the public health and economic impacts of COVID-19, including a variety of tax provisions.
- **DOCSIS** – Data Over Cable Service Interface Specification is an international telecommunications standard that permits the addition of high-bandwidth data transfer to an existing cable TV (CATV) system. DOCSIS 3.1 is a system specification that increases data transmission rates.
- **EBITDA** – refers to earnings before interest, taxes, depreciation, amortization and accretion and is used in the non-GAAP metric Adjusted EBITDA throughout this document. See Supplemental Information Relating to Non-GAAP Financial Measures within this MD&A for additional information.
- **Eligible Telecommunications Carrier (ETC)** – designation by states for providing specified services in “high cost” areas which enables participation in universal service support mechanisms.
- **Fiber Out-of-Territory Builds** – represents construction of facilities-based market expansions outside of TDS' incumbent local exchange carrier (ILEC) and Cable footprint.
- **Free Cash Flow** – non-GAAP metric defined as Cash flows from operating activities less Cash paid for additions to property, plant and equipment. See Supplemental Information Relating to Non-GAAP Financial Measures within this MD&A for additional information.
- **Gross Additions** – represents the total number of new connections added during the period, without regard to connections that were terminated during that period.
- **IPTV** – internet protocol television.
- **Keep Americans Connected Pledge** – voluntary FCC initiative, through June 30, 2020, in response to the COVID-19 pandemic to ensure that Americans do not lose their broadband or telephone connectivity as a result of the exceptional circumstance.
- **ManagedIP Connections** – refers to the number of telephone handsets, data lines and IP trunks providing communications using IP networking technology.
- **Net Additions (Losses)** – represents the total number of new connections added during the period, net of connections that were terminated during that period.
- **OIBDA** – refers to operating income before depreciation, amortization and accretion and is used in the non-GAAP metric Adjusted OIBDA throughout this document. See Supplemental Information Relating to Non-GAAP Financial Measures within this MD&A for additional information.
- **Postpaid Average Revenue per Account (Postpaid ARPA)** – metric which is calculated by dividing total postpaid service revenues by the average number of postpaid accounts and by the number of months in the period.
- **Postpaid Average Revenue per User (Postpaid ARPU)** – metric which is calculated by dividing total postpaid service revenues by the average number of postpaid connections and by the number of months in the period.
- **Retail Connections** – the sum of UScellular postpaid connections and UScellular prepaid connections.
- **Tax Act** – refers to comprehensive federal tax legislation enacted on December 22, 2017, which made broad changes to the U.S. tax code. Now titled H.R.1, the Tax Act was originally identified as the Tax Cuts and Jobs Act of 2017.
- **Universal Service Fund (USF)** – a system of telecommunications collected fees and support payments managed by the FCC intended to promote universal access to telecommunications services in the United States.
- **UScellular Connections** – individual lines of service associated with each device activated by a customer. Connections include all types of devices that connect directly to the UScellular network.

- **Video Connections** – represents the number of Wireline customers provided video services. For Cable, generally, a home or business receiving video programming counts as one video connection. In counting bulk residential or commercial connections, such as an apartment building or a hotel, connections are counted based on the number of units/rooms within the building receiving service.
- **Voice Connections** – refers to the individual circuits connecting a customer to Wireline’s central office facilities that provide voice services or the Cable billable number of lines into a building for voice services.
- **VoLTE** – Voice over Long-Term Evolution is a technology specification that defines the standards and procedures for delivering voice communications and related services over 4G LTE networks.
- **Wireline Residential Revenue per Connection** – metric which is calculated by dividing total Wireline residential revenue by the average number of Wireline residential connections and by the number of months in the period.

Results of Operations — TDS Consolidated

Year Ended December 31,	2020	2019	2020 vs. 2019
(Dollars in millions)			
Operating revenues			
UScellular	\$ 4,037	\$ 4,022	—
TDS Telecom	976	930	5 %
All other ¹	212	224	(6)%
Total operating revenues	5,225	5,176	1 %
Operating expenses			
UScellular	3,864	3,910	(1)%
TDS Telecom	866	823	5 %
All other ¹	236	264	(11)%
Total operating expenses	4,966	4,997	(1)%
Operating income (loss)			
UScellular	173	112	54 %
TDS Telecom	110	107	3 %
All other ¹	(24)	(40)	41 %
Total operating income	259	179	45 %
Investment and other income (expense)			
Equity in earnings of unconsolidated entities	181	168	8 %
Interest and dividend income	15	29	(49)%
Gain (loss) on investments	2	—	N/M
Interest expense	(168)	(165)	(2)%
Other, net	(1)	—	N/M
Total investment and other income	29	32	(10)%
Income before income taxes			
Income tax expense	288	211	36 %
	19	64	(71)%
Net income			
	269	147	83 %
Less: Net income attributable to noncontrolling interests, net of tax	43	26	70 %
Net income attributable to TDS shareholders	\$ 226	\$ 121	86 %
Adjusted OIBDA (Non-GAAP) ²	\$ 1,190	\$ 1,122	6 %
Adjusted EBITDA (Non-GAAP) ²	\$ 1,385	\$ 1,319	5 %
Capital expenditures ³	\$ 1,317	\$ 1,032	28 %

N/M - Percentage change not meaningful

¹ Consists of corporate and other operations and intercompany eliminations.

² Refer to Supplemental Information Relating to Non-GAAP Financial Measures within this MD&A for a reconciliation of this measure.

³ Refer to Liquidity and Capital Resources within this MD&A for additional information on Capital expenditures.

Refer to individual segment discussions in this MD&A for additional details on operating revenues and expenses at the segment level.

Equity in earnings of unconsolidated entities

Equity in earnings of unconsolidated entities represents TDS' share of net income from entities in which it has a noncontrolling interest and that are accounted for using the equity method. TDS' investment in the Los Angeles SMSA Limited Partnership (LA Partnership) contributed pre-tax income of \$82 million and \$78 million in 2020 and 2019, respectively.

Income tax expense

The effective tax rate on Income before income taxes for 2020 was 6.4%. The effective tax rate includes the impact of federal and state tax, and is reduced significantly in 2020 due to the tax benefits of the CARES Act enacted on March 27, 2020.

The CARES Act provides retroactive eligibility of bonus depreciation on qualified improvement property put into service after December 31, 2017 and a 5-year carryback of net operating losses generated in years 2018-2020. As the statutory federal tax rate applicable to certain years within the carryback period is 35%, carryback to those years provides a tax benefit in excess of the current federal statutory rate of 21%, resulting in a reduction of income tax expense for the year ended December 31, 2020, and a projected cash refund in 2021 of taxes paid in prior years.

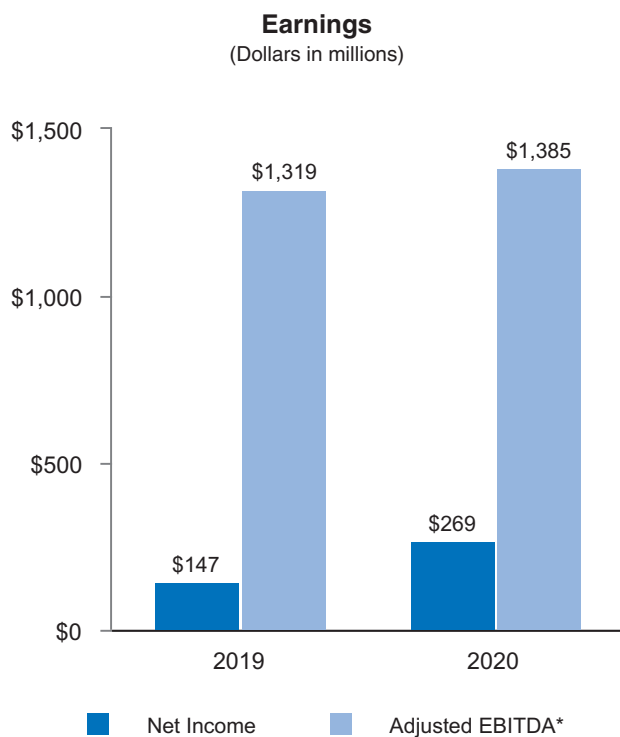
TDS' effective tax rate on Income before income taxes for 2019 was 30.3%. The effective tax rate included the impact of federal and state tax, as well as other increases due primarily to nondeductible interest expense.

See Note 5 — Income Taxes in the Notes to Consolidated Financial Statements for additional information.

Net income attributable to noncontrolling interests, net of tax

Year Ended December 31,	2020	2019
(Dollars in millions)		
UScellular noncontrolling public shareholders'	\$ 40	\$ 23
Noncontrolling shareholders' or partners'	3	3
Net income attributable to noncontrolling interests, net of tax	<u>\$ 43</u>	<u>\$ 26</u>

Net income attributable to noncontrolling interests, net of tax includes the noncontrolling public shareholders' share of UScellular's net income, the noncontrolling shareholders' or partners' share of certain UScellular subsidiaries' net income and other TDS noncontrolling interests.



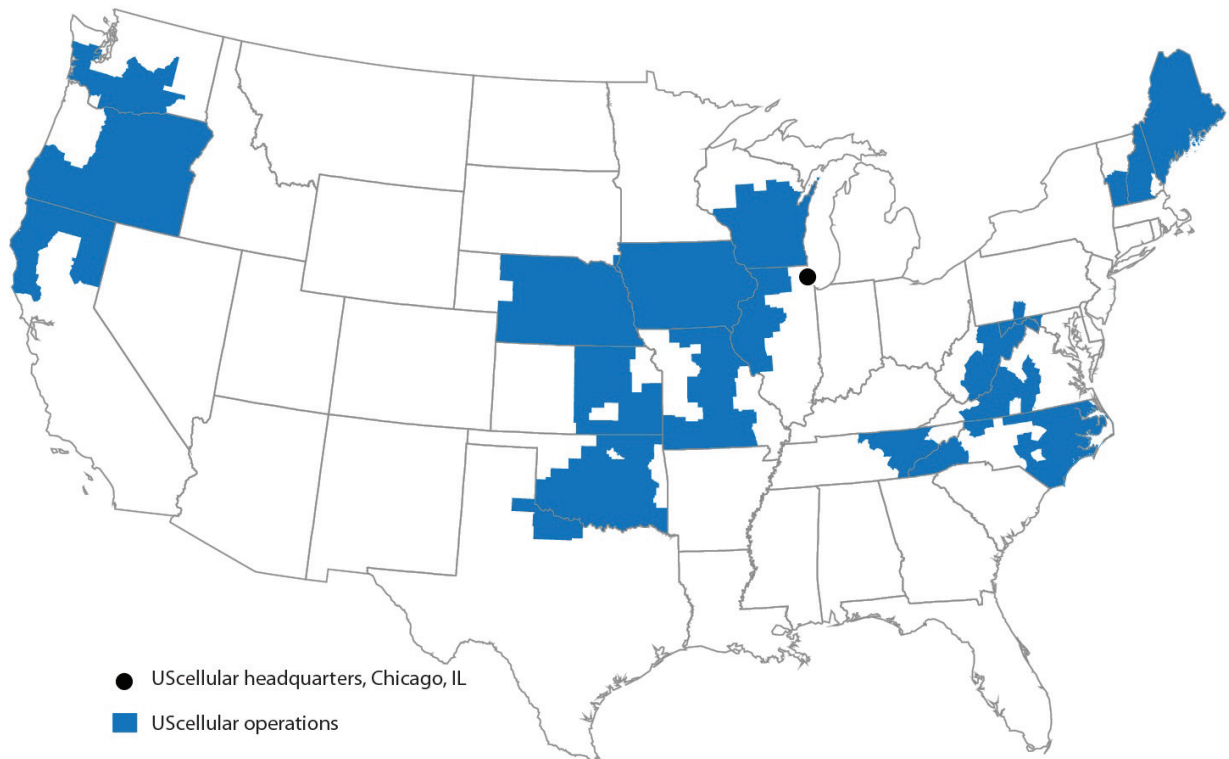
Net income increased in 2020 due primarily to higher revenues, lower operating expenses and the impact of the CARES Act reducing income tax expense. Adjusted EBITDA increased in 2020 due primarily to higher revenues and lower operating expenses.

*Represents a non-GAAP financial measure. Refer to Supplemental Information Relating to Non-GAAP Financial Measures within this MD&A for a reconciliation of this measure.

Business Overview

UScellular owns, operates, and invests in wireless markets throughout the United States. UScellular is an 82%-owned subsidiary of TDS. UScellular's strategy is to attract and retain wireless customers through a value proposition comprised of a high-quality network, outstanding customer service, and competitive devices, plans, and pricing - all provided with a community focus.

OPERATIONS



- Serves customers with 5.0 million connections including 4.4 million postpaid, 0.5 million prepaid and 0.1 million reseller and other connections
- Operates in 21 states
- Employs approximately 5,300 associates
- 4,271 owned towers
- 6,797 cell sites in service

COVID-19 considerations

COVID-19 impacts on UScellular's business for 2020 include a reduction in certain components of service revenues and equipment sales, a reduction in advertising and sales promotion costs and a reduction in handset subscriber gross additions and defections. The impacts of COVID-19 could negatively affect UScellular's results of operations, cash flows and financial position in future periods. The extent and duration of these impacts are uncertain due to many factors and could be material. Certain impacts on and actions by UScellular related to COVID-19 include, but are not limited to, the following:

- Taking action to keep associates safe, including implementing a work-from-home strategy for employees whose jobs can be performed remotely. In addition, to keep associates, customers, and communities safe, UScellular performs enhanced cleanings and provides associates with personal protective equipment to be worn during customer interactions. UScellular has also implemented a daily health check process for associates and requires social distancing and mask wearing in all company facilities, including stores. Throughout this period of change, UScellular has continued serving its customers and ensuring its wireless network remains fully operational.
- Participation in the FCC Keep Americans Connected Pledge, through June 30, 2020, to not turn-off service or charge late fees due to a customer's inability to pay their bill due to circumstances related to COVID-19. This resulted in a reduction in non-pay defections, as well as reduced service revenues for the year ended December 31, 2020. During the third and fourth quarter of 2020, certain accounts that were part of the Pledge were terminated due to non-payment. Many of the remaining accounts that were on the Pledge are on payment arrangements of varying durations, and UScellular expects additional terminations due to non-payment in future periods.
- Waiving overage charges and certain other charges. This resulted in reduced service revenues for the year ended December 31, 2020.
- Supporting the communities in which UScellular operates. Through UScellular's partnership with Boys & Girls Clubs, UScellular has contributed to the Boys & Girls Clubs' COVID-19 Relief Fund to support children, families and communities. These funds are dispersed directly to more than 50 clubs in UScellular's service regions to support the most immediate needs of youth in areas of importance such as providing food for children who rely on their Boys & Girls Clubs for their dinner, care for children of essential workers and first responders, and digital learning resources. UScellular also began exploring ways to leverage its assets, brand, partnerships, and resources to begin to close the digital divide and ensure all youth in its markets have reliable and fast internet access in school and at home.
- Recognizing income tax benefits associated with the enactment of the CARES Act. This legislation resulted in a reduction to income tax expense for the year ended December 31, 2020 and a projected cash refund in 2021 of taxes paid in prior years.
- Monitoring its supply chain to assess impacts to availability and costs of device inventory and network equipment and services, including monitoring the dependency on third parties to continue network related projects. At this time, UScellular expects to be able to meet customer demand for devices and services and to be able to continue its 4G LTE network modernization and 5G deployment with no significant disruptions.
- UScellular is tracking customer usage and, at this time, believes network capacity is sufficient to accommodate expected usage.
- Monitoring roaming behaviors. Both inbound and outbound roaming traffic have been dampened by COVID-19 as wireless customers are reducing travel. The extent to which roaming traffic will be impacted by the pandemic in the future will depend upon governmental mandates and customer behavior in response to the outbreak.

UScellular Mission and Strategy

UScellular's mission is to provide exceptional wireless communication services which enhance consumers' lives, increase the competitiveness of local businesses, and improve the efficiency of government operations in the markets UScellular serves.

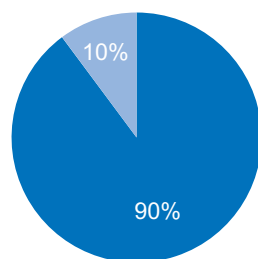
UScellular's strategy is to attract and retain customers through a value proposition comprising a high-quality network, outstanding customer service, and competitive devices, plans and pricing - all provided with a community focus. Strategic efforts include:

- UScellular offers economical and competitively priced service plans and devices to its customers and is focused on increasing revenues from sales of related products such as accessories and device protection plans and from new services such as home internet. In addition, UScellular is focused on expanding its solutions available to business and government customers.
- UScellular continues to devote efforts to enhance its network capabilities. UScellular has completed its deployment of VoLTE technology. VoLTE technology allows customers to utilize a 4G LTE network for both voice and data services and offers enhanced services such as high definition voice and simultaneous voice and data sessions.

- 5G technology helps address customers' growing demand for data services and creates opportunities for new services requiring high speed and reliability as well as low latency. UScellular's 5G deployment is initially focused on mobility services using its low band spectrum. UScellular has acquired high band spectrum, which it will deploy in the future to further enable the delivery of 5G services. UScellular has launched commercial 5G services in portions of California, Illinois, Iowa, Kansas, Maine, Maryland, Missouri, Nebraska, New Hampshire, North Carolina, Oklahoma, Oregon, Tennessee, Texas, Virginia, Washington, West Virginia and Wisconsin and will continue to launch in additional areas in the coming years. In addition to the deployment of 5G technology, UScellular is also modernizing its 4G LTE network to further enhance 4G LTE speeds.
- UScellular assesses its existing wireless interests on an ongoing basis with a goal of improving the competitiveness of its operations and maximizing its long-term return on capital. As part of this strategy, UScellular actively seeks attractive opportunities to acquire wireless spectrum, including pursuant to FCC auctions such as Auctions 103, 105 and 107.

Operational Overview

**Retail Connections Composition
As of December 31, 2020**



■ Postpaid ■ Prepaid

As of December 31,	2020	2019
Retail Connections – End of Period		
Postpaid	4,412,000	4,383,000
Prepaid	499,000	506,000
Total	<u>4,911,000</u>	<u>4,889,000</u>

Year Ended December 31,	2020	2019	2020 vs. 2019
Postpaid Activity and Churn			
Gross Additions			
Handsets	397,000	458,000	(13)%
Connected Devices	203,000	148,000	37 %
Total Gross Additions	<u>600,000</u>	<u>606,000</u>	(1)%
Net Additions (Losses)			
Handsets	(13,000)	(24,000)	46 %
Connected Devices	39,000	(65,000)	N/M
Total Net Additions (Losses)	<u>26,000</u>	<u>(89,000)</u>	N/M
Churn			
Handsets	0.89 %	1.04 %	
Connected Devices	2.58 %	3.24 %	
Total Churn	1.09 %	1.31 %	

N/M - Percentage change not meaningful

Total postpaid handset net losses decreased in 2020 due primarily to lower handset defections as a result of lower consumer switching activity related to COVID-19, as well as a reduction in non-pay defections. Partially offsetting the decrease in defections were lower gross additions resulting from lower consumer switching activity.

Total postpaid connected device net additions increased in 2020 due primarily to (i) an increase in gross additions due to higher demand for internet related products given a need for remote connectivity related to COVID-19 and (ii) a decrease in tablet defections.

Postpaid Revenue

Year Ended December 31,	2020	2019	2020 vs. 2019
Average Revenue Per User (ARPU)	\$ 47.01	\$ 46.01	2%
Average Revenue Per Account (ARPA)	\$ 122.93	\$ 119.80	3%

Postpaid ARPU and Postpaid ARPA increased in 2020, due primarily to (i) an increase in device protection plan revenues, (ii) an increase in regulatory recovery revenues, and (iii) having proportionately fewer tablet connections, which on a per-unit basis contribute less revenue than other connected devices and smartphones. These increases were partially offset by the impact of waiving overage charges and late payment and related fees, measures UScellular took to assist customers during 2020 related to the COVID-19 pandemic.

Financial Overview — UScellular

Year Ended December 31,	2020	2019	2020 vs. 2019
(Dollars in millions)			
Retail service	\$ 2,686	\$ 2,650	1 %
Inbound roaming	152	174	(13)%
Other	229	211	8 %
Service revenues	<u>3,067</u>	<u>3,035</u>	1 %
Equipment sales	<u>970</u>	<u>987</u>	(2)%
Total operating revenues	<u>4,037</u>	<u>4,022</u>	—
System operations (excluding Depreciation, amortization and accretion reported below)	782	756	3 %
Cost of equipment sold	1,011	1,028	(2)%
Selling, general and administrative	1,368	1,406	(3)%
Depreciation, amortization and accretion	683	702	(3)%
(Gain) loss on asset disposals, net	25	19	36 %
(Gain) loss on sale of business and other exit costs, net	—	(1)	N/M
(Gain) loss on license sales and exchanges, net	(5)	—	N/M
Total operating expenses	<u>3,864</u>	<u>3,910</u>	(1)%
Operating income	<u>\$ 173</u>	<u>\$ 112</u>	54 %
Net income	<u>\$ 233</u>	<u>\$ 133</u>	76 %
Adjusted OIBDA (Non-GAAP) ¹	<u>\$ 876</u>	<u>\$ 832</u>	5 %
Adjusted EBITDA (Non-GAAP) ¹	<u>\$ 1,063</u>	<u>\$ 1,015</u>	5 %
Capital expenditures ²	<u>\$ 940</u>	<u>\$ 710</u>	32 %

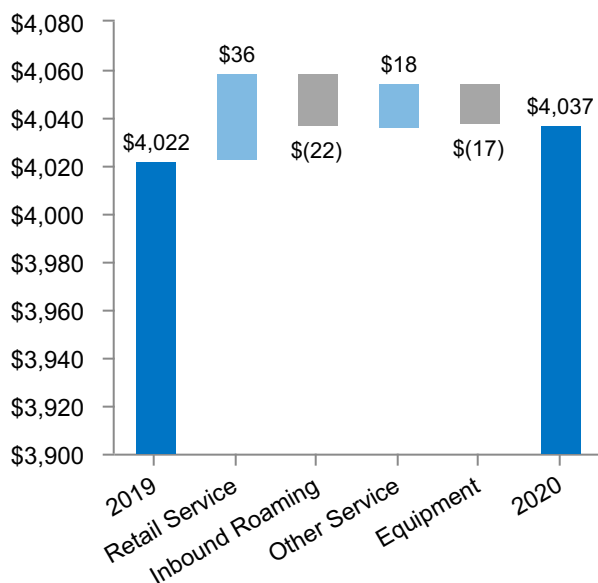
N/M - Percentage change not meaningful

¹ Refer to Supplemental Information Relating to Non-GAAP Financial Measures within this MD&A for a reconciliation of this measure.

² Refer to Liquidity and Capital Resources within this MD&A for additional information on Capital expenditures.

Operating Revenues

(Dollars in millions)



Service revenues consist of:

- Retail Service – Charges for voice, data and value added services and recovery of regulatory costs
- Inbound Roaming – Charges to other wireless carriers whose customers use UScellular’s wireless systems when roaming
- Other Service – Amounts received from the Federal USF, tower rental revenues, and miscellaneous other service revenues

Equipment revenues consist of:

- Sales of wireless devices and related accessories to new and existing customers, agents, and third-party distributors

Key components of changes in the statement of operations line items were as follows:

Total operating revenues

Retail service revenues increased in 2020, primarily as a result of an increase in Postpaid ARPU as previously discussed in the Operational Overview section, partially offset by a decline in the average number of postpaid subscribers.

Inbound roaming revenues decreased in 2020, primarily driven by lower data revenues, with lower rates partially offset by higher usage. UScellular expects inbound roaming revenues to continue to decline as a result of a decrease in rates, and the merger of Sprint and T-Mobile.

Other service revenues increased in 2020, resulting from increases in tower rental revenues and miscellaneous other service revenues.

Equipment sales revenues decreased in 2020, due primarily to a decrease in new smartphone and accessory sales, partially offset by an increase in used smartphone sales.

System operations expenses

System operations expenses increased in 2020, due to increased cell site rent expense, non-capitalizable costs to add network capacity and costs to decommission network assets.

Cost of equipment sold

Cost of equipment sold decreased in 2020, due primarily to a decrease in new smartphone and accessory sales, partially offset by an increase in used smartphone and connected device sales.

Selling, general and administrative expenses

Selling, general and administrative expenses decreased in 2020, due primarily to decreases in (i) bad debts expense driven by fewer non-pay customers as a result of better credit mix and improved customer payment behavior and (ii) advertising expense due to reduced sponsorship expense from cancelled events related to COVID-19.

Depreciation, amortization and accretion

Depreciation, amortization, and accretion decreased in 2020, due to certain billing system assets reaching their end of life, partially offset by higher depreciation due to increased capital expenditures and accelerated depreciation of certain assets due to changes in network technology.

(Gain) loss on asset disposals, net

Loss on asset disposals, net increased in 2020 due primarily to higher disposal of used equipment.



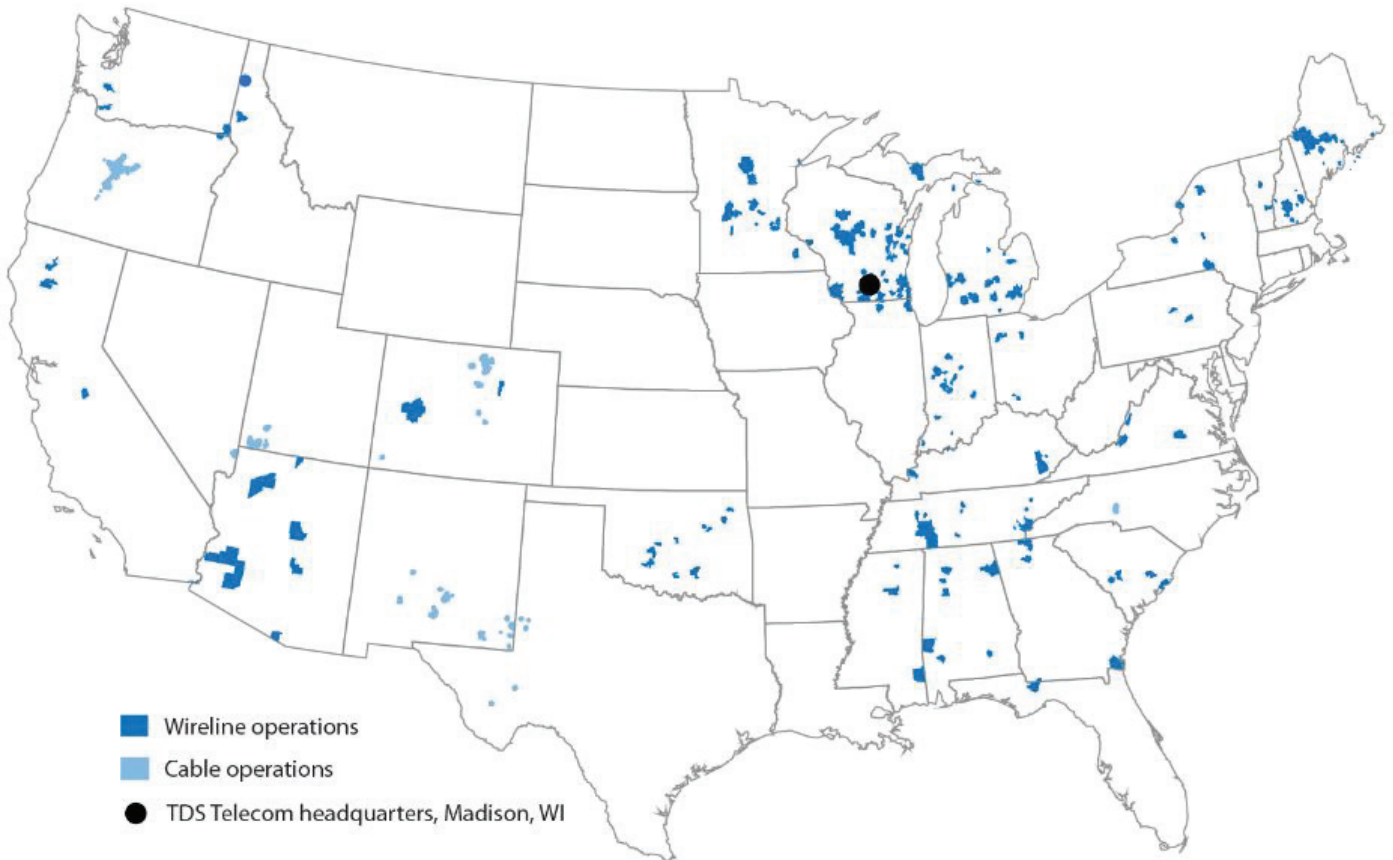
Business Overview

TDS Telecom provides a wide range of communications services to residential and commercial customers. TDS Telecom operates in two segments: Wireline, which includes a fiber-to-the-home program in new markets, and Cable.

TDS Telecom has a common strategy across all its businesses to provide high-speed broadband services bundled with video and voice services. Services are provided to residential, commercial, and wholesale customers in a mix of rural, suburban and metropolitan communities, with the largest concentration of its customers in the Upper Midwest and the Southeast. TDS Telecom seeks to be the leading provider of broadband services in the markets it serves by investing into high-quality networks and providing excellent customer service.

On December 31, 2019, TDS acquired substantially all of the assets of MI Connection Communications System, dba Continuum. Continuum is a cable company that passes approximately 40,000 service addresses in North Carolina and offers complementary broadband, video and voice services.

OPERATIONS



- Serves 1.2 million connections in 32 states.
- Employs approximately 2,900 employees.

COVID-19 considerations

The future impacts of COVID-19 are uncertain due to many factors and could be material to TDS Telecom's results of operations, cash flows and financial position. Certain impacts on and actions by TDS Telecom related to COVID-19 include, but are not limited to, the following:

- Taking action to keep employees safe, including implementing a work-from-home policy for employees whose jobs can be performed remotely. In addition, to keep employees, customers, and communities safe, TDS Telecom closed certain retail stores and temporarily ceased door-to-door selling. Retail stores that remain open have implemented social distancing and enhanced cleaning measures. In addition, TDS Telecom has expanded safety protocols for front line workers, such as field service technicians and direct salesforce employees as they returned to door-to-door selling in the second quarter. Throughout this period of change, TDS Telecom has continued serving its customers and ensuring its network remains fully operational.
- Participation in the FCC Keep Americans Connected Pledge, through June 30, 2020, to not turn-off service or charge late fees due to a customer's inability to pay their bill due to circumstances related to COVID-19. TDS Telecom is complying with certain states that have extended no-disconnect orders past the expiration of the FCC Pledge. These actions did not have a significant financial impact for the year ended December 31, 2020.
- Supporting the communities in which TDS Telecom operates. TDS Telecom has donated to food pantries and other organizations that are serving the needs of the communities in which it operates.
- Offering 60 days of free broadband service to new customers who are low-income and/or families with children or college age students through April 2020, with free services ending in June 2020.
- Recognizing income tax benefits associated with the enactment of the CARES Act. This legislation resulted in a reduction to income tax expense for 2020 and a cash refund of taxes paid in prior years.
- Tracking increased customer demand for broadband services. The demand may fluctuate depending on the severity and duration of the pandemic. At this time, TDS Telecom's network capacity has been sufficient for increased usage.
- Door-to-door sales activities in out-of-territory markets were initially impacted by the pandemic leading to a broadened approach that uses increasing online sales and marketing activities. A significant reduction in pre-sales activity could result in a slowing of construction activity.
- Monitoring its supply chain to assess impacts to availability of network equipment. At this time, TDS Telecom expects to be able to meet customer demand for on-premise equipment, and to maintain its expected investment levels in fiber and other broadband deployments.
- Monitoring the dependency on third parties to continue work on out-of-territory market construction. Various state municipal and vendor restrictions related to COVID-19 could cause delays in municipal permitting, pole access, and other contractor work that could slow down construction plans.

TDS Telecom Mission and Strategy

TDS Telecom's mission is to provide outstanding communications services to delight its customers, champion economic development by investing in infrastructure, and to grow rapidly.

TDS Telecom's strategic efforts include:

- TDS Telecom strives to be the preferred broadband provider in its markets with the ability to provide value-added bundling services with video and voice service options. TDS Telecom continues to focus on driving growth in its broadband services by investing in fiber deployment in TDS' new out-of-territory markets and in existing markets.
- TDS Telecom may also seek to grow its operations through the acquisition of businesses that support and complement its existing markets or create entirely new clusters of markets where TDS Telecom can succeed. TDS Telecom intends to avoid markets served by other fiber overbuilders or municipalities which have constructed their own networks with fiber to the home.

Financial Overview — TDS Telecom

Year Ended December 31,	2020	2019	2020 vs. 2019
(Dollars in millions)			
Operating revenues			
Wireline	\$ 685	\$ 683	—
Cable	292	247	18 %
TDS Telecom operating revenues ¹	<u>976</u>	<u>930</u>	5 %
Operating expenses			
Wireline	593	587	1 %
Cable	274	236	16 %
TDS Telecom operating expenses ¹	<u>866</u>	<u>823</u>	5 %
TDS Telecom operating income	<u>\$ 110</u>	<u>\$ 107</u>	3 %
Net income	\$ 100	\$ 92	8 %
Adjusted OIBDA (Non-GAAP) ²	\$ 314	\$ 300	4 %
Adjusted EBITDA (Non-GAAP) ²	\$ 317	\$ 313	1 %
Capital expenditures ³	\$ 368	\$ 316	16 %

Numbers may not foot due to rounding.

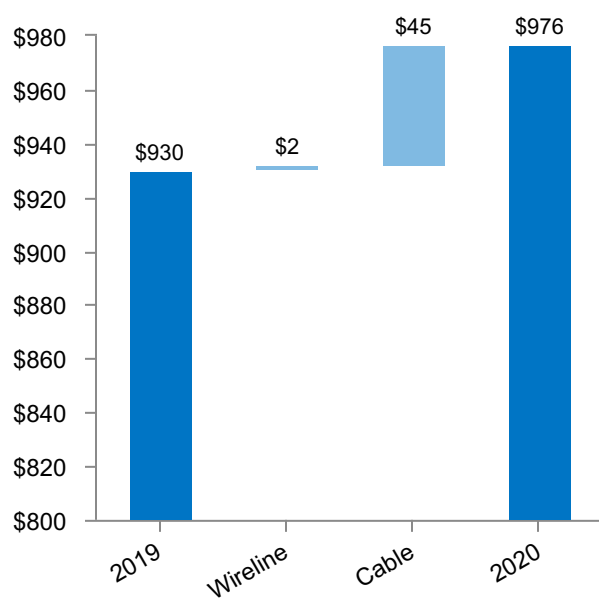
¹ Includes eliminations between the Wireline and Cable segments.

² Refer to Supplemental Information Relating to Non-GAAP Financial Measures within this MD&A for a reconciliation of this measure.

³ Refer to Liquidity and Capital Resources within this MD&A for additional information on Capital expenditures.

Operating Revenues

(Dollars in millions)



Operating revenues increased in 2020 due primarily to the acquisition of Continuum, Wireline and Cable broadband growth and Wireline video growth which were partially offset by declines in Wireline residential voice and commercial revenues.

Total operating expenses

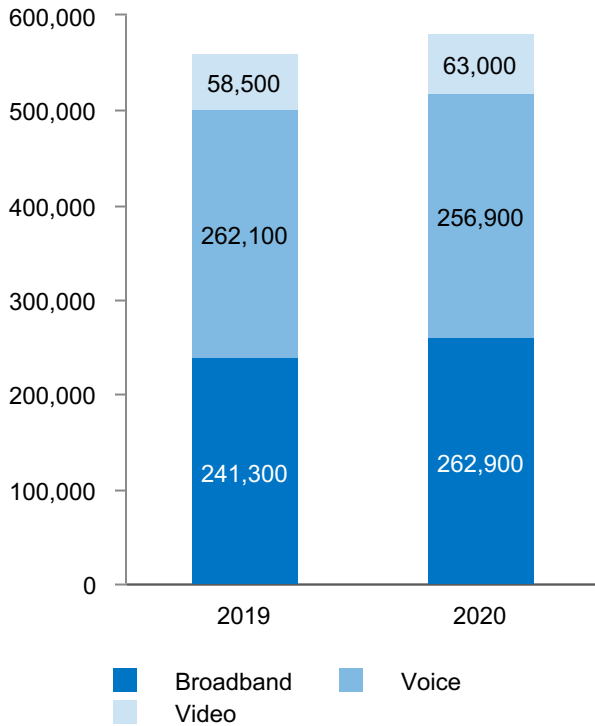
Operating expenses increased in 2020 due primarily to expenses related to the addition of Continuum, increases in building and maintenance costs, higher video programming costs, and a gain on the sale of assets in 2019, partially offset by a decrease related to the change in accounting to capitalize modems.



WIRELINE OPERATIONS

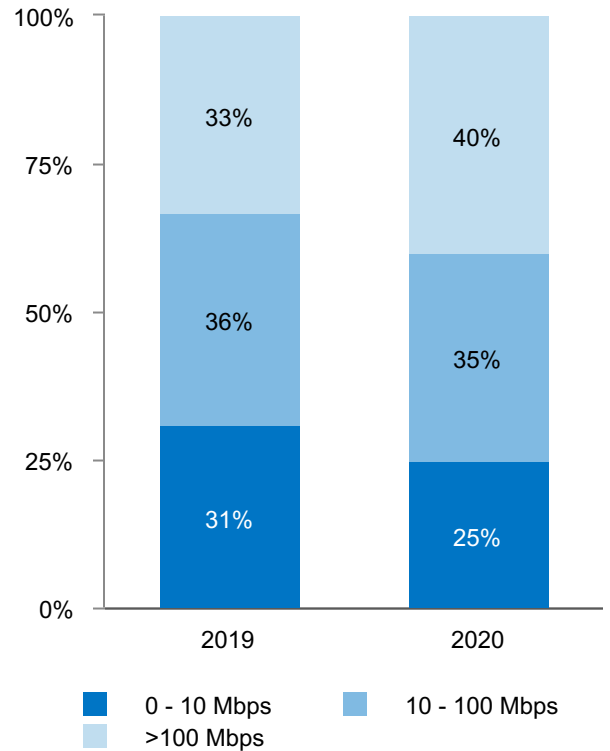
Operational Overview

Residential Connections
As of December 31,



Total residential connections increased 4% as growth in broadband and video connections grew 9% and 8%, respectively, partially offset by a 2% decline in voice connections.

Residential Broadband Connections by Speeds¹
As of December 31,

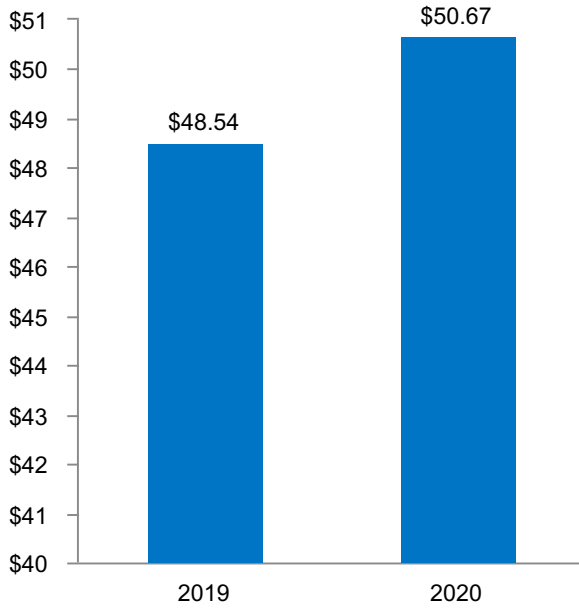


Residential broadband customers continue to choose higher speeds with 75% taking speeds of 10 Mbps or greater and 40% choosing speeds of 100 Mbps or greater.

¹ Includes ILEC and out-of-territory

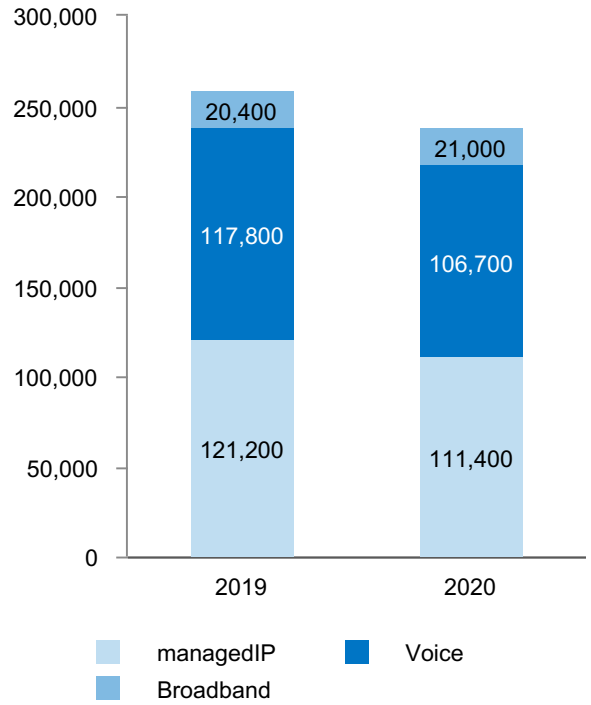
Residential Revenue per Connection

For the year ended December 31,



Commercial Connections

As of December 31,



Residential revenue per connection increased 4% due to growth in broadband and video connections, which are priced higher than declining voice services, and price increases. Video and broadband services also have tiered pricing depending on the packages and speeds the customer selects.

Total commercial connections decreased by 8% due primarily to declines in connections in competitive local exchange carrier (CLEC) markets.

Financial Overview — Wireline

Year Ended December 31,	2020	2019	2020 vs. 2019
(Dollars in millions)			
Residential	\$ 349	\$ 328	6 %
Commercial	152	168	(9)%
Wholesale	182	186	(2)%
Service revenues	<u>684</u>	<u>682</u>	–
Equipment and product sales	<u>1</u>	<u>1</u>	(31)%
Total operating revenues	<u>685</u>	<u>683</u>	–
Cost of services (excluding Depreciation, amortization and accretion reported below)	269	263	2 %
Cost of equipment and products	1	1	(36)%
Selling, general and administrative	199	199	–
Depreciation, amortization and accretion	124	132	(6)%
(Gain) loss on asset disposals, net	—	(8)	N/M
Total operating expenses	<u>593</u>	<u>587</u>	1 %
Operating income	<u>\$ 92</u>	<u>\$ 96</u>	(4)%
Income before income taxes	<u>\$ 99</u>	<u>\$ 110</u>	(10)%
Adjusted OIBDA (Non-GAAP) ¹	<u>\$ 217</u>	<u>\$ 220</u>	(1)%
Adjusted EBITDA (Non-GAAP) ¹	<u>\$ 220</u>	<u>\$ 231</u>	(5)%
Capital expenditures ²	<u>\$ 293</u>	<u>\$ 243</u>	20 %

Numbers may not foot due to rounding.

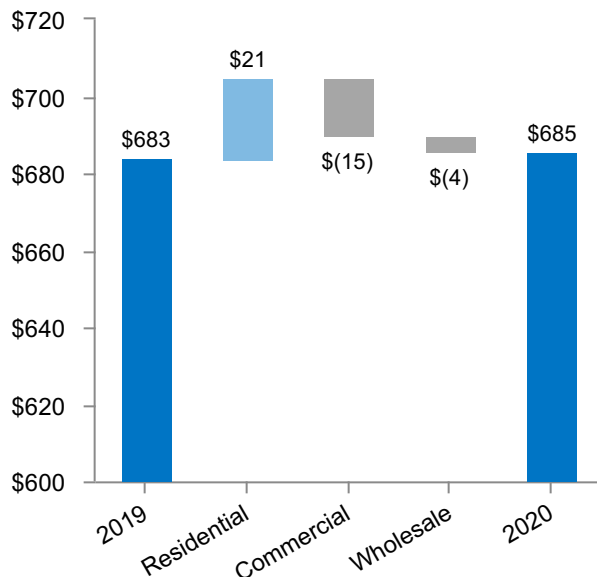
N/M - Percentage change not meaningful

¹ Refer to Supplemental Information Relating to Non-GAAP Financial Measures within this MD&A for a reconciliation of this measure.

² Refer to Liquidity and Capital Resources within this MD&A for additional information on Capital expenditures.

Operating Revenues

(Dollars in millions)



Residential revenues consist of:

- Broadband services, including fiber- and copper-based high-speed internet, security and support services
- Video services, including IPTV and satellite offerings
- Voice services

Commercial revenues consist of:

- High-speed and dedicated business internet services
- Video services
- Voice services

Wholesale revenues consist of:

- Network access services primarily to interexchange and wireless carriers for carrying data and voice traffic on TDS Telecom's network
- Federal and state USF support, including A-CAM

Key components of changes in the statement of operations items were as follows:

Total operating revenues

Residential revenues increased in 2020 due primarily to growth in broadband and video connections, as well as price increases, partially offset by a decline in voice connections.

Commercial revenues decreased in 2020 due primarily to declining connections in CLEC markets.

Wholesale revenues decreased in 2020 due primarily to decreased access revenues.

Cost of services

Cost of services increased slightly in 2020 due primarily to increases in building and maintenance costs, higher video programming costs, partially offset by a decrease in expenses related to the capitalization of new modems. Effective January 1, 2020, the cost of modems, along with associated installation costs, is being capitalized.

Selling, general and administrative

Selling, general and administrative expenses remained flat in 2020 due primarily to lower legal and consulting costs, offset by increases in advertising costs in the out-of-territory markets.

Depreciation, amortization and accretion

Depreciation, amortization and accretion decreased in 2020 due primarily to certain assets becoming fully depreciated and extended useful lives assumptions, partially offset by depreciation on new fiber assets.

(Gain) loss on asset disposals, net

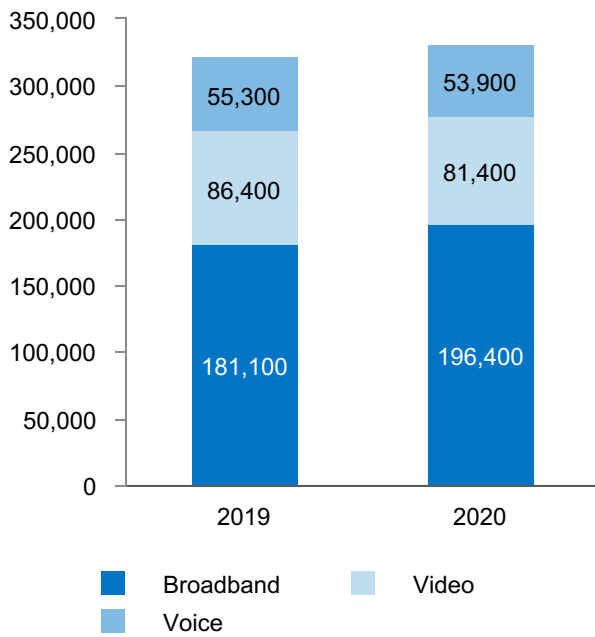
Gain on asset disposals decreased in 2020 due to the sale of fiber assets in certain CLEC markets during 2019.



CABLE OPERATIONS

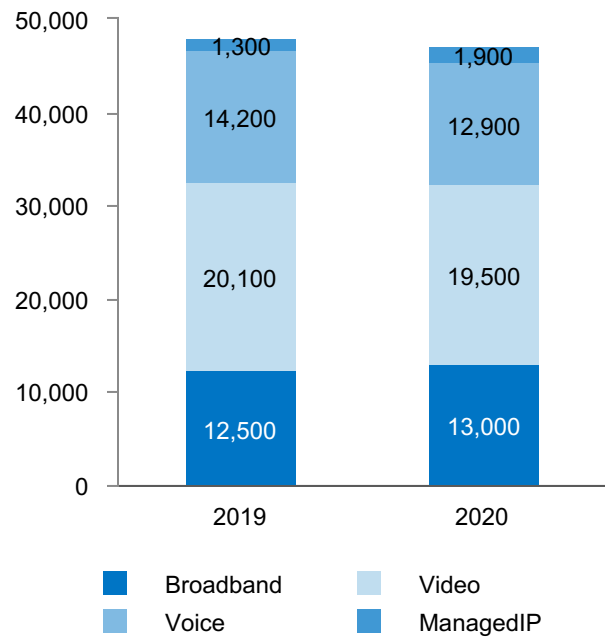
Operational Overview

Residential Connections
As of December 31,



Total residential connections grew 3% in 2020 due to a 8% increase in broadband connections, partially offset by a 6% decline in video connections and a 3% decline in voice connections.

Commercial Connections
As of December 31,



Total commercial connections decreased 2% in 2020 due to declining voice and video connections, partially offset by an increase in broadband and managedIP connections.

Financial Overview — Cable

Year Ended December 31,	2020	2019	2020 vs. 2019
(Dollars in millions)			
Residential	\$ 245	\$ 205	20 %
Commercial	47	43	10 %
Total operating revenues	<u>292</u>	<u>247</u>	18 %
Cost of services (excluding Depreciation, amortization and accretion reported below)	123	105	17 %
Selling, general and administrative	72	62	16 %
Depreciation, amortization and accretion	78	68	15 %
(Gain) loss on asset disposals, net	1	1	(26)%
Total operating expenses	<u>274</u>	<u>236</u>	16 %
Operating income (loss)	<u>\$ 18</u>	<u>\$ 11</u>	60 %
Income (loss) before income taxes	<u>\$ 18</u>	<u>\$ 13</u>	43 %
Adjusted OIBDA (Non-GAAP) ¹	<u>\$ 97</u>	<u>\$ 80</u>	21 %
Adjusted EBITDA (Non-GAAP) ¹	<u>\$ 97</u>	<u>\$ 82</u>	19 %
Capital expenditures ²	<u>\$ 75</u>	<u>\$ 73</u>	2 %

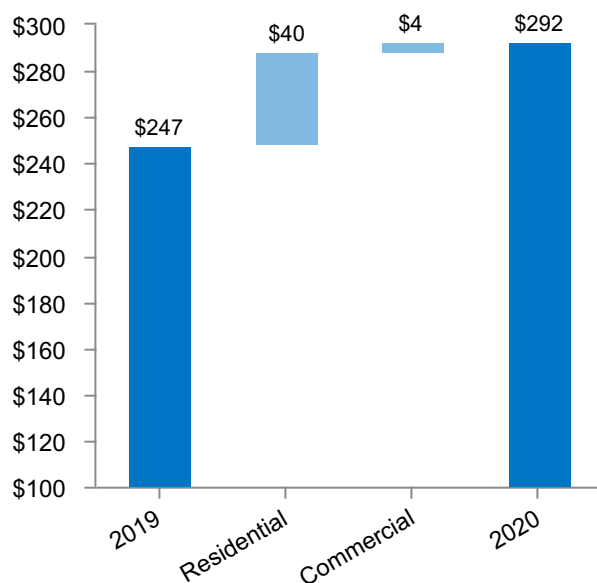
Numbers may not foot due to rounding.

¹ Refer to Supplemental Information Relating to Non-GAAP Financial Measures within this MD&A for a reconciliation of this measure.

² Refer to Liquidity and Capital Resources within this MD&A for additional information on Capital expenditures.

Operating Revenues

(Dollars in millions)



Residential and Commercial revenues consist of:

- Broadband services, including high-speed internet, security and support services
- Video services, including IPTV and traditional cable programming
- Voice services

Key components of changes in the statement of operations items were as follows:

Total operating revenues

Residential and commercial revenues increased in 2020 due primarily to the acquisition of Continuum (\$22 million) as well as growth in broadband connections and price increases.

Cost of services

Cost of services increased in 2020 due primarily to the acquisition of Continuum (\$13 million) and increases in employee-related expenses.

Selling, general and administrative

Selling, general and administrative expenses increased in 2020 due primarily to increases in employee-related expenses and the acquisition of Continuum (\$2 million).

Depreciation, amortization and accretion

Depreciation, amortization and accretion increased in 2020 due primarily to the acquisition of Continuum (\$11 million).

Liquidity and Capital Resources

Sources of Liquidity

TDS and its subsidiaries operate capital-intensive businesses. In the past, TDS' existing cash and investment balances, funds available under its revolving credit and receivables securitization agreements, funds from other financing sources, including term loans and other long-term debt, and cash flows from operating and certain investing and financing activities, including sales of assets or businesses, provided sufficient liquidity and financial flexibility for TDS to meet its normal day-to-day operating needs and debt service requirements, to finance the build-out and enhancement of markets and to fund acquisitions. There is no assurance that this will be the case in the future. See Market Risk for additional information regarding maturities of long-term debt.

TDS has incurred negative free cash flow at times in the past and this could occur in the future. However, TDS believes that existing cash and investment balances, funds available under its revolving credit, term loan and receivables securitization agreements, expected future tax refunds and expected cash flows from operating and investing activities will provide sufficient liquidity for TDS to meet its normal day-to-day operating needs and debt service requirements for the coming years. TDS will continue to monitor the rapidly changing business and market conditions and plans to take appropriate actions, as necessary, to meet its liquidity needs.

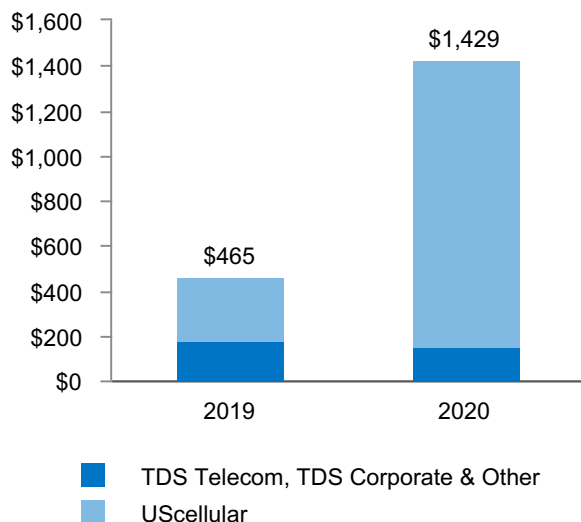
TDS may require substantial additional capital for, among other uses, funding day-to-day operating needs including working capital, acquisitions of providers of cable, wireless or wireline telecommunications services, IT services or other businesses, wireless spectrum license or system acquisitions, capital expenditures, agreements to purchase goods or services, leases, debt service requirements, the repurchase of shares, the payment of dividends, or making additional investments, including new technologies and out-of-territory fiber builds. It may be necessary from time to time to increase the size of the existing revolving credit agreements, to put in place new credit agreements, or to obtain other forms of financing in order to fund potential expenditures.

Cash and Cash Equivalents

Cash and cash equivalents include cash and money market investments. The primary objective of TDS' Cash and cash equivalents investment activities is to preserve principal. TDS does not have direct access to UScellular cash.

Cash and Cash Equivalents

(Dollars in millions)



The majority of TDS' Cash and cash equivalents are held in bank deposit accounts and in money market funds that purchase only debt issued by the U.S. Treasury or U.S. government agencies.

Financing

Revolving Credit Agreements

In March 2020, TDS entered into a new \$400 million unsecured revolving credit agreement with certain lenders and other parties and UScellular entered into a new \$300 million unsecured revolving credit agreement with certain lenders and other parties. Amounts under the new revolving credit agreements may be borrowed, repaid and reborrowed from time to time until maturity in March 2025. As a result of the new agreements, TDS' and UScellular's previous revolving credit agreements due to expire in May 2023 were terminated. As of December 31, 2020, there were no outstanding borrowings under the revolving credit agreements, except for letters of credit, and TDS and UScellular's unused borrowing capacity was \$399 million and \$298 million, respectively.

Term Loan Agreements

In January 2020, TDS entered into an unsecured \$200 million senior term loan credit agreement. In March 2020, TDS amended the agreement to conform the agreement with its revolving credit agreement. The term loan may be drawn in one or more advances by the one-year anniversary of the date of the agreement; amounts not drawn by that time will cease to be available. The maturity date of the term loan is in January 2027. As of December 31, 2020, the outstanding borrowings under the agreement were \$125 million and the unused borrowing capacity was \$75 million. In January 2021, TDS borrowed an additional \$75 million under the senior term loan credit agreement.

In March 2020, UScellular amended its unsecured senior term loan credit agreement in order to conform the agreement with its revolving credit agreement. In June 2020, UScellular amended and restated the agreement and increased its borrowing capacity to \$300 million. The term loan may be drawn in one or more advances by the one-year anniversary of the date of the agreement; amounts not drawn by that time will cease to be available. The maturity date of the term loan is in June 2027. As of December 31, 2020, the outstanding borrowings under the agreement were \$83 million and the unused borrowing capacity was \$217 million.

Receivables Securitization Agreement

In April 2020, UScellular borrowed \$125 million under its receivables securitization agreement. In October 2020, UScellular amended and restated its agreement to increase its total borrowing capacity to \$300 million. Amounts under the receivables securitization agreement may be borrowed, repaid and reborrowed from time to time until maturity in December 2022, which may be extended from time to time as specified therein. In December 2020, UScellular repaid \$100 million of the outstanding borrowing. As of December 31, 2020, the outstanding borrowings under the agreement were \$25 million and the unused capacity was \$275 million, subject to sufficient collateral to satisfy the asset borrowing base provisions of the agreement.

Financial Covenants

The TDS and UScellular revolving credit agreements, senior term loan agreements and the UScellular receivables securitization agreement require TDS or UScellular, as applicable, to comply with certain affirmative and negative covenants, which include certain financial covenants. In particular, under these agreements, TDS and UScellular are required to maintain the Consolidated Interest Coverage Ratio at a level not lower than 3.00 to 1.00 as of the end of any fiscal quarter. TDS and UScellular also were required to maintain the Consolidated Leverage Ratio at a level not to exceed 3.25 to 1.00 as of the end of any fiscal quarter. TDS and UScellular believe they were in compliance as of December 31, 2020 with all such financial covenants.

Other Long-Term Financing

In August 2020, UScellular issued \$500 million of 6.25% Senior Notes due in 2069 and in December 2020, UScellular issued \$500 million of 5.5% Senior Notes due in 2070. The proceeds from both issuances will be used for general corporate purposes, which may include the repayment of other debt, the purchase of additional spectrum and the funding of capital expenditures, including in connection with 5G buildout projects.

TDS and UScellular each have an effective shelf registration statement on Form S-3 to issue senior or subordinated debt securities. The proceeds from any such issuances may be used for general corporate purposes, including the possible reduction of other short-term or long-term debt; spectrum purchases; capital expenditures; acquisition, construction and development programs; working capital; additional investments in subsidiaries; or the repurchase of shares. The TDS shelf registration permits TDS to issue at any time and from time to time senior or subordinated debt securities in one or more offerings in an indeterminate amount. The UScellular shelf registration statement permits UScellular to issue at any time and from time to time senior or subordinated debt securities in one or more offerings, up to the amount registered, which is currently \$500 million. The ability of TDS or UScellular to complete an offering pursuant to such shelf registration statements is subject to market conditions and other factors at the time.

TDS believes that it and/or its subsidiaries were in compliance as of December 31, 2020, with all covenants and other requirements set forth in the TDS and UScellular long-term debt indentures. TDS and UScellular have not failed to make nor do they expect to fail to make any scheduled payment of principal or interest under such indentures.

Refer to Market Risk — Long-Term Debt for additional information regarding required principal payments and the weighted average interest rates related to TDS' Long-term debt.

TDS and UScellular, at their discretion, may from time to time seek to retire or purchase their outstanding debt through cash purchases and/or exchanges for other securities, in open market purchases, privately negotiated transactions, tender offers, exchange offers or otherwise. Such repurchases or exchanges, if any, will depend on prevailing market conditions, liquidity requirements, contractual restrictions and other factors. The amounts involved may be material.

See Note 12 — Debt in the Notes to Consolidated Financial Statements for additional information regarding the revolving credit agreements, senior term loan agreements, UScellular's receivables securitization agreement, UScellular's Senior Notes and other long-term financing.

Credit Ratings

In certain circumstances, TDS' and UScellular's interest cost on their various agreements may be subject to increase if their current credit ratings from nationally recognized credit rating agencies are lowered, and may be subject to decrease if the ratings are raised. The agreements do not cease to be available nor do the maturity dates accelerate solely as a result of a downgrade in TDS' or UScellular's credit rating. However, downgrades in TDS' or UScellular's credit rating could adversely affect their ability to renew the agreements or obtain access to other credit agreements in the future.

TDS and UScellular are rated at sub-investment grade. TDS and UScellular's credit ratings as of December 31, 2020, and the dates such ratings were re-affirmed were as follows:

Rating Agency	Rating	Outlook
Moody's (TDS) (re-affirmed October 2020)	Ba2	stable outlook
Moody's (UScellular) (re-affirmed October 2020)	Ba1	stable outlook
Standard & Poor's (re-affirmed October 2020)	BB	stable outlook
Fitch Ratings (re-affirmed June 2020)	BB+	stable outlook

Capital Requirements

The discussion below is intended to highlight some of the significant cash outlays expected during 2021 and beyond and to highlight the spending incurred in prior years for these items. This discussion does not include cash required to fund normal operations, and is not a comprehensive list of capital requirements. Significant cash requirements that are not routine or in the normal course of business could arise from time to time.

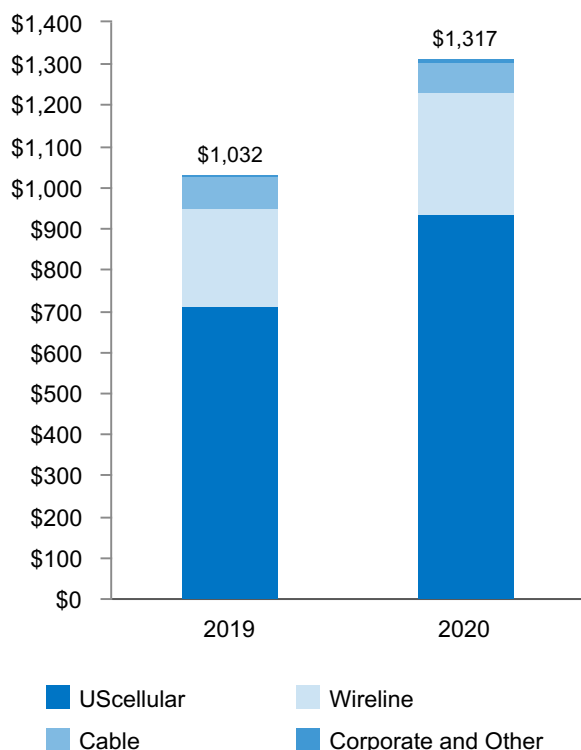
Capital Expenditures

TDS makes substantial investments to acquire, construct and upgrade telecommunications networks and facilities to remain competitive and as a basis for creating long-term value for shareholders. In recent years, rapid changes in technology and new opportunities (such as 5G and VoLTE technology in the Wireless business and fiber in the Wireline business) have required substantial investments in potentially revenue-enhancing and cost-saving upgrades to TDS' networks to remain competitive; this is expected to continue in 2021 and future years with the continued deployment of 5G technology in the Wireless business, and the continued deployment of fiber in the Wireline business.

Capital expenditures (i.e., additions to property, plant and equipment and system development expenditures; excludes wireless spectrum license additions), which include the effects of accruals and capitalized interest, in 2020 and 2019 were as follows:

Capital Expenditures

(Dollars in millions)



UScellular's capital expenditures in 2020 were \$940 million compared to \$710 million in 2019. In 2020, UScellular's capital expenditures were used for the following purposes:

- Enhance and maintain UScellular's network coverage, including continuing deployment of VoLTE technology and providing additional speed and capacity to accommodate increased data usage by current customers;
- Continue network modernization and 5G deployment; and
- Invest in information technology to support existing and new services and products.

Capital expenditures for 2021 are expected to be between \$775 million and \$875 million. UScellular will continue to incur spend in 2021 related to its multi-year 5G deployment and network modernization initiatives.

TDS Telecom's capital expenditures in 2020 were \$368 million compared to \$316 million in 2019. In 2020, these capital expenditures were used for the following purposes:

- Continue to expand fiber deployment inside and outside of current footprint;
- Maintain and enhance existing infrastructure including build-out requirements to meet state broadband and A-CAM programs;
- Upgrade broadband capacity and speeds;
- Support success-based spending for broadband and video growth; and
- Deploy TDS TV+, a cloud-based video platform.

Capital expenditures for 2021 are expected to be between \$425 million and \$475 million. These expenditures are expected to be used for similar purposes as those listed above.

TDS intends to finance its capital expenditures for 2021 using primarily Cash flows from operating activities, existing cash balances and, if required, additional debt financing from its receivables securitization agreement, senior term loan credit agreements, revolving credit agreements and/or other forms of financing.

Acquisitions, Divestitures and Exchanges

TDS may be engaged from time to time in negotiations (subject to all applicable regulations) relating to the acquisition, divestiture or exchange of companies, properties, wireless spectrum licenses (including pursuant to FCC auctions) and other possible businesses. In general, TDS may not disclose such transactions until there is a definitive agreement.

Subsequent to December 31, 2020, UScellular committed to purchase wireless spectrum licenses for approximately \$1,460 million inclusive of associated costs, subject to regulatory approval. UScellular believes its cash balances, existing debt facilities, and other financing sources as described above are sufficient to meet this commitment.

Other Obligations

TDS will require capital for future spending on existing contractual obligations, including long-term debt obligations; operating lease and finance lease commitments; commitments for device purchases, network facilities and transport services; agreements for software licensing; long-term marketing programs; and other agreements to purchase goods or services.

Variable Interest Entities

TDS consolidates certain “variable interest entities” as defined under GAAP. See Note 15 — Variable Interest Entities in the Notes to Consolidated Financial Statements for additional information related to these variable interest entities. TDS may elect to make additional capital contributions and/or advances to these variable interest entities in future periods in order to fund their operations.

Common Share Repurchase Programs

During 2020, TDS repurchased 879,409 Common Shares for \$14 million at an average cost per share of \$15.53. As of December 31, 2020, the maximum dollar value of TDS Common Shares that may yet be purchased under TDS' program was \$185 million.

During 2020, UScellular repurchased 803,836 Common Shares for \$23 million at an average cost per share of \$29.00. At December 31, 2020, the total cumulative amount of UScellular Common Shares authorized to be purchased is 4,507,000.

Depending on its future financial performance, construction, development and acquisition programs, and available sources of financing, TDS and UScellular may not have sufficient liquidity or capital resources to make share repurchases. Therefore, there is no assurance that TDS and UScellular will make any share repurchases in the future.

For additional information related to the current TDS and UScellular repurchase authorizations, see Note 17 — Common Shareholders' Equity in the Notes to Consolidated Financial Statements.

Off-Balance Sheet Arrangements

TDS had no transactions, agreements or other contractual arrangements with unconsolidated entities involving “off-balance sheet arrangements,” as defined by SEC rules, that had or are reasonably likely to have a material current or future effect on its financial condition, results of operations, liquidity, capital expenditures or capital resources.

Dividends

TDS paid quarterly dividends per outstanding share of \$0.170 in 2020 and \$0.165 in 2019. TDS increased the dividend per share to \$0.175 in the first quarter of 2021. TDS has no current plans to change its policy of paying dividends.

Consolidated Cash Flow Analysis

TDS operates a capital-intensive business. TDS makes substantial investments to acquire wireless spectrum licenses and properties and to construct and upgrade communications networks and facilities as a basis for creating long-term value for shareholders. In recent years, rapid changes in technology and new opportunities have required substantial investments in potentially revenue-enhancing and cost-saving upgrades to TDS' networks. Cash flows may fluctuate from quarter to quarter and year to year due to seasonality, the timing of acquisitions and divestitures, capital expenditures and other factors. The following discussion summarizes TDS' cash flow activities in 2020 and 2019.

2020 Commentary

TDS' Cash, cash equivalents and restricted cash increased \$978 million. Net cash provided by operating activities was \$1,532 million due primarily to net income of \$269 million adjusted for non-cash items of \$1,071 million and distributions received from unconsolidated entities of \$189 million, including \$89 million in distributions from the LA Partnership.

Cash flows used for investing activities were \$1,511 million. Cash paid for additions to property, plant and equipment totaled \$1,338 million. Cash payments for wireless spectrum license acquisitions, including advanced payments, were \$201 million.

Cash flows provided by financing activities were \$957 million, reflecting the issuance of \$500 million of 5.50% UScellular Senior Notes, \$500 million of 6.25% UScellular Senior Notes, \$125 million borrowed under the UScellular receivables securitization agreement, and \$125 million borrowed under the TDS term loan. These were partially offset by a \$100 million repayment on the UScellular receivables securitization agreement, the payment of dividends totaling \$78 million, the payment of debt issuance costs of \$41 million, and the repurchase of TDS and UScellular Common Shares.

2019 Commentary

TDS' Cash, cash equivalents and restricted cash decreased \$453 million. Net cash provided by operating activities was \$1,016 million due to net income of \$147 million plus non-cash items of \$984 million and distributions received from unconsolidated entities of \$162 million, including \$75 million in distributions from the LA Partnership. This was offset by changes in working capital items which decreased net cash by \$277 million. The more significant working capital changes were increases in accounts receivables and equipment installment plan receivables and a decrease in accounts payable.

Cash flows used for investing activities were \$1,249 million. Cash paid for additions to property, plant and equipment totaled \$957 million and Cash paid for acquisitions and licenses totaled \$346 million. This was partially offset by cash received from the redemption of short-term Treasury bills of \$29 million and Cash received from divestitures and exchanges of \$41 million.

Cash flows used for financing activities were \$220 million, reflecting a \$100 million principal prepayment on the UScellular senior term loan, the repurchase of \$21 million of UScellular Common Shares and ordinary activity such as the payment of dividends and the scheduled repayments of debt.

Consolidated Balance Sheet Analysis

The following discussion addresses certain captions in the consolidated balance sheet and changes therein. This discussion is intended to highlight the significant changes and is not intended to fully reconcile the changes. Changes in financial condition during 2020 were as follows:

Income taxes receivable

Income taxes receivable increased \$151 million primarily reflecting future tax refunds attributable to the carryback of 2020 net operating losses, as allowed under the CARES Act which was enacted in March 2020. See Note 5 — Income Taxes in the Notes to Consolidated Financial Statements for additional information.

Accounts payable

Accounts payable increased \$134 million due primarily to software license and network equipment spending.

Accrued taxes

Accrued taxes increased \$28 million due primarily to an increase in accrued payroll taxes.

Deferred income tax liability, net

Deferred income tax liability, net increased \$187 million due primarily to full deductibility for tax purposes of qualified property placed in service during 2020. See Note 5 — Income Taxes in the Notes to Consolidated Financial Statements for additional information.

Long-term debt, net

Long-term debt, net increased \$1,108 million due primarily to UScellular's issuance of \$500 million of 5.50% Senior Notes and \$500 million of 6.25% Senior Notes, and \$125 million borrowed under the TDS term loan. See Note 12 — Debt in the Notes to Consolidated Financial Statements for additional information.

Application of Critical Accounting Policies and Estimates

TDS prepares its consolidated financial statements in accordance with GAAP. TDS' significant accounting policies are discussed in detail in Note 1 — Summary of Significant Accounting Policies and Recent Accounting Pronouncements, Note 2 — Revenue Recognition and Note 10 — Leases in the Notes to Consolidated Financial Statements.

Management believes the application of the following critical accounting policies and the estimates required by such application reflect its most significant judgments and estimates used in the preparation of TDS' consolidated financial statements.

Intangible Asset Impairment

Licenses and Goodwill represent a significant component of TDS' consolidated assets. These assets are considered to be indefinite-lived assets and, therefore, are not amortized but rather are tested at least annually for impairment. TDS performs annual impairment testing of Licenses and Goodwill as of November 1 of each year, or more frequently if triggering events occur. Significant negative events, such as changes in any of the assumptions described below or decreases in forecasted cash flows, could result in an impairment in future periods. Licenses are tested for impairment at the level of reporting referred to as a unit of accounting. Goodwill is tested for impairment at the level of reporting referred to as a reporting unit.

See Note 7 — Intangible Assets in the Notes to Consolidated Financial Statements for information related to Licenses and Goodwill activity in 2020 and 2019.

Wireless Spectrum Licenses – UScellular

For purposes of its impairment testing, UScellular separates its FCC wireless spectrum licenses into eight units of accounting, which consist of one unit of accounting for developed operating market wireless spectrum licenses (built wireless spectrum licenses) and seven geographic non-operating market wireless spectrum licenses (unbuilt wireless spectrum licenses). UScellular performed a qualitative impairment assessment in 2020 and a quantitative impairment assessment in 2019 to determine whether an impairment existed.

In 2020, UScellular considered several qualitative factors, including analyst estimates of wireless spectrum license values which contemplated recent spectrum auction results, recent UScellular and other market participant transactions and other industry and market factors. Based on this assessment, UScellular concluded that it was more likely than not that the fair value of the wireless spectrum licenses in each unit of accounting exceeded their respective carrying values. Therefore, no quantitative impairment evaluation was completed.

In 2019, a market approach was used to value the wireless spectrum license portfolio. Within each unit of accounting, the wireless spectrum licenses were pooled by type and by geographic area. The market approach calculates estimated market values using observable pricing multiples from wireless spectrum license purchase and auction transactions to estimate fair value for each pool of wireless spectrum licenses. The sum of the fair values of each of the pools represents the estimated fair value of UScellular's wireless spectrum licenses. The most significant assumption made in this process was the pricing multiples which are units of value expressed in relation to the bandwidth and population covered by a wireless spectrum license. Based on the assessment, the fair values of the wireless spectrum license units of accounting exceeded their respective carrying values by amounts ranging from 39% to greater than 100%. It was determined that the carrying value of wireless spectrum licenses acquired through Auction 101 and 102 approximated fair value based on the recency of the auctions. Therefore, no impairment of wireless spectrum licenses existed.

Goodwill – TDS Telecom

TDS Telecom has recorded Goodwill as a result of past acquisitions of wireline and cable businesses. For purposes of the 2020 and 2019 Goodwill impairment tests, TDS Telecom had two reporting units: Wireline and Cable.

Based on the results of TDS Telecom's annual Goodwill impairment assessment performed as of November 1, 2020, the fair values of the Wireline and Cable reporting units exceeded their carrying values. Therefore, no impairment of Goodwill was recorded for these reporting units.

The discounted cash flow approach and guideline public company method were used to value the Wireline and Cable reporting units. The discounted cash flow approach develops an indication of fair value using various inputs and considers current economic factors as well as risks specific to the industry and the reporting unit. The most significant assumptions made in this process were the revenue growth rate (shown as a compound annual growth rate in the table below), the terminal growth rate and the discount rate. The guideline public company method develops an indication of fair value by calculating average market pricing multiples for selected publicly-traded companies. The developed multiples were applied to applicable financial measures of the respective reporting unit to determine an estimated fair value. The discounted cash flow approach and guideline public company method were weighted to arrive at the total fair value used for impairment testing. The weighting of methods was consistently applied in both 2020 and 2019.

For purposes of the discounted cash flow approach, the following table represents key assumptions used in estimating the fair value of the Wireline and Cable reporting units as of November 1, 2020. Except for the revenue growth rate at the Wireline reporting unit, the other key assumptions used in the 2020 annual impairment assessment did not change significantly from the key assumptions used in the 2019 annual impairment assessment. The Wireline reporting unit's revenue growth rate increased year over year due primarily to the growth and inclusion of TDS Telecom's fiber deployments in new out-of-territory markets in the discounted cash flow model. There are uncertainties associated with these key assumptions and potential events and/or circumstances that could have a negative effect on the key assumptions described below.

Key Assumptions	Wireline	Cable
Revenue growth rate ¹	6.2 %	5.5 %
Terminal growth rate ¹	0.0 %	2.0 %
Discount rate ²	6.5 %	7.5 %

¹ There are risks that could negatively impact the projected revenue and terminal growth rates, including but not limited to macroeconomic and industry factors.

² The discount rate is derived based on a set of guideline public companies and is an indicator of the cost of capital for a market participant in TDS Telecom's industries. The discount rate may increase if borrowing costs rise, market participants weight more of their capital structure towards equity vs. debt, long-term risk free interest rates increase, Wireline's or Cable's risk in relation to its peers increases, or other elements affecting the estimated cost of equity or debt increase.

Provided all other assumptions remained the same, the Wireline and Cable discount rates would have to increase to approximately 10% and 17%, respectively, to yield estimated fair values equal to their respective carrying values at November 1, 2020. Further, provided all other assumptions remained the same, the Wireline and Cable terminal growth rate assumptions would need to decrease to approximately negative 4% and negative 15%, respectively, to yield an estimate of fair value equal to the carrying value of the respective reporting units at November 1, 2020.

The Goodwill balances of the reporting units tested for impairment as of November 1, 2020, and the percentage by which the estimated fair value of the corresponding reporting units exceeded their carrying values, as a percentage of carrying value, was as follows:

Reporting unit	Goodwill balance	Excess of estimated Fair Value over Carrying Value
(Dollars in millions)		
Wireline	\$ 409	47 %
Cable	\$ 138	85 %

Income Taxes

The amounts of income tax assets and liabilities, the related income tax provision and the amount of unrecognized tax benefits are critical accounting estimates because such amounts are significant to TDS' financial condition and results of operations.

The preparation of the consolidated financial statements requires TDS to calculate a provision for income taxes. This process involves estimating the actual current income tax liability together with assessing temporary differences resulting from the different treatment of items for tax purposes. These temporary differences result in deferred income tax assets and liabilities which are included on a net basis in TDS' Consolidated Balance Sheet. TDS must then assess the likelihood that deferred income tax assets will be realized based on future taxable income and, to the extent management believes that realization is not likely, establish a valuation allowance. Management's judgment is required in determining the provision for income taxes, deferred income tax assets and liabilities and any valuation allowance that is established for deferred income tax assets.

TDS recognizes the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities based on the technical merits of the position. The tax benefits recognized in the financial statements from such a position are measured based on management's judgment as to the possible outcome that has a greater than 50% cumulative likelihood of being realized upon ultimate resolution.

See Note 5 — Income Taxes in the Notes to Consolidated Financial Statements for additional information.

Regulatory Matters

5G Fund

On October 27, 2020, the FCC adopted rules creating the 5G Fund for Rural America, which will distribute up to \$9 billion over ten years to bring 5G wireless broadband connectivity to rural America. The 5G Fund will be implemented through a two-phase competitive process, using multi-round auctions to award support. The winning bidders will be required to meet certain minimum speed requirements and interim and final deployment milestones. The order provides that the 5G Fund be in lieu of the previously proposed fund (the Phase II Connect America Mobility Fund) for the development of 4G LTE. The order also provides that over time a growing percentage of the legacy support a carrier receives must be used for 5G deployment.

UScellular cannot predict at this time when the 5G fund auction will occur, when the phase down period for its existing legacy support from the Federal USF will commence, or whether the 5G fund auction will provide opportunities to UScellular to offset any loss in existing support.

FCC Rulemaking – Restoring Internet Freedom

In December 2017, the FCC approved rules reversing or revising decisions made in the FCC's 2015 Open Internet and Title II Order (Restoring Internet Freedom). The 2017 action reversed the FCC's 2015 decision to reclassify Broadband Internet Access Services as telecommunications services subject to regulation under Title II of the Telecommunications Act. The 2017 action also reversed the FCC's 2015 restrictions on blocking, throttling and paid prioritization, and modified transparency rules relating to such practices. Several parties filed suit in federal court challenging the 2017 actions. On October 1, 2019, the Court of Appeals for the D.C. Circuit issued an order reaffirming the FCC in most respects, but limiting the FCC's ability to preempt state and local net neutrality laws. On February 19, 2020, the FCC issued a Public Notice seeking comment on three issues under further consideration by the FCC based on a recent D.C. Circuit decision. On October 27, 2020, the FCC adopted an Order on Remand in response to the U.S. Court of Appeals for the D.C. Circuit's remand on the three issues under further consideration by the FCC and found no basis to alter the FCC's conclusions in the Restoring Internet Freedom Order.

A number of states, including certain states in which TDS operates, have adopted or considered laws intended to reinstate aspects of the foregoing net neutrality regulations that were reversed or revised by the FCC in 2017. To the extent such laws are enacted, it is expected that legal proceedings will be pursued challenging such laws, subject now to the DC Circuit ruling limiting the FCC's preemptive authority in this matter. The new administration may also conduct rulemaking proceedings that may reinstate in some form net neutrality rules. TDS cannot predict the outcome of any of these proceedings or the impact on its business.

Spectrum Auctions

On July 11, 2019, the FCC released a Public Notice establishing procedures for an auction offering wireless spectrum licenses in the 37, 39 and 47 GHz bands (Auction 103). On March 12, 2020, the FCC announced by public notice that UScellular was the provisional winning bidder for 237 wireless spectrum licenses for a purchase price of \$146 million. In June 2020, the wireless spectrum licenses from Auction 103 were granted by the FCC.

On March 2, 2020, the FCC released a Public Notice establishing procedures for an auction offering wireless spectrum licenses in the 3.5 GHz band (Auction 105). On September 2, 2020, the FCC announced by public notice that UScellular was the provisional winning bidder for 243 wireless spectrum licenses for a purchase price of \$14 million. The wireless spectrum licenses are expected to be granted by the FCC in 2021.

On August 7, 2020, the FCC released a Public Notice establishing procedures for an auction offering wireless spectrum licenses in the 3.7-3.98 GHz bands (Auction 107). UScellular filed an application to participate in Auction 107 on September 21, 2020. Bidding in Auction 107 commenced on December 8, 2020. The initial phase of this auction closed on January 15, 2021 and the assignment phase commenced on February 8, 2021.

Rural Digital Opportunity Fund

On January 30, 2020, the FCC adopted the Rural Digital Opportunity Fund Report and Order, which establishes the framework for the Rural Digital Opportunity Fund (Auction 904). Auction 904 was a reverse auction to provide funding for high speed fixed broadband service in underserved rural areas. On July 15, 2020, UScellular filed an application to participate in Auction 904. Auction 904 began on October 29, 2020 and concluded on November 25, 2020. UScellular was not a winning bidder in Auction 904.

Private Securities Litigation Reform Act of 1995

Safe Harbor Cautionary Statement

This Management's Discussion and Analysis of Financial Condition and Results of Operations and other sections of this Annual Report contain statements that are not based on historical facts and represent forward-looking statements, as this term is defined in the Private Securities Litigation Reform Act of 1995. All statements, other than statements of historical facts, that address activities, events or developments that TDS intends, expects, projects, believes, estimates, plans or anticipates will or may occur in the future are forward-looking statements. The words "believes," "anticipates," "estimates," "expects," "plans," "intends," "projects" and similar expressions are intended to identify these forward-looking statements, but are not the exclusive means of identifying them. Such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results, events or developments to be significantly different from any future results, events or developments expressed or implied by such forward-looking statements. Such risks, uncertainties and other factors include, but are not limited to, those set forth below. See "Risk Factors" in TDS' Annual Report on Form 10-K for the year ended December 31, 2020, for a further discussion of these risks. Each of the following risks could have a material adverse effect on TDS' business, financial condition or results of operations. However, such factors are not necessarily all of the important factors that could cause actual results, performance or achievements to differ materially from those expressed in, or implied by, the forward-looking statements contained in this document. Other unknown or unpredictable factors also could have material adverse effects on future results, performance or achievements. TDS undertakes no obligation to update publicly any forward-looking statements whether as a result of new information, future events or otherwise. Readers should evaluate any statements in light of these important factors.

Operational Risk Factors

- *Intense competition involving products, services, pricing, and network speed and technologies could adversely affect TDS' revenues or increase its costs to compete.*
- *Changes in roaming practices or other factors could cause TDS' roaming revenues to decline from current levels, roaming expenses to increase from current levels and/or impact TDS' ability to service its customers in geographic areas where TDS does not have its own network, which could have an adverse effect on TDS' business, financial condition or results of operations.*
- *A failure by TDS to obtain access to adequate radio spectrum to meet current or anticipated future needs and/or to accurately predict future needs for radio spectrum could have an adverse effect on TDS' business, financial condition or results of operations.*
- *An inability to attract people of outstanding talent throughout all levels of the organization, to develop their potential through education and assignments, and to retain them by keeping them engaged, challenged and properly rewarded could have an adverse effect on TDS' business, financial condition or results of operations.*
- *TDS' smaller scale relative to larger competitors that may have greater financial and other resources than TDS could cause TDS to be unable to compete successfully, which could adversely affect its business, financial condition or results of operations.*
- *Changes in various business factors, including changes in demand, consumer preferences and perceptions, price competition, churn from customer switching activity and other factors, could have an adverse effect on TDS' business, financial condition or results of operations.*
- *Advances or changes in technology could render certain technologies used by TDS obsolete, could put TDS at a competitive disadvantage, could reduce TDS' revenues or could increase its costs of doing business.*
- *Complexities associated with deploying new technologies present substantial risk and TDS' investments in unproven technologies may not produce the benefits that TDS expects.*
- *Costs, integration problems or other factors associated with acquisitions, divestitures or exchanges of properties or wireless spectrum licenses and/or expansion of TDS' businesses could have an adverse effect on TDS' business, financial condition or results of operations.*
- *A failure by TDS to complete significant network construction and systems implementation activities as part of its plans to improve the quality, coverage, capabilities and capacity of its network, support and other systems and infrastructure could have an adverse effect on its operations.*
- *Difficulties involving third parties with which TDS does business, including changes in TDS' relationships with or financial or operational difficulties of key suppliers or independent agents and third party national retailers who market TDS' services, could adversely affect TDS' business, financial condition or results of operations.*
- *A failure by TDS to maintain flexible and capable telecommunication networks or information technology, or a material disruption thereof, could have an adverse effect on TDS' business, financial condition or results of operations.*

Financial Risk Factors

- *Uncertainty in TDS' future cash flow and liquidity or the inability to access capital, deterioration in the capital markets, other changes in TDS' performance or market conditions, changes in TDS' credit ratings or other factors could limit or restrict the availability of financing on terms and prices acceptable to TDS, which could require TDS to reduce its construction, development or acquisition programs, reduce the amount of wireless spectrum licenses acquired, and/or reduce or cease share repurchases and/or the payment of dividends.*
- *TDS has a significant amount of indebtedness which could adversely affect its financial performance and in turn adversely affect its ability to make payments on its indebtedness, comply with terms of debt covenants and incur additional debt.*
- *TDS' assets and revenue are concentrated primarily in the U.S. telecommunications industry. Consequently, its operating results may fluctuate based on factors related primarily to conditions in this industry.*
- *TDS has significant investments in entities that it does not control. Losses in the value of such investments could have an adverse effect on TDS' financial condition or results of operations.*

Regulatory, Legal and Governance Risk Factors

- *Failure by TDS to timely or fully comply with any existing applicable legislative and/or regulatory requirements or changes thereto could adversely affect TDS' business, financial condition or results of operations.*
- *TDS receives significant regulatory support, and is also subject to numerous surcharges and fees from federal, state and local governments – the applicability and the amount of the support and fees are subject to great uncertainty, including the ability to pass through certain fees to customers, and this uncertainty could have an adverse effect on TDS' business, financial condition or results of operations.*
- *Settlements, judgments, restraints on its current or future manner of doing business and/or legal costs resulting from pending and future litigation could have an adverse effect on TDS' business, financial condition or results of operations.*
- *The possible development of adverse precedent in litigation or conclusions in professional studies to the effect that radio frequency emissions from wireless devices and/or cell sites cause harmful health consequences, including cancer or tumors, or may interfere with various electronic medical devices such as pacemakers, could have an adverse effect on TDS' wireless business, financial condition or results of operations.*
- *Claims of infringement of intellectual property and proprietary rights of others, primarily involving patent infringement claims, could prevent TDS from using necessary technology to provide products or services or subject TDS to expensive intellectual property litigation or monetary penalties, which could have an adverse effect on TDS' business, financial condition or results of operations.*
- *Certain matters, such as control by the TDS Voting Trust and provisions in the TDS Restated Certificate of Incorporation, may serve to discourage or make more difficult a change in control of TDS or have other consequences.*

General Risk Factors

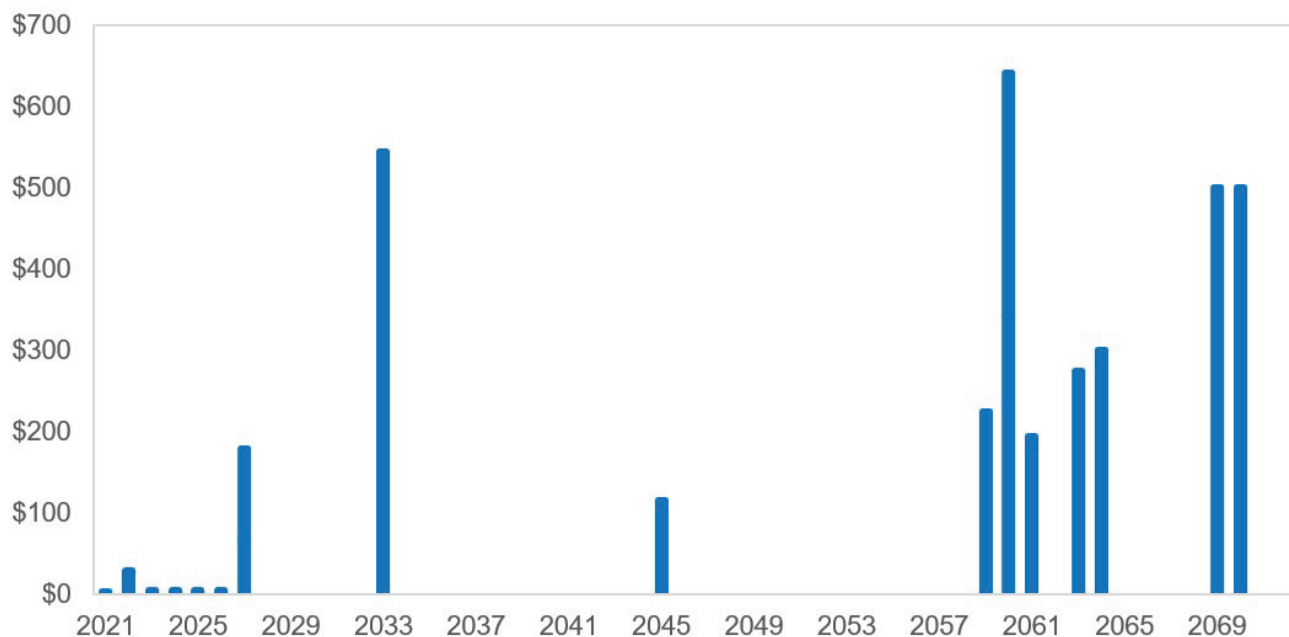
- *TDS has experienced, and in the future expects to experience, cyber-attacks or other breaches of network or information technology security of varying degrees on a regular basis, which could have an adverse effect on TDS' business, financial condition or results of operations.*
- *Disruption in credit or other financial markets, a deterioration of U.S. or global economic conditions or other events could, among other things, impede TDS' access to or increase the cost of financing its operating and investment activities and/or result in reduced revenues and lower operating income and cash flows, which would have an adverse effect on TDS' business, financial condition or results of operations.*
- *The impact of public health emergencies, such as the COVID-19 pandemic, on TDS' business is uncertain, but depending on duration and severity could have a material adverse effect on TDS' business, financial condition or results of operations.*

Market Risk

Long-Term Debt

As of December 31, 2020, the majority of TDS' long-term debt was in the form of fixed-rate notes with remaining maturities ranging up to 50 years. Fluctuations in market interest rates can lead to significant fluctuations in the fair value of these fixed-rate notes.

The following chart presents the scheduled principal payments on long-term debt by maturity dates at December 31, 2020:



The following table presents the scheduled principal payments on long-term debt, finance lease obligations, and other installment arrangements, and the related weighted average interest rates by maturity dates at December 31, 2020:

	Principal Payments Due by Period	
	Long-Term Debt Obligations ¹	Weighted-Avg. Interest Rates on Long-Term Debt Obligations ²
(Dollars in millions)		
2021	\$ 5	2.8 %
2022	30	1.6 %
2023	5	2.5 %
2024	5	2.5 %
2025	5	2.5 %
Thereafter	3,488	6.3 %
Total	\$ 3,538	6.3 %

¹ The total long-term debt obligation differs from Long-term debt in the Consolidated Balance Sheet due to unamortized debt issuance costs on all non-revolving debt instruments and unamortized discounts related to UScellular's 6.7% Senior Notes. See Note 12 — Debt in the Notes to Consolidated Financial Statements for additional information.

² Represents the weighted average stated interest rates at December 31, 2020, for debt maturing in the respective periods.

Fair Value of Long-Term Debt

At December 31, 2020 and 2019, the estimated fair value of long-term debt obligations, excluding finance lease obligations, other installment arrangements, the current portion of such long-term debt and debt financing costs, was \$3,746 million and \$2,474 million, respectively. See Note 3 — Fair Value Measurements in the Notes to Consolidated Financial Statements for additional information.

Other Market Risk Sensitive Instruments

The substantial majority of TDS' other market risk sensitive instruments (as defined in Item 305 of SEC Regulation S-K) are short-term, including Cash and cash equivalents. Accordingly, TDS believes that a significant change in interest rates would not have a material effect on such other market risk sensitive instruments.

Supplemental Information Relating to Non-GAAP Financial Measures

TDS sometimes uses information derived from consolidated financial information but not presented in its financial statements prepared in accordance with GAAP to evaluate the performance of its business. Certain of these measures are considered “non-GAAP financial measures” under U.S. Securities and Exchange Commission Rules. Specifically, TDS has referred to the following measures in this Form 10-K Report:

- EBITDA
- Adjusted EBITDA
- Adjusted OIBDA
- Free cash flow

Following are explanations of each of these measures:

EBITDA, Adjusted EBITDA and Adjusted OIBDA

EBITDA, Adjusted EBITDA and Adjusted OIBDA are defined as net income adjusted for the items set forth in the reconciliation below. EBITDA, Adjusted EBITDA and Adjusted OIBDA are not measures of financial performance under GAAP and should not be considered as alternatives to Net income or Cash flows from operating activities, as indicators of cash flows or as measures of liquidity. TDS does not intend to imply that any such items set forth in the reconciliation below are non-recurring, infrequent or unusual; such items may occur in the future.

Adjusted EBITDA is a segment measure reported to the chief operating decision maker for purposes of assessing their performance. See Note 19 — Business Segment Information in the Notes to Consolidated Financial Statements for additional information.

Management uses Adjusted EBITDA and Adjusted OIBDA as measurements of profitability, and therefore, reconciliations to applicable GAAP income measures are deemed appropriate. Management believes Adjusted EBITDA and Adjusted OIBDA are useful measures of TDS’ operating results before significant recurring non-cash charges, gains and losses, and other items as presented below as they provide additional relevant and useful information to investors and other users of TDS’ financial data in evaluating the effectiveness of its operations and underlying business trends in a manner that is consistent with management’s evaluation of business performance. Adjusted EBITDA shows adjusted earnings before interest, taxes, depreciation, amortization and accretion, and gains and losses, while Adjusted OIBDA reduces this measure further to exclude Equity in earnings of unconsolidated entities and Interest and dividend income in order to more effectively show the performance of operating activities excluding investment activities. The following tables reconcile EBITDA, Adjusted EBITDA and Adjusted OIBDA to the corresponding GAAP measures, Net income or Income before income taxes and Operating income. Income tax expense is not provided at the individual segment level for Wireline and Cable. TDS calculates income tax expense (benefit) for TDS Telecom in total.

TDS - CONSOLIDATED	2020	2019
(Dollars in millions)		
Net income (GAAP)	\$ 269	\$ 147
Add back or deduct:		
Income tax expense	19	64
Interest expense	168	165
Depreciation, amortization and accretion	909	932
EBITDA (Non-GAAP)	1,365	1,308
Add back or deduct:		
(Gain) loss on asset disposals, net	27	12
(Gain) loss on sale of business and other exit costs, net	—	(1)
(Gain) loss on license sales and exchanges, net	(5)	—
(Gain) loss on investments	(2)	—
Adjusted EBITDA (Non-GAAP)	1,385	1,319
Deduct:		
Equity in earnings of unconsolidated entities	181	168
Interest and dividend income	15	29
Other, net	(1)	—
Adjusted OIBDA (Non-GAAP)	1,190	1,122
Deduct:		
Depreciation, amortization and accretion	909	932
(Gain) loss on asset disposals, net	27	12
(Gain) loss on sale of business and other exit costs, net	—	(1)
(Gain) loss on license sales and exchanges, net	(5)	—
Operating income (GAAP)	\$ 259	\$ 179

UScellular	2020	2019
(Dollars in millions)		
Net income (GAAP)	\$ 233	\$ 133
Add back or deduct:		
Income tax expense	17	52
Interest expense	112	110
Depreciation, amortization and accretion	683	702
EBITDA (Non-GAAP)	<u>1,045</u>	<u>997</u>
Add back or deduct:		
(Gain) loss on asset disposals, net	25	19
(Gain) loss on sale of business and other exit costs, net	—	(1)
(Gain) loss on license sales and exchanges, net	(5)	—
(Gain) loss on investments	(2)	—
Adjusted EBITDA (Non-GAAP)	<u>1,063</u>	<u>1,015</u>
Deduct:		
Equity in earnings of unconsolidated entities	179	166
Interest and dividend income	8	17
Adjusted OIBDA (Non-GAAP)	<u>876</u>	<u>832</u>
Deduct:		
Depreciation, amortization and accretion	683	702
(Gain) loss on asset disposals, net	25	19
(Gain) loss on sale of business and other exit costs, net	—	(1)
(Gain) loss on license sales and exchanges, net	(5)	—
Operating income (GAAP)	<u><u>\$ 173</u></u>	<u><u>\$ 112</u></u>

TDS TELECOM	2020	2019
(Dollars in millions)		
Net income (GAAP)	\$ 100	\$ 92
Add back or deduct:		
Income tax expense	18	30
Interest expense	(4)	(3)
Depreciation, amortization and accretion	203	200
EBITDA (Non-GAAP)	<u>316</u>	<u>320</u>
Add back or deduct:		
(Gain) loss on asset disposals, net	1	(7)
Adjusted EBITDA (Non-GAAP)	<u>317</u>	<u>313</u>
Deduct:		
Interest and dividend income	5	12
Other, net	(1)	—
Adjusted OIBDA (Non-GAAP)	<u>314</u>	<u>300</u>
Deduct:		
Depreciation, amortization and accretion	203	200
(Gain) loss on asset disposals, net	1	(7)
Operating income (GAAP)	<u><u>\$ 110</u></u>	<u><u>\$ 107</u></u>

Numbers may not foot due to rounding.

WIRESLINE	2020	2019
(Dollars in millions)		
Income before income taxes (GAAP)	\$ 99	\$ 110
Add back or deduct:		
Interest expense	(4)	(3)
Depreciation, amortization and accretion	124	132
EBITDA (Non-GAAP)	219	239
Add back or deduct:		
(Gain) loss on asset disposals, net	—	(8)
Adjusted EBITDA (Non-GAAP)	220	231
Deduct:		
Interest and dividend income	4	10
Other, net	(1)	—
Adjusted OIBDA (Non-GAAP)	217	220
Deduct:		
Depreciation, amortization and accretion	124	132
(Gain) loss on asset disposals, net	—	(8)
Operating income (GAAP)	\$ 92	\$ 96

Numbers may not foot due to rounding.

CABLE	2020	2019
(Dollars in millions)		
Income before income taxes (GAAP)	\$ 18	\$ 13
Add back:		
Depreciation, amortization and accretion	78	68
EBITDA (Non-GAAP)	97	81
Add back or deduct:		
(Gain) loss on asset disposals, net	1	1
Adjusted EBITDA (Non-GAAP)	97	82
Deduct:		
Interest and dividend income	1	2
Adjusted OIBDA (Non-GAAP)	97	80
Deduct:		
Depreciation, amortization and accretion	78	68
(Gain) loss on asset disposals, net	1	1
Operating income (GAAP)	\$ 18	\$ 11

Numbers may not foot due to rounding.

Free Cash Flow

The following table presents Free cash flow, which is defined as Cash flows from operating activities less Cash paid for additions to property, plant and equipment. Free cash flow is a non-GAAP financial measure which TDS believes may be useful to investors and other users of its financial information in evaluating liquidity, specifically, the amount of net cash generated by business operations after deducting Cash paid for additions to property, plant and equipment.

	2020	2019
(Dollars in millions)		
Cash flows from operating activities (GAAP)	\$ 1,532	\$ 1,016
Less: Cash paid for additions to property, plant and equipment	1,338	957
Free cash flow (Non-GAAP)	\$ 194	\$ 59

Financial Statements

Telephone and Data Systems, Inc. Consolidated Statement of Operations

Year Ended December 31,	2020	2019	2018
(Dollars and shares in millions, except per share amounts)			
Operating revenues			
Service	\$ 4,136	\$ 4,059	\$ 3,999
Equipment and product sales	1,089	1,117	1,110
Total operating revenues	<u>5,225</u>	<u>5,176</u>	<u>5,109</u>
Operating expenses			
Cost of services (excluding Depreciation, amortization and accretion reported below)	1,244	1,202	1,206
Cost of equipment and products	1,110	1,135	1,130
Selling, general and administrative	1,681	1,717	1,694
Depreciation, amortization and accretion	909	932	883
(Gain) loss on asset disposals, net	27	12	9
(Gain) loss on sale of business and other exit costs, net	—	(1)	—
(Gain) loss on license sales and exchanges, net	(5)	—	(18)
Total operating expenses	<u>4,966</u>	<u>4,997</u>	<u>4,904</u>
Operating income	259	179	205
Investment and other income (expense)			
Equity in earnings of unconsolidated entities	181	168	160
Interest and dividend income	15	29	26
Gain (loss) on investments	2	—	—
Interest expense	(168)	(165)	(172)
Other, net	(1)	—	2
Total investment and other income	<u>29</u>	<u>32</u>	<u>16</u>
Income before income taxes	288	211	221
Income tax expense	19	64	46
Net income	269	147	175
Less: Net income attributable to noncontrolling interests, net of tax	43	26	40
Net income attributable to TDS shareholders	<u>\$ 226</u>	<u>\$ 121</u>	<u>\$ 135</u>
Basic weighted average shares outstanding	114	114	112
Basic earnings per share attributable to TDS shareholders	<u>\$ 1.97</u>	<u>\$ 1.06</u>	<u>\$ 1.20</u>
Diluted weighted average shares outstanding	115	116	114
Diluted earnings per share attributable to TDS shareholders	<u>\$ 1.93</u>	<u>\$ 1.03</u>	<u>\$ 1.17</u>

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

Telephone and Data Systems, Inc.
Consolidated Statement of Comprehensive Income

Year Ended December 31,	2020	2019	2018
(Dollars in millions)			
Net income	\$ 269	\$ 147	\$ 175
Net change in accumulated other comprehensive income			
Change related to retirement plan			
Amounts included in net periodic benefit cost for the period			
Net actuarial gains	3	1	—
Prior service cost	—	—	(10)
Amortization of prior service cost	3	1	(1)
	<u>6</u>	<u>2</u>	<u>(11)</u>
Change in deferred income taxes	(1)	(1)	3
Change related to retirement plan, net of tax	5	1	(8)
Net change in accumulated other comprehensive income	5	1	(8)
Comprehensive income	274	148	167
Less: Net income attributable to noncontrolling interests, net of tax	43	26	40
Comprehensive income attributable to TDS shareholders	\$ 231	\$ 122	\$ 127

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

Telephone and Data Systems, Inc.
Consolidated Statement of Cash Flows

Year Ended December 31,	2020	2019	2018
(Dollars in millions)			
Cash flows from operating activities			
Net income	\$ 269	\$ 147	\$ 175
Add (deduct) adjustments to reconcile net income to net cash flows from operating activities			
Depreciation, amortization and accretion	909	932	883
Bad debts expense	77	112	101
Stock-based compensation expense	53	59	54
Deferred income taxes, net	190	34	33
Equity in earnings of unconsolidated entities	(181)	(168)	(160)
Distributions from unconsolidated entities	189	162	153
(Gain) loss on asset disposals, net	27	12	9
(Gain) loss on sale of business and other exit costs, net	—	(1)	—
(Gain) loss on license sales and exchanges, net	(5)	—	(18)
(Gain) loss on investments	(2)	—	—
Other operating activities	3	4	4
Changes in assets and liabilities from operations			
Accounts receivable	(16)	(49)	(39)
Equipment installment plans receivable	(54)	(97)	(149)
Inventory	12	(19)	(5)
Accounts payable	173	(60)	2
Customer deposits and deferred revenues	4	(9)	8
Accrued taxes	(120)	(17)	(29)
Other assets and liabilities	4	(26)	(5)
Net cash provided by operating activities	<u>1,532</u>	<u>1,016</u>	<u>1,017</u>
Cash flows from investing activities			
Cash paid for additions to property, plant and equipment	(1,338)	(957)	(776)
Cash paid for acquisitions and licenses	(172)	(346)	(16)
Cash received from investments	1	29	100
Cash paid for investments	(3)	(11)	(17)
Cash received from divestitures and exchanges	26	41	29
Advance payments for license acquisitions	(30)	(5)	(2)
Other investing activities	5	—	2
Net cash used in investing activities	<u>(1,511)</u>	<u>(1,249)</u>	<u>(680)</u>
Cash flows from financing activities			
Issuance of long-term debt	1,250	—	—
Repayment of long-term debt	(110)	(118)	(20)
TDS Common Shares reissued for benefit plans, net of tax payments	(3)	(6)	42
UScellular Common Shares reissued for benefit plans, net of tax payments	(11)	(9)	18
Repurchase of TDS Common Shares	(14)	—	—
Repurchase of UScellular Common Shares	(23)	(21)	—
Dividends paid to TDS shareholders	(78)	(75)	(72)
Payment of debt issuance costs	(41)	(1)	(2)
Distributions to noncontrolling interests	(2)	(4)	(6)
Payments to acquire additional interest in subsidiaries	(11)	—	—
Other financing activities	—	14	8
Net cash provided by (used in) financing activities	<u>957</u>	<u>(220)</u>	<u>(32)</u>
Net increase (decrease) in cash, cash equivalents and restricted cash	978	(453)	305
Cash, cash equivalents and restricted cash			
Beginning of period	474	927	622
End of period	<u>\$ 1,452</u>	<u>\$ 474</u>	<u>\$ 927</u>

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

Telephone and Data Systems, Inc.
Consolidated Balance Sheet — Assets

December 31,	2020	2019
(Dollars in millions)		
Current assets		
Cash and cash equivalents	\$ 1,429	\$ 465
Short-term investments	3	—
Accounts receivable		
Customers and agents, less allowances of \$67 and \$74, respectively	1,004	1,005
Other, less allowances of \$2 and \$2, respectively	108	119
Inventory, net	154	169
Prepaid expenses	105	98
Income taxes receivable	187	36
Other current assets	36	29
Total current assets	<u>3,026</u>	<u>1,921</u>
Assets held for sale	2	—
Licenses	2,638	2,480
Goodwill	547	547
Other intangible assets, net of accumulated amortization of \$71 and \$65, respectively¹	213	239
Investments in unconsolidated entities	477	488
Property, plant and equipment		
In service and under construction	13,659	12,864
Less: Accumulated depreciation and amortization	9,687	9,337
Property, plant and equipment, net	<u>3,972</u>	<u>3,527</u>
Operating lease right-of-use assets	998	972
Other assets and deferred charges	652	607
Total assets²	<u>\$ 12,525</u>	<u>\$ 10,781</u>

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

Telephone and Data Systems, Inc.
Consolidated Balance Sheet — Liabilities and Equity

December 31,	2020	2019
(Dollars and shares in millions, except per share amounts)		
Current liabilities		
Current portion of long-term debt	\$ 5	\$ 10
Accounts payable	508	374
Customer deposits and deferred revenues	193	189
Accrued interest	16	11
Accrued taxes	69	41
Accrued compensation	132	121
Short-term operating lease liabilities	129	116
Other current liabilities	101	100
Total current liabilities	<u>1,153</u>	<u>962</u>
Liabilities held for sale	1	—
Deferred liabilities and credits		
Deferred income tax liability, net	863	676
Long-term operating lease liabilities	940	931
Other deferred liabilities and credits	541	481
Long-term debt, net	3,424	2,316
Commitments and contingencies		
Noncontrolling interests with redemption features	10	11
Equity		
TDS shareholders' equity		
Series A Common and Common Shares		
Authorized 290 shares (25 Series A Common and 265 Common Shares)		
Issued 133 shares (7 Series A Common and 126 Common Shares)		
Outstanding 114 shares (7 Series A Common and 107 Common Shares) and 115 shares (7 Series A Common and 108 Common Shares), respectively		
Par Value (\$0.01 per share)	1	1
Capital in excess of par value	2,482	2,468
Treasury shares, at cost, 19 and 18 Common Shares, respectively	(477)	(479)
Accumulated other comprehensive loss	(4)	(9)
Retained earnings	2,802	2,672
Total TDS shareholders' equity	<u>4,804</u>	<u>4,653</u>
Noncontrolling interests	<u>789</u>	<u>751</u>
Total equity	5,593	5,404
Total liabilities and equity²	<u>\$ 12,525</u>	<u>\$ 10,781</u>

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

¹ The accumulated amortization balance at December 31, 2019 differs from the amount reported in the Consolidated Balance Sheet of the 2019 Form 10-K, as the previously reported amount included certain intangible assets that were fully amortized and had a net book value of zero.

² The consolidated total assets as of December 31, 2020 and 2019, include assets held by consolidated variable interest entities (VIEs) of \$1,042 million and \$915 million, respectively, which are not available to be used to settle the obligations of TDS. The consolidated total liabilities as of December 31, 2020 and 2019, include certain liabilities of consolidated VIEs of \$18 million and \$20 million, respectively, for which the creditors of the VIEs have no recourse to the general credit of TDS. See Note 15 — Variable Interest Entities for additional information.

Telephone and Data Systems, Inc. Consolidated Statement of Changes in Equity

TDS Shareholders

	Series A Common and Common shares	Capital in excess of par value	Treasury shares	Accumulated other comprehensive income (loss)	Retained earnings	Total TDS shareholders' equity	Noncontrolling interests	Total equity
(Dollars in millions, except per share amounts)								
December 31, 2019	\$ 1	\$ 2,468	\$ (479)	\$ (9)	\$ 2,672	\$ 4,653	\$ 751	\$ 5,404
Cumulative effect of accounting changes	—	—	—	—	(2)	(2)	—	(2)
Net income attributable to TDS shareholders	—	—	—	—	226	226	—	226
Net income attributable to noncontrolling interests classified as equity	—	—	—	—	—	—	43	43
Other comprehensive income	—	—	—	5	—	5	—	5
TDS Common and Series A Common share dividends (\$0.68 per share)	—	—	—	—	(78)	(78)	—	(78)
Repurchase of Common Shares	—	—	(14)	—	—	(14)	—	(14)
Dividend reinvestment plan	—	—	3	—	—	3	—	3
Incentive and compensation plans	—	21	13	—	(16)	18	—	18
Adjust investment in subsidiaries for repurchases, issuances and other compensation plans	—	(7)	—	—	—	(7)	(3)	(10)
Distributions to noncontrolling interests	—	—	—	—	—	—	(2)	(2)
December 31, 2020	\$ 1	\$ 2,482	\$ (477)	\$ (4)	\$ 2,802	\$ 4,804	\$ 789	\$ 5,593

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

Telephone and Data Systems, Inc.
Consolidated Statement of Changes in Equity

TDS Shareholders

	Series A Common and Common shares	Capital in excess of par value	Treasury shares	Accumulated other comprehensive income (loss)	Retained earnings	Total TDS shareholders' equity	Noncontrolling interests	Total equity
(Dollars in millions, except per share amounts)								
December 31, 2018	\$ 1	\$ 2,432	\$ (519)	\$ (10)	\$ 2,656	\$ 4,560	\$ 733	\$ 5,293
Cumulative effect of accounting changes	—	—	—	—	2	2	—	2
Net income attributable to TDS shareholders	—	—	—	—	121	121	—	121
Net income attributable to noncontrolling interests classified as equity	—	—	—	—	—	—	26	26
Other comprehensive income	—	—	—	1	—	1	—	1
TDS Common and Series A Common Share dividends (\$0.66 per share)	—	—	—	—	(75)	(75)	—	(75)
Dividend reinvestment plan	—	1	20	—	(6)	15	—	15
Incentive and compensation plans	—	18	20	—	(26)	12	—	12
Adjust investment in subsidiaries for repurchases, issuances and other compensation plans	—	17	—	—	—	17	(5)	12
Distributions to noncontrolling interests	—	—	—	—	—	—	(3)	(3)
December 31, 2019	\$ 1	\$ 2,468	\$ (479)	\$ (9)	\$ 2,672	\$ 4,653	\$ 751	\$ 5,404

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

Telephone and Data Systems, Inc.
Consolidated Statement of Changes in Equity

	TDS Shareholders							Total equity
	Series A Common and Common shares	Capital in excess of par value	Treasury shares	Accumulated other comprehensive income (loss)	Retained earnings	Total TDS shareholders' equity	Noncontrolling interests	
(Dollars in millions, except per share amounts)								
December 31, 2017	\$ 1	\$ 2,413	\$ (669)	\$ (1)	\$ 2,525	\$ 4,269	\$ 623	\$ 4,892
Cumulative effect of accounting changes	—	—	—	(1)	165	164	31	195
Net income attributable to TDS shareholders	—	—	—	—	135	135	—	135
Net income attributable to noncontrolling interests classified as equity	—	—	—	—	—	—	28	28
Other comprehensive loss	—	—	—	(8)	—	(8)	—	(8)
TDS Common and Series A Common Share dividends (\$0.64 per share)	—	—	—	—	(72)	(72)	—	(72)
Dividend reinvestment plan	—	1	25	—	(14)	12	—	12
Incentive and compensation plans	—	17	125	—	(83)	59	—	59
Adjust investment in subsidiaries for repurchases, issuances and other compensation plans	—	1	—	—	—	1	54	55
Distributions to noncontrolling interests	—	—	—	—	—	—	(3)	(3)
December 31, 2018	\$ 1	\$ 2,432	\$ (519)	\$ (10)	\$ 2,656	\$ 4,560	\$ 733	\$ 5,293

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

Telephone and Data Systems, Inc.
Notes to Consolidated Financial Statements

Note 1 Summary of Significant Accounting Policies and Recent Accounting Pronouncements

Nature of Operations

Telephone and Data Systems, Inc. (TDS) is a diversified telecommunications company providing high-quality communications services to customers with 5.0 million wireless connections and 1.2 million wireline and cable connections at December 31, 2020. TDS conducts all of its wireless operations through its 82%-owned subsidiary, United States Cellular Corporation (UScellular). TDS provides wireline and cable services through its wholly-owned subsidiary, TDS Telecommunications LLC (TDS Telecom).

TDS has the following reportable segments: UScellular, Wireline, and Cable. TDS' non-reportable other business activities are presented as "Corporate, Eliminations and Other", which includes the operations of TDS' wholly-owned hosted and managed services (HMS) subsidiary, which operates under the OneNeck IT Solutions brand, and its wholly-owned printing subsidiary Suttle-Straus, Inc. (Suttle-Straus). HMS' and Suttle-Straus' financial results were not significant to TDS' operations. All of TDS' segments operate only in the United States. See Note 19 — Business Segment Information for summary financial information on each business segment.

Principles of Consolidation

The accounting policies of TDS conform to accounting principles generally accepted in the United States of America (GAAP) as set forth in the Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC). Unless otherwise specified, references to accounting provisions and GAAP in these notes refer to the requirements of the FASB ASC. The consolidated financial statements include the accounts of TDS and subsidiaries in which it has a controlling financial interest, including UScellular and TDS Telecom. In addition, the consolidated financial statements include certain entities in which TDS has a variable interest that requires consolidation under GAAP. See Note 15 — Variable Interest Entities for additional information relating to TDS' VIEs. Intercompany accounts and transactions have been eliminated.

Use of Estimates

The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect (a) the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and (b) the reported amounts of revenues and expenses during the reported period. Actual results could differ from those estimates. Significant estimates are involved in accounting for goodwill, indefinite-lived intangible assets and income taxes.

Cash, Cash Equivalents and Restricted Cash

Cash and cash equivalents include cash and highly liquid investments with original maturities of three months or less. Cash and cash equivalents subject to contractual restrictions are classified as restricted cash. The following table provides a reconciliation of Cash and cash equivalents and restricted cash reported in the Consolidated Balance Sheet to the total of the amounts in the Consolidated Statement of Cash Flows.

December 31,	2020	2019
(Dollars in millions)		
Cash and cash equivalents	\$ 1,429	\$ 465
Restricted cash included in Other current assets	23	9
Cash, cash equivalents and restricted cash in the statement of cash flows	<u>\$ 1,452</u>	<u>\$ 474</u>

Accounts Receivable and Allowance for Doubtful Accounts

UScellular's accounts receivable consist primarily of amounts owed by customers for wireless services and equipment sales, including sales of certain devices and accessories under installment plans, by agents and third-party distributors for sales of equipment to them and by other wireless carriers whose customers have used UScellular's wireless systems.

TDS Telecom's accounts receivable primarily consist of amounts owed by customers for services and products provided, by state and federal governments for grants and support funds, and by interexchange carriers for long-distance and data traffic, which TDS Telecom carries on its network.

TDS estimates expected credit losses related to accounts receivable balances based on a review of available and relevant information including current economic conditions, projected economic conditions, historical loss experience, account aging, and other factors that could affect collectability. Expected credit losses are determined for each pool of accounts receivable balances that share similar risk characteristics. The allowance for doubtful accounts is the best estimate of the amount of expected credit losses related to existing accounts receivable. TDS does not have any off-balance sheet credit exposure related to its customers.

Inventory

Inventory consists primarily of wireless devices stated at the lower of cost, which approximates cost determined on the first-in first-out basis, or net realizable value. Net realizable value is determined by reference to the stand-alone selling price.

Licenses

Licenses consist of direct and incremental costs incurred in acquiring Federal Communications Commission (FCC) wireless spectrum licenses that generally provide UScellular with the exclusive right to utilize designated radio spectrum within specific geographic service areas to provide wireless service. Although wireless spectrum licenses are issued for a fixed period of time, generally ten years, or in some cases twelve or fifteen years, the FCC has granted license renewals routinely and at a nominal cost. The wireless spectrum licenses held by UScellular expire at various dates. UScellular believes that it is probable that its future wireless spectrum license renewal applications will be granted. UScellular determined that there are currently no legal, regulatory, contractual, competitive, economic or other factors that limit the useful lives of the wireless spectrum licenses. Therefore, UScellular has determined that wireless spectrum licenses are indefinite-lived intangible assets.

UScellular performs its annual impairment assessment of wireless spectrum licenses as of November 1 of each year or more frequently if there are events or circumstances that cause UScellular to believe it is more likely than not that the carrying value of wireless spectrum licenses exceeds fair value. For purposes of its impairment testing, UScellular separated its FCC wireless spectrum licenses into eight units of accounting. The eight units of accounting consisted of one unit of accounting for developed operating market wireless spectrum licenses (built wireless spectrum licenses) and seven units of accounting for geographic non-operating market wireless spectrum licenses (unbuilt wireless spectrum licenses).

UScellular performed a qualitative impairment assessment in 2020 and a quantitative impairment assessment in 2019 to determine whether the wireless spectrum licenses were impaired. Based on the impairment assessments performed, UScellular did not have an impairment of its wireless spectrum licenses in 2020 or 2019. See Note 7 — Intangible Assets for additional details related to wireless spectrum licenses.

Goodwill

TDS has Goodwill as a result of its acquisition of wireline and cable companies. TDS performs its annual impairment assessment of Goodwill as of November 1 of each year or more frequently if there are events or circumstances that cause TDS to believe it is more likely than not that the carrying value of individual reporting units exceeds their respective fair values. Goodwill impairment loss will be measured as the amount by which a reporting unit's carrying amount exceeds its fair value. The loss recognized should not exceed the total amount of goodwill allocated to that reporting unit.

For purposes of conducting its Goodwill impairment tests, TDS Telecom identified two reporting units: Wireline and Cable. The discounted cash flow approach and guideline public company method were used to value the Wireline and Cable reporting units for the annual impairment tests. Based on the annual impairment assessments performed, Wireline and Cable did not have an impairment of their Goodwill in 2020 or 2019.

See Note 7 — Intangible Assets for additional details related to Goodwill.

Franchise Rights

TDS Telecom has franchise rights as a result of acquisitions of cable businesses. Franchise rights are intangible assets that provide their holder with the right to operate a business in a certain geographical location as sanctioned by the franchiser, usually a government agency. Franchise rights are generally granted for ten years and may be renewed for additional terms upon approval by the granting authority. TDS anticipates that future renewals of its franchise rights will be granted. TDS reviews franchise rights for impairment whenever events or changes in circumstances indicate that the assets might be impaired. TDS re-evaluates the useful life of franchise rights each year to determine if changes in technology or other business changes would warrant a revision of its remaining useful life. Franchise rights are included in Other intangible assets in the Consolidated Balance Sheet.

See Note 7 — Intangible Assets for additional details related to franchise rights.

Investments in Unconsolidated Entities

For its equity method investments for which financial information is readily available, TDS records its equity in the earnings of the entity in the current period. For its equity method investments for which financial information is not readily available, TDS records its equity in the earnings of the entity on a one quarter lag basis.

Property, Plant and Equipment

Property, plant and equipment is stated at the original cost of construction or purchase including capitalized costs of certain taxes, payroll-related expenses, interest and estimated costs to remove the assets.

Expenditures that enhance the productive capacity of assets in service or extend their useful lives are capitalized and depreciated. Expenditures for maintenance and repairs of assets in service are charged to Cost of services or Selling, general and administrative expense, as applicable. Retirements and disposals of assets are recorded by removing the original cost of the asset (along with the related accumulated depreciation) from plant in service and recording it, together with proceeds, if any, and net removal costs (removal costs less an applicable accrued asset retirement obligation and salvage value realized), as a gain or loss, as appropriate. Certain Wireline segment assets use the group depreciation method. Accordingly, when a group method asset is retired in the ordinary course of business, the original cost of the asset and accumulated depreciation in the same amount are removed, with no gain or loss recognized on the disposition.

TDS capitalizes certain costs of developing new information systems. Software licenses that qualify for capitalization as an asset are accounted for as the acquisition of an intangible asset and the incurrence of a liability to the extent that the license fees are not fully paid at acquisition.

Depreciation and Amortization

Depreciation is provided using the straight-line method over the estimated useful life of the related asset, except for certain Wireline segment assets, which use the group depreciation method. The group depreciation method develops a depreciation rate based on the average useful life of a specific group of assets, rather than each asset individually. TDS depreciates leasehold improvement assets over periods ranging from one year to thirty years; such periods approximate the shorter of the assets' economic lives or the specific lease terms.

Useful lives of specific assets are reviewed throughout the year to determine if changes in technology or other business changes would warrant accelerating the depreciation of those specific assets. There were no material changes to the assigned useful lives of the various categories of property, plant and equipment in 2020, 2019 or 2018. However, in 2020 and 2019, depreciation for certain specific assets was accelerated due to changes in technology. See Note 9 — Property, Plant and Equipment for additional details related to useful lives.

Impairment of Long-Lived Assets

TDS reviews long-lived assets for impairment whenever events or changes in circumstances indicate that the assets might be impaired. UScellular has one asset group and TDS Telecom has two asset groups for purposes of assessing property, plant and equipment for impairment based on the integrated nature of its network, assets and operations. The cash flows generated by each of these groups is the lowest level for which identifiable cash flows are largely independent of the cash flows of other groups of assets and liabilities.

Leases

A lease is generally present in a contract if the lessee controls the use of identified property, plant or equipment for a period of time in exchange for consideration. See Note 10 — Leases for additional details related to leases.

Agent Liabilities

UScellular has relationships with agents, which are independent businesses that obtain customers for UScellular. At December 31, 2020 and 2019, UScellular had accrued \$55 million and \$59 million, respectively, in agent related liabilities. These amounts are included in Other current liabilities in the Consolidated Balance Sheet.

Debt Issuance Costs

Debt issuance costs include underwriters' and legal fees and other charges related to issuing and renewing various borrowing instruments and other long-term agreements, and are amortized over the respective term of each instrument. Debt issuance costs related to TDS' and UScellular's revolving credit agreements and UScellular's receivables securitization agreement are recorded in Other assets and deferred charges in the Consolidated Balance Sheet. All other debt issuance costs are presented as an offset to the related debt obligation in the Consolidated Balance Sheet.

Asset Retirement Obligations

TDS records asset retirement obligations for the fair value of legal obligations associated with asset retirements and a corresponding increase in the carrying amount of the related long-lived asset in the period in which the obligations are incurred. In periods subsequent to initial measurement, TDS recognizes changes in the liability resulting from the passage of time and updates to the timing or the amount of the original estimates. The liability is accreted to its estimated settlement date value over the period to the estimated settlement date. The change in the carrying amount of the long-lived asset is depreciated over the average remaining life of the related asset. See Note 11 — Asset Retirement Obligations for additional information.

Treasury Shares

Common Shares repurchased by TDS are recorded at cost as treasury shares and result in a reduction of equity. When treasury shares are reissued, TDS determines the cost using the first-in, first-out cost method. The difference between the cost of the treasury shares and reissuance price is included in Capital in excess of par value or Retained earnings.

Revenue Recognition

Revenues from sales of equipment and products are recognized when control has transferred to the customer, agent or third-party distributor. Service revenues are recognized as the related service is provided. See Note 2 — Revenue Recognition for additional information on TDS' policies related to Revenues.

Advertising Costs

TDS expenses advertising costs as incurred. Advertising costs totaled \$213 million, \$227 million and \$230 million in 2020, 2019 and 2018, respectively.

Income Taxes

TDS files a consolidated federal income tax return. Deferred taxes are computed using the liability method, whereby deferred tax assets are recognized for future deductible temporary differences and operating loss carryforwards, and deferred tax liabilities are recognized for future taxable temporary differences. Both deferred tax assets and liabilities are measured using the enacted tax rates in effect when the temporary differences are expected to reverse. Temporary differences are the differences between the reported amounts of assets and liabilities and their tax bases. Deferred tax assets and liabilities are adjusted for the effects of changes in tax laws and rates on the date of enactment. Deferred tax assets are reduced by a valuation allowance when it is more likely than not that some portion or all of the deferred tax assets will not be realized. TDS evaluates income tax uncertainties, assesses the probability of the ultimate settlement with the applicable taxing authority and records an amount based on that assessment. Deferred taxes are reported as a net non-current asset or liability by jurisdiction. Any corresponding valuation allowance to reduce the amount of deferred tax assets is also recorded as non-current. See Note 5 — Income Taxes for additional information.

Stock-Based Compensation and Other Plans

TDS has established long-term incentive plans, dividend reinvestment plans, and a non-employee director compensation plan. The dividend reinvestment plan of TDS is not considered a compensatory plan and, therefore, recognition of compensation costs for grants made under this plan is not required. All other plans are considered compensatory plans; therefore, recognition of costs for grants made under these plans is required.

TDS recognizes stock compensation expense based upon the fair value of the specific awards granted using established valuation methodologies. The amount of stock compensation cost recognized on either a straight-line basis or graded attribution method is based on the portion of the award that is expected to vest over the requisite service period, which generally represents the vesting period. Stock-based compensation cost recognized has been reduced for estimated forfeitures. Forfeitures are estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. See Note 18 — Stock-Based Compensation for additional information.

Recently Adopted Accounting Pronouncements

In June 2016, the FASB issued Accounting Standards Update 2016-13, *Financial Instruments - Credit Losses: Measurement of Credit Losses on Financial Instruments* and subsequently amended the standard with additional Accounting Standards Updates, collectively referred to as ASC 326. This standard requires entities to use a new forward-looking, expected loss model to estimate credit losses and requires additional disclosures relating to the credit quality of trade and other receivables. TDS adopted the provisions of ASC 326 on January 1, 2020, using a modified retrospective method. Under this method, TDS applied the new accounting standard only to the most recent period presented, recognizing the cumulative effect of the accounting change, as an adjustment to the beginning balance of retained earnings. Accordingly, prior periods have not been recast to reflect the new accounting standard. The cumulative effect of applying the provisions of ASC 326 had no material impact on retained earnings.

In August 2018, the FASB issued Accounting Standards Update 2018-15, *Intangibles - Goodwill and Other - Internal-Use Software: Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract* (ASU 2018-15). ASU 2018-15 aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the existing guidance for capitalizing implementation costs for an arrangement that has a software license. The service element of a hosting arrangement will continue to be expensed as incurred. Any capitalized implementation costs will be amortized over the period of the service contract. TDS adopted ASU 2018-15 on January 1, 2020, using the prospective method. The adoption of ASU 2018-15 did not have a significant impact on TDS' financial position or results of operations.

TDS' cloud-hosted arrangements that are service contracts consist primarily of software used to perform administrative functions. Implementation costs related to TDS' cloud-hosted arrangements, which are recorded in Prepaid expenses and Other assets and deferred charges in the Consolidated Balance Sheet, were as follows:

December 31,	2020	
(Dollars in millions)		
Implementation costs, gross	\$	69
Accumulated amortization		(13)
Implementation costs, net	\$	56

These costs are amortized over the period of the service contract, which is generally three to five years. Amortization of implementation costs was \$11 million for the year ended December 31, 2020 and was included in Selling, general and administrative expenses.

Note 2 Revenue Recognition

Nature of goods and services

The following is a description of principal activities from which TDS generates its revenues.

Services and products	Nature, timing of satisfaction of performance obligations, and significant payment terms
Wireless services	Wireless service includes voice, messaging and data services. Revenue is recognized in Service revenues as wireless service is provided to the customer. Wireless services generally are billed and paid in advance on a monthly basis.
Wireless devices and accessories	UScellular offers a comprehensive range of wireless devices such as handsets, tablets, mobile hotspots, home phones and routers for use by its customers, as well as accessories. UScellular also sells wireless devices to agents and other third-party distributors for resale. UScellular frequently discounts wireless devices sold to new and current customers. UScellular also offers customers the option to purchase certain devices and accessories under installment contracts over a specified time period. For certain equipment installment plans, after a specified period of time, the customer may have the right to upgrade to a new device. Such upgrades require the customer to enter into an equipment installment contract for the new device, and transfer the existing device to UScellular. UScellular recognizes revenue in Equipment and product sales revenues when control of the device or accessory is transferred to the customer, agent or third-party distributor, which is generally upon delivery.
Wireless roaming	UScellular receives roaming revenues when other wireless carriers' customers use UScellular's wireless systems. UScellular recognizes revenue in Service revenues when the roaming service is provided.
Wireless Eligible Telecommunications Carrier (ETC) Revenues	Telecommunications companies may be designated by states, or in some cases by the FCC, as an ETC to receive support payments from the Universal Service Fund if they provide specified services in "high cost" areas. ETC revenues recognized in the reporting period represent the amounts which UScellular is entitled to receive for such period, as determined and approved in connection with UScellular's designation as an ETC in various states.
Wireless tower rents	UScellular receives tower rental revenues when another carrier leases tower space on a UScellular owned tower. UScellular recognizes revenue in Service revenues in the period during which the services are provided.
Wireline services	Wireline services include broadband, video and voice services. Revenue is recognized in Service revenues as service is provided to the customer. Wireline services are generally billed and paid in advance on a monthly basis.
Wireline wholesale revenues	Wholesale revenues include network access services primarily to interexchange and wireless carriers for carrying data and voice traffic on TDS Telecom's network, special access services and state and federal support payments, including A-CAM. Wholesale revenues are recorded as the related service is provided.
Cable services	Cable services include broadband, video and voice services. Revenue is recognized in Service revenues as service is provided to the customer. Cable services are generally billed and paid in advance on a monthly basis.
IT hardware sales	TDS recognizes equipment revenue when it no longer has any requirements to perform, when title has passed and when the products are accepted by the customer.
Hosted and managed services	HMS Service revenues consist of cloud and hosting solutions, managed services, Enterprise Resource Planning (ERP) application management, colocation services, and IT hardware related maintenance and professional services. Revenues related to these services are recognized as services are provided.

Significant Judgments

As a practical expedient, TDS groups similar contracts or similar performance obligations together into portfolios of contracts or performance obligations if doing so does not result in a significant difference from accounting for the individual contracts discretely. TDS applies this grouping method for the following types of transactions: device activation fees, contract acquisition costs, contract fulfillment costs, and certain customer promotions. Contract portfolios are recognized over the respective expected customer lives or terms of the contracts.

Services are deemed to be highly interrelated when the method and timing of transfer and performance risk are the same. Highly interrelated services that are determined to not be distinct have been grouped into a single performance obligation. Each month of services promised is a performance obligation. The series of monthly service performance obligations promised over the course of the contract are combined into a single performance obligation for purposes of the allocation.

TDS has made judgments regarding transaction price, including but not limited to issues relating to variable consideration, time value of money, returns and non-cash consideration. When determined to be significant in the context of the contract, these items are considered in the valuation of transaction price at contract inception or modification, as appropriate.

Multiple Performance Obligations

UScellular and TDS Telecom sell bundled service and equipment offerings. In these instances, TDS recognizes its revenue based on the relative standalone selling prices for each distinct service or equipment performance obligation, or bundles thereof. TDS estimates the standalone selling price of the device or accessory to be its retail price excluding discounts. TDS estimates the standalone selling price of wireless service to be the price offered to customers on month-to-month contracts.

Incentives

Discounts, incentives, and rebates to agents and end customers that are deemed cash are recognized as a reduction of Operating revenues concurrently with the associated revenue.

From time to time, UScellular may offer certain promotions to incentivize customers to switch to, or to purchase additional services from, UScellular. Under these types of promotions, an eligible customer may receive an incentive in the form of a discount off additional services purchased shown as a credit to the customer's monthly bill. UScellular accounts for the future discounts as material rights at the time of the initial transaction by allocating and deferring revenue based on the relative proportion of the future discounts in comparison to the aggregate initial purchase. The deferred revenue will be recognized as service revenue in future periods.

Amounts Collected from Customers and Remitted to Governmental Authorities

TDS records amounts collected from customers and remitted to governmental authorities on a net basis within a liability account if the amount is assessed upon the customer and TDS merely acts as an agent in collecting the amount on behalf of the imposing governmental authority. If the amount is assessed upon TDS, then amounts collected from customers are recorded in Service revenues and amounts remitted to governmental authorities are recorded in Selling, general and administrative expenses in the Consolidated Statement of Operations. The amounts recorded gross in revenues that are billed to customers and remitted to governmental authorities totaled \$82 million, \$78 million and \$90 million for 2020, 2019 and 2018, respectively.

Disaggregation of Revenue

In the following table, TDS' revenues are disaggregated by type of service, which represents the relevant categorization of revenues for TDS' reportable segments, and timing of recognition. Service revenues are recognized over time and Equipment and product sales are point in time.

Year Ended December 31, 2020	TDS Telecom			TDS Telecom Total ¹	Corporate, Eliminations and Other	Total
	UScellular	Wireline	Cable			
(Dollars in millions)						
Revenues from contracts with customers:						
Type of service:						
Retail service	\$ 2,686	\$ —	\$ —	\$ —	\$ —	\$ 2,686
Inbound roaming	152	—	—	—	—	152
Residential	—	349	245	594	—	594
Commercial	—	152	46	198	—	198
Wholesale	—	181	—	181	—	181
Other service	152	—	—	(1)	69	220
Service revenues from contracts with customers	2,990	683	290	972	69	4,031
Equipment and product sales	970	1	—	1	118	1,089
Total revenues from contracts with customers²	\$ 3,960	\$ 683	\$ 290	\$ 973	\$ 187	\$ 5,120

Year Ended December 31, 2019	TDS Telecom				Corporate, Eliminations and Other	Total
	UScellular	Wireline	Cable	TDS Telecom Total ¹		
(Dollars in millions)						
Revenues from contracts with customers:						
Type of service:						
Retail service	\$ 2,650	\$ —	\$ —	\$ —	\$ —	\$ 2,650
Inbound roaming	174	—	—	—	—	174
Residential	—	328	205	533	—	533
Commercial	—	168	41	209	—	209
Wholesale	—	185	—	185	—	185
Other service	137	—	—	(1)	72	208
Service revenues from contracts with customers	2,961	681	246	926	72	3,959
Equipment and product sales	987	1	—	1	129	1,117
Total revenues from contracts with customers²	\$ 3,948	\$ 682	\$ 246	\$ 927	\$ 201	\$ 5,076

Year Ended December 31, 2018	TDS Telecom				Corporate, Eliminations and Other	Total
	UScellular	Wireline	Cable	TDS Telecom Total ¹		
(Dollars in millions)						
Revenues from contracts with customers:						
Type of service:						
Retail service	\$ 2,623	\$ —	\$ —	\$ —	\$ —	\$ 2,623
Inbound roaming	154	—	—	—	—	154
Residential	—	321	188	509	—	509
Commercial	—	184	42	226	—	226
Wholesale	—	191	—	191	—	191
Other service	135	—	—	(1)	72	206
Service revenues from contracts with customers	2,912	696	230	925	72	3,909
Equipment and product sales	989	2	—	2	119	1,110
Total revenues from contracts with customers²	\$ 3,901	\$ 698	\$ 230	\$ 927	\$ 191	\$ 5,019

Numbers may not foot due to rounding.

¹ TDS Telecom Total includes eliminations between the Wireline and Cable segments.

² Revenue line items in this table will not agree to amounts presented in the Consolidated Statement of Operations as the amounts in this table only include revenue resulting from contracts with customers.

Contract Balances

For contracts that involve multiple element service and equipment offerings, the transaction price is allocated to each performance obligation based on its relative standalone selling price. When payment is collected in advance of delivery of goods or services, a contract liability is recorded. A contract asset is recorded when revenue is recognized in advance of TDS' right to receive consideration. Once there is an unconditional right to receive the consideration, TDS bills the customer under the terms of the respective contract and the amounts are recorded as receivables.

TDS recognizes Equipment and product sales revenue when the equipment is delivered to the customer and a corresponding contract asset or liability is recorded for the difference between the amount of revenue recognized and the amount billed to the customer in cases where discounts are offered. The contract asset or liability is reduced over the contract term as service is provided and billed to the customer.

The following table provides balances for contract assets from contracts with customers, which are recorded in Other current assets and Other assets and deferred charges in the Consolidated Balance Sheet, and contract liabilities from contracts with customers, which are recorded in Customer deposits and deferred revenues and Other deferred liabilities and credits in the Consolidated Balance Sheet.

December 31,	2020		2019	
(Dollars in millions)				
Contract assets	\$	13	\$	10
Contract liabilities	\$	216	\$	197

Revenue recognized related to contract liabilities existing at January 1, 2020 was \$172 million for the year ended December 31, 2020.

Transaction price allocated to the remaining performance obligations

The following table includes estimated service revenues expected to be recognized related to performance obligations that are unsatisfied (or partially unsatisfied) at the end of the reporting period. These estimates represent service revenues to be recognized when services are delivered to customers pursuant to service plan contracts and under certain roaming agreements with other carriers. These estimates are based on contracts in place as of December 31, 2020, and may vary from actual results. As practical expedients, revenue related to contracts of less than one year, generally month-to-month contracts, and contracts with a fixed per-unit price and variable quantity, are excluded from these estimates.

		Service Revenues	
(Dollars in millions)			
2021		\$	377
2022			160
Thereafter			158
Total		\$	695

Contract Cost Assets

TDS expects that commission fees paid as a result of obtaining contracts are recoverable and therefore TDS defers and amortizes these costs. As a practical expedient, costs with an amortization period of one year or less are expensed as incurred. TDS also incurs fulfillment costs, such as installation costs, where there is an expectation that a future benefit will be realized. Deferred commission fees and fulfillment costs are amortized based on the timing of transfer of the goods or services to which the assets relate, typically the contract term. Contract cost asset balances, which are recorded in Other assets and deferred charges in the Consolidated Balance Sheet, were as follows:

December 31,	2020		2019	
(Dollars in millions)				
Costs to obtain contracts				
Sales commissions	\$	139	\$	146
Fulfillment costs				
Installation costs		10		11
Total contract cost assets	\$	149	\$	157

Amortization of contract cost assets was \$120 million, \$126 million and \$124 million for the years ended December 31, 2020, 2019 and 2018, respectively, and was included in Selling, general and administrative expenses and Cost of services expenses.

Note 3 Fair Value Measurements

As of December 31, 2020 and 2019, TDS did not have any material financial or nonfinancial assets or liabilities that were required to be recorded at fair value in its Consolidated Balance Sheet in accordance with GAAP.

The provisions of GAAP establish a fair value hierarchy that contains three levels for inputs used in fair value measurements. Level 1 inputs include quoted market prices for identical assets or liabilities in active markets. Level 2 inputs include quoted market prices for similar assets and liabilities in active markets or quoted market prices for identical assets and liabilities in inactive markets. Level 3 inputs are unobservable. A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. A financial instrument's level within the fair value hierarchy is not representative of its expected performance or its overall risk profile and, therefore, Level 3 assets are not necessarily higher risk than Level 2 assets or Level 1 assets.

TDS has applied the provisions of fair value accounting for purposes of computing the fair value of financial instruments for disclosure purposes as displayed below.

	Level within the Fair Value Hierarchy	December 31, 2020		December 31, 2019	
		Book Value	Fair Value	Book Value	Fair Value
(Dollars in millions)					
Cash and cash equivalents	1	\$ 1,429	\$ 1,429	\$ 465	\$ 465
Short-term investments	1	3	3	—	—
Long-term debt					
Retail	2	2,753	2,809	1,753	1,796
Institutional	2	535	707	534	594
Other	2	230	230	84	84

The fair values of Cash and cash equivalents and Short-term investments approximate their book values due to the short-term nature of these financial instruments. Long-term debt excludes lease obligations, other installment arrangements, the current portion of Long-term debt and debt financing costs. The fair value of “Retail” Long-term debt was estimated using market prices for TDS’ 7.0% Senior Notes, 6.875% Senior Notes, 6.625% Senior Notes and 5.875% Senior Notes, and UScellular’s 7.25% 2063 Senior Notes, 7.25% 2064 Senior Notes, 6.95% Senior Notes, 6.25% Senior Notes issued in August 2020 and 5.5% Senior Notes issued in December 2020. TDS’ “Institutional” debt consists of UScellular’s 6.7% Senior Notes which are traded over the counter. TDS’ “Other” debt consists of senior term loan credit agreements and receivables securitization agreement. TDS estimated the fair value of its Institutional and Other debt through a discounted cash flow analysis using the interest rates or estimated yield to maturity for each borrowing, which ranged from 1.35% to 3.75% and 3.55% to 6.25% at December 31, 2020 and 2019, respectively.

Note 4 Equipment Installment Plans

UScellular sells devices to customers under equipment installment plans over a specified time period. For certain equipment installment plans, after a specified period of time or amount of payments, the customer may have the right to upgrade to a new device and have the remaining unpaid equipment installment contract balance waived, subject to certain conditions, including trading in the original device in good working condition and signing a new equipment installment contract.

The following table summarizes equipment installment plan receivables as of December 31, 2020 and 2019.

December 31,	2020	2019
(Dollars in millions)		
Equipment installment plan receivables, gross	\$ 1,007	\$ 1,008
Allowance for credit losses	(78)	(84)
Equipment installment plan receivables, net	<u>\$ 929</u>	<u>\$ 924</u>

Net balance presented in the Consolidated Balance Sheet as:

Accounts receivable — Customers and agents (Current portion)	\$ 590	\$ 587
Other assets and deferred charges (Non-current portion)	339	337
Equipment installment plan receivables, net	<u>\$ 929</u>	<u>\$ 924</u>

UScellular uses various inputs, including internal data, information from credit bureaus and other sources, to evaluate the credit profiles of its customers. From this evaluation, a credit class is assigned to the customer that determines the number of eligible lines, the amount of credit available, and the down payment requirement, if any. These credit classes are grouped into four credit categories: lowest risk, lower risk, slight risk and higher risk. A customer's assigned credit class is reviewed periodically and a change is made, if appropriate. An equipment installment plan billed amount is considered past due if not paid within 30 days. The balance and aging of the equipment installment plan receivables on a gross basis by credit category were as follows:

	December 31, 2020					December 31, 2019				
	Lowest Risk	Lower Risk	Slight Risk	Higher Risk	Total	Lowest Risk	Lower Risk	Slight Risk	Higher Risk	Total
(Dollars in millions)										
Unbilled	\$ 819	\$ 98	\$ 22	\$ 9	\$ 948	\$ 812	\$ 99	\$ 23	\$ 8	\$ 942
Billed — current	36	5	1	1	43	37	5	2	1	45
Billed — past due	8	5	2	1	16	11	6	3	1	21
Total	<u>\$ 863</u>	<u>\$ 108</u>	<u>\$ 25</u>	<u>\$ 11</u>	<u>\$ 1,007</u>	<u>\$ 860</u>	<u>\$ 110</u>	<u>\$ 28</u>	<u>\$ 10</u>	<u>\$ 1,008</u>

The balance of the equipment installment plan receivables as of December 31, 2020 on a gross basis by year of origination were as follows:

	2018	2019	2020	Total
(Dollars in millions)				
Lowest Risk	\$ 42	\$ 270	\$ 551	\$ 863
Lower Risk	3	28	77	108
Slight Risk	1	6	18	25
Higher Risk	—	2	9	11
Total	<u>\$ 46</u>	<u>\$ 306</u>	<u>\$ 655</u>	<u>\$ 1,007</u>

Activity for the years ended December 31, 2020 and December 31, 2019, in the allowance for credit losses for equipment installment plan receivables was as follows:

	2020	2019
(Dollars in millions)		
Allowance for credit losses, beginning of year	\$ 84	\$ 77
Bad debts expense	50	82
Write-offs, net of recoveries	(56)	(75)
Allowance for credit losses, end of year	<u>\$ 78</u>	<u>\$ 84</u>

Note 5 Income Taxes

TDS' current income taxes balances at December 31, 2020 and 2019, were as follows:

December 31,	2020	2019
(Dollars in millions)		
Federal income taxes receivable	\$ 180	\$ 31
Net state income taxes receivable	7	5

Income tax expense (benefit) is summarized as follows:

Year Ended December 31,	2020	2019	2018
(Dollars in millions)			
Current			
Federal	\$ (175)	\$ 15	\$ 10
State	4	15	3
Deferred			
Federal	179	36	24
State	11	(2)	9
Total income tax expense (benefit)	<u>\$ 19</u>	<u>\$ 64</u>	<u>\$ 46</u>

A reconciliation of TDS' income tax expense computed at the statutory rate to the reported income tax expense, and the statutory federal income tax rate to TDS' effective income tax rate is as follows:

Year Ended December 31,	2020		2019		2018	
	Amount	Rate	Amount	Rate	Amount	Rate
(Dollars in millions)						
Statutory federal income tax expense and rate	\$ 60	21.0 %	\$ 44	21.0 %	\$ 46	21.0 %
State income taxes, net of federal benefit ¹	11	4.0	12	5.5	11	4.9
Federal income tax rate change ²	—	—	—	—	(16)	(7.1)
Change in federal valuation allowance ³	—	—	7	3.1	(1)	(0.3)
Loss carryback benefit of CARES Act ⁴	(60)	(21.0)	—	—	—	—
Nondeductible compensation	9	3.0	4	1.9	9	4.1
Tax credits	(2)	(0.6)	(4)	(1.9)	(1)	(0.6)
Other differences, net	1	—	1	0.7	(2)	(1.0)
Total income tax expense (benefit) and rate	<u>\$ 19</u>	<u>6.4 %</u>	<u>\$ 64</u>	<u>30.3 %</u>	<u>\$ 46</u>	<u>21.0 %</u>

¹ State income taxes, net of federal benefit, include changes in unrecognized tax benefits as well as adjustments to state valuation allowances.

² The Tax Act reduced the federal income tax rate from 35% to 21% for years after 2017, resulting in a tax benefit in 2018 due primarily to an income tax accounting method change that accelerated tax depreciation on certain assets for the 2017 tax year, pursuant to FASB Accounting Standards Update 2018-05, *Income Taxes: Amendments to SEC Paragraphs Pursuant to SEC Staff Accounting Bulletin No. 118*.

³ Change in federal valuation allowance in 2019 is due primarily to interest expense carryforwards not expected to be realized. The 2018 change also includes interest expense carryforwards not expected to be realized, offset by a change in judgment related to net operating loss carryforwards that became realizable due to an internal restructuring.

⁴ The CARES Act provides a 5-year carryback of net operating losses generated in years 2018-2020. As the statutory federal tax rate applicable to certain years within the carryback period is 35%, carryback to those years provides a tax benefit in excess of the current federal statutory rate of 21%.

Significant components of TDS' deferred income tax assets and liabilities at December 31, 2020 and 2019, were as follows:

December 31,	2020	2019
(Dollars in millions)		
Deferred tax assets		
Net operating loss (NOL) carryforwards	\$ 183	\$ 168
Lease liabilities	257	251
Asset retirement obligation	81	74
Other	109	106
Total deferred tax assets	<u>630</u>	<u>599</u>
Less valuation allowance	<u>(158)</u>	<u>(152)</u>
Net deferred tax assets	<u>472</u>	<u>447</u>
Deferred tax liabilities		
Property, plant and equipment	652	481
Licenses/intangibles	287	261
Partnership investments	144	132
Lease assets	235	226
Other	17	22
Total deferred tax liabilities	<u>1,335</u>	<u>1,122</u>
Net deferred income tax liability	<u>\$ 863</u>	<u>\$ 675</u>

At December 31, 2020, TDS and certain subsidiaries had \$3,088 million of state NOL carryforwards (generating a \$166 million deferred tax asset) available to offset future taxable income. The state NOL carryforwards expire between 2021 and 2040. TDS and certain subsidiaries had \$80 million of federal NOL carryforwards (generating a \$17 million deferred tax asset) available to offset future taxable income. The federal NOL carryforwards generally expire between 2021 and 2038, with the exception of federal NOLs generated after 2017, which do not expire. A valuation allowance was established for certain state NOL carryforwards and federal NOL carryforwards since it is more likely than not that a portion of such carryforwards will expire before they can be utilized.

A summary of TDS' deferred tax asset valuation allowance is as follows:

	2020	2019	2018
(Dollars in millions)			
Balance at beginning of year	\$ 152	\$ 135	\$ 147
Charged to Income tax expense	6	17	(5)
Charged to Retained earnings	—	—	(7)
Balance at end of year	<u>\$ 158</u>	<u>\$ 152</u>	<u>\$ 135</u>

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

	2020	2019	2018
(Dollars in millions)			
Unrecognized tax benefits balance at beginning of year	\$ 49	\$ 49	\$ 46
Additions for tax positions of current year	8	8	8
Additions for tax positions of prior years	3	—	2
Reductions for tax positions of prior years	(1)	(7)	(1)
Reductions for settlements of tax positions	—	(1)	—
Reductions for lapses in statutes of limitations	(5)	—	(6)
Unrecognized tax benefits balance at end of year	<u>\$ 54</u>	<u>\$ 49</u>	<u>\$ 49</u>

Unrecognized tax benefits are included in Accrued taxes and Other deferred liabilities and credits in the Consolidated Balance Sheet. If these benefits were recognized, they would have reduced income tax expense in 2020, 2019 and 2018 by \$43 million, \$39 million and \$39 million, respectively, net of the federal benefit from state income taxes.

TDS recognizes accrued interest and penalties related to unrecognized tax benefits in Income tax expense (benefit). The amounts charged to income tax expense related to interest and penalties resulted in an expense of \$2 million, \$3 million and less than \$1 million in 2020, 2019 and 2018, respectively. Net accrued liabilities for interest and penalties were \$23 million and \$21 million at December 31, 2020 and 2019, respectively, and are included in Other deferred liabilities and credits in the Consolidated Balance Sheet.

TDS and its subsidiaries file federal and state income tax returns. With limited exceptions, TDS is no longer subject to federal and state income tax audits for the years prior to 2017.

Note 6 Earnings Per Share

Basic earnings per share attributable to TDS shareholders is computed by dividing Net income attributable to TDS shareholders by the weighted average number of Common Shares outstanding during the period. Diluted earnings per share attributable to TDS shareholders is computed by dividing Net income attributable to TDS shareholders by the weighted average number of Common Shares outstanding during the period adjusted to include the effects of potentially dilutive securities. Potentially dilutive securities primarily include incremental shares issuable upon the exercise of outstanding stock options and the vesting of performance and restricted stock units.

The amounts used in computing basic and diluted earnings per share attributable to TDS shareholders were as follows:

Year Ended December 31,	2020	2019	2018
(Dollars and shares in millions, except per share amounts)			
Net income attributable to TDS shareholders used in basic earnings per share	\$ 226	\$ 121	\$ 135
Adjustments to compute diluted earnings:			
Noncontrolling interest adjustment	(3)	(1)	(2)
Net income attributable to TDS shareholders used in diluted earnings per share	<u>\$ 223</u>	<u>\$ 120</u>	<u>\$ 133</u>
Weighted average number of shares used in basic earnings per share:			
Common Shares	107	107	105
Series A Common Shares	7	7	7
Total	<u>114</u>	<u>114</u>	<u>112</u>
Effects of dilutive securities			
	<u>1</u>	<u>2</u>	<u>2</u>
Weighted average number of shares used in diluted earnings per share	<u>115</u>	<u>116</u>	<u>114</u>
Basic earnings per share attributable to TDS shareholders			
	<u>\$ 1.97</u>	<u>\$ 1.06</u>	<u>\$ 1.20</u>
Diluted earnings per share attributable to TDS shareholders			
	<u>\$ 1.93</u>	<u>\$ 1.03</u>	<u>\$ 1.17</u>

Certain Common Shares issuable upon the exercise of stock options or vesting of performance and restricted stock units were not included in weighted average diluted shares outstanding for the calculation of Diluted earnings per share attributable to TDS shareholders because their effects were antidilutive. The number of such Common Shares excluded was 5 million shares, 2 million shares and 3 million shares for 2020, 2019 and 2018, respectively.

Note 7 Intangible Assets

Licenses

TDS reviews attractive opportunities to acquire additional wireless spectrum, including pursuant to FCC auctions. TDS also may seek to divest outright or include in exchanges wireless spectrum that is not strategic to its long-term success. Prior to 2009, TDS accounted for UScellular's share repurchases as step acquisitions, allocating a portion of the share repurchase value to TDS' Licenses. Consequently, UScellular's Licenses on a stand-alone basis do not equal the TDS consolidated Licenses related to UScellular. Activity related to TDS' Licenses is presented below.

	UScellular	Wireline	Cable	Total
(Dollars in millions)				
Balance at December 31, 2018	\$ 2,190	\$ 2	\$ 3	\$ 2,195
Acquisitions	267	—	—	267
Divestitures	(10)	—	—	(10)
Exchanges - Licenses received	26	—	—	26
Capitalized interest	2	—	—	2
Balance at December 31, 2019	<u>2,475</u>	<u>2</u>	<u>3</u>	<u>2,480</u>
Acquisitions	171	—	—	171
Divestitures	(18)	—	—	(18)
Capitalized interest	5	—	—	5
Balance at December 31, 2020	<u>\$ 2,633</u>	<u>\$ 2</u>	<u>\$ 3</u>	<u>\$ 2,638</u>

Auction 103

In March 2020, the FCC announced by way of public notice that UScellular was the provisional winning bidder for 237 wireless spectrum licenses in the 37, 39 and 47 GHz bands (Auction 103) for \$146 million. In June 2020, the wireless spectrum licenses from Auction 103 were granted by the FCC.

Goodwill

Activity related to TDS' Goodwill is presented below.

	Wireline ¹	Cable	Total
(Dollars in millions)			
Balance at December 31, 2018	\$ 409	\$ 100	\$ 509
Acquisitions	—	38	38
Balance at December 31, 2019	409	138	547
Acquisitions	—	—	—
Balance at December 31, 2020	\$ 409	\$ 138	\$ 547

¹ Accumulated impairment losses in prior periods were \$29 million for Wireline.

Other intangible assets

Activity related to TDS' Other intangible assets is presented below.

	December 31, 2020			December 31, 2019		
	Gross Amount	Accumulated Amortization	Net Amount	Gross Amount	Accumulated Amortization	Net Amount
(Dollars in millions)						
Franchise rights	\$ 255	\$ (51)	\$ 204	\$ 255	\$ (34)	\$ 221
Customer lists and Trade name ¹	29	(20)	9	49	(31)	18
Total	\$ 284	\$ (71)	\$ 213	\$ 304	\$ (65)	\$ 239

¹ The Customer lists and Trade name balances at December 31, 2019 differ from the amounts reported in Note 8 – Intangible Assets of the 2019 Form 10-K, as the previously reported amounts included certain intangible assets that were fully amortized and had a net book value of zero.

Amortization expense for intangible assets was \$26 million, \$24 million and \$26 million for the years ended December 31, 2020, 2019 and 2018, respectively. Based on the current balance of finite-lived intangible assets, the estimated amortization expense is \$21 million, \$20 million, \$19 million, \$17 million and \$17 million for the years 2021 through 2025, respectively.

Note 8 Investments in Unconsolidated Entities

Investments in unconsolidated entities consist of amounts invested in entities in which TDS holds a noncontrolling interest. TDS' Investments in unconsolidated entities are accounted for using either the equity method or measurement alternative method as shown in the table below. The carrying value of measurement alternative method investments represents cost minus any impairments plus or minus any observable price changes.

December 31,	2020	2019
(Dollars in millions)		
Equity method investments:		
Capital contributions, loans, advances and adjustments	\$ 115	\$ 116
Cumulative share of income	2,278	2,099
Cumulative share of distributions	(1,937)	(1,748)
Total equity method investments	456	467
Measurement alternative method investments	21	21
Total investments in unconsolidated entities	\$ 477	\$ 488

The following tables, which are based on unaudited information provided in part by third parties, summarize the combined assets, liabilities and equity, and results of operations of TDS' equity method investments:

December 31,	2020		2019	
(Dollars in millions)				
Assets				
Current	\$	1,232	\$	1,516
Noncurrent		5,908		5,776
Total assets	\$	7,140	\$	7,292
Liabilities and Equity				
Current liabilities	\$	646	\$	626
Noncurrent liabilities		1,124		1,132
Partners' capital and shareholders' equity		5,370		5,534
Total liabilities and equity	\$	7,140	\$	7,292

Year Ended December 31,	2020		2019		2018	
(Dollars in millions)						
Results of Operations						
Revenues	\$	6,702	\$	6,929	\$	6,801
Operating expenses		4,753		5,043		4,985
Operating income		1,949		1,886		1,816
Other income (expense), net		13		(24)		9
Net income	\$	1,962	\$	1,862	\$	1,825

Note 9 Property, Plant and Equipment

TDS' Property, plant and equipment in service and under construction, and related accumulated depreciation and amortization, as of December 31, 2020 and 2019, were as follows:

December 31,	Useful Lives (Years)	2020		2019	
(Dollars in millions)					
Land	N/A	\$	56	\$	57
Buildings	5-40		533		527
Leasehold and land improvements	1-30		1,404		1,314
Cable and wire	15-40		2,195		1,996
Network and switching equipment	3-10		2,634		2,507
Cell site equipment	7-25		4,017		3,708
Office furniture and equipment	3-10		394		387
Other operating assets and equipment	1-12		189		174
System development	1-7		1,709		1,604
Work in process	N/A		528		590
Total property, plant and equipment, gross			13,659		12,864
Accumulated depreciation and amortization			(9,687)		(9,337)
Total property, plant and equipment, net		\$	3,972	\$	3,527

Depreciation and amortization expense totaled \$862 million, \$890 million and \$839 million in 2020, 2019 and 2018, respectively. In 2020, 2019 and 2018, (Gain) loss on asset disposals, net included charges of \$27 million, \$12 million and \$9 million, respectively, related to disposals of assets, trade-ins of older assets for replacement assets and other retirements of assets from service in the normal course of business.

Note 10 Leases

Change in Accounting Policy

In February 2016, the FASB issued Accounting Standards Update 2016-02, *Leases* and subsequently amended the standard with several Accounting Standards Updates, collectively referred to as ASC 842. This standard replaces the previous lease accounting standard under ASC 840 - *Leases* and requires lessees to record a right-of-use (ROU) asset and lease liability for the majority of leases. TDS adopted the provisions of ASC 842 on January 1, 2019, using a modified retrospective method. Under this method, TDS elected to apply the new accounting standard only to the most recent period presented, recognizing the cumulative effect of the accounting change as an adjustment to the beginning balance of retained earnings. Accordingly, prior periods have not been recast to reflect the new accounting standard. The cumulative effect of applying the provisions of ASC 842 had no material impact on retained earnings.

Lessee Agreements

A lease is generally present in a contract if the lessee controls the use of identified property, plant or equipment for a period of time in exchange for consideration. Nearly all of TDS' leases are classified as operating leases, although it does have a small number of finance leases. TDS' most significant leases are for land and tower spaces, network facilities, retail spaces, and offices.

TDS has agreements with both lease and nonlease components, which are accounted for separately. As part of the present value calculation for the lease liabilities, TDS uses an incremental borrowing rate as the rates implicit in the leases are not readily determinable. The incremental borrowing rates used for lease accounting are based on TDS' unsecured rates, adjusted to approximate the rates at which TDS would be required to borrow on a collateralized basis over a term similar to the recognized lease term. TDS applies the incremental borrowing rates to lease components using a portfolio approach based upon the length of the lease term and the reporting entity in which the lease resides. The cost of nonlease components in TDS' lease portfolio (e.g., utilities and common area maintenance) are not typically predetermined at lease commencement and are expensed as incurred at their relative standalone price.

Variable lease expense occurs when, subsequent to the lease commencement, lease payments are made that were not originally included in the lease liability calculation. TDS' variable lease payments are primarily a result of leases with escalations that are tied to an index. The incremental changes due to the index changes are recorded as variable lease expense and are not included in the ROU assets or lease liabilities.

The identified lease term determines the periods to which expense is allocated and also has a significant impact on the ROU asset and lease liability calculations. Many of TDS' leases include renewal and early termination options. At lease commencement, the lease terms include options to extend the lease when TDS is reasonably certain that it will exercise the options. The lease terms do not include early termination options unless TDS is reasonably certain to exercise the options. Certain asset classes have similar lease characteristics; therefore, TDS has applied the portfolio approach for lease term recognition for its tower space, retail, and certain ground lease asset classes.

The following table shows the components of lease cost included in the Consolidated Statement of Operations:

Year Ended December 31,	2020		2019	
(Dollars in millions)				
Operating lease cost	\$	184	\$	177
Financing lease cost:				
Amortization of ROU assets		2		2
Interest on lease liabilities		1		1
Variable lease cost		11		8
Total lease cost	\$	198	\$	188

The following table shows supplemental cash flow information related to lease activities:

Year Ended December 31,	2020		2019	
(Dollars in millions)				
Cash paid for amounts included in the measurement of lease liabilities:				
Operating cash flows from operating leases	\$	188	\$	172
Operating cash flows from finance leases		1		1
ROU assets obtained in exchange for lease obligations:				
Operating leases	\$	157	\$	132
Finance leases		—		10

The following table shows the classification of TDS' finance leases in its Consolidated Balance Sheet:

December 31,	2020	2019
(Dollars in millions)		
Finance Leases		
Property, plant and equipment	\$ 20	\$ 20
Less: Accumulated depreciation and amortization	7	5
Property, plant and equipment, net	<u>\$ 13</u>	<u>\$ 15</u>
Current portion of long-term debt	—	1
Long-term debt, net	<u>\$ 7</u>	<u>\$ 7</u>
Total finance lease liabilities	<u>\$ 7</u>	<u>\$ 8</u>

The table below shows a weighted-average analysis for lease terms and discount rates for all leases:

December 31,	2020	2019
Weighted Average Remaining Lease Term		
Operating leases	12 years	12 years
Finance leases	25 years	24 years
Weighted Average Discount Rate		
Operating leases	4.1 %	4.4 %
Finance leases	6.2 %	6.3 %

The maturities of lease liabilities are as follows:

	Operating Leases	Finance Leases
(Dollars in millions)		
2021	\$ 169	\$ —
2022	168	1
2023	151	1
2024	132	1
2025	100	—
Thereafter	708	15
Total lease payments ¹	<u>\$ 1,428</u>	<u>\$ 18</u>
Less: Imputed interest	359	11
Present value of lease liabilities	<u>\$ 1,069</u>	<u>\$ 7</u>

¹ Lease payments exclude \$54 million of legally binding lease payments for leases signed but not yet commenced.

Lessor Agreements

TDS' most significant lessor leases are for tower space and colocation space. All of TDS' lessor leases are classified as operating leases. A lease is generally present in a contract if the lessee controls the use of identified property, plant, or equipment for a period of time in exchange for consideration. TDS' lessor agreements with lease and nonlease components are generally accounted for separately; however, certain service agreements with insignificant lease components are accounted for as nonlease transactions.

The identified lease term determines the periods to which revenue is allocated over the term of the lease. Many of TDS' leases include renewal and early termination options. At lease commencement, lease terms include options to extend the lease when TDS is reasonably certain that lessees will exercise the options. Lease terms would not include periods after the date of a termination option that lessees are reasonably certain to exercise.

Variable lease income occurs when, subsequent to the lease commencement, lease payments are received that were not originally included in the lease receivable calculation. TDS' variable lease income is primarily a result of leases with escalations that are tied to an index. The incremental increases due to the index changes are recorded as variable lease income.

The following table shows the components of lease income which are included in Service revenues in the Consolidated Statement of Operations:

Year Ended December 31,	2020	2019
(Dollars in millions)		
Operating lease income ¹	\$ 105	\$ 100

¹ During the third quarter of 2019, TDS recorded an out-of-period adjustment attributable to 2009 through the second quarter of 2019 due to errors in the timing of recognition of revenue for certain tower leases. This out-of-period adjustment had the impact of increasing operating lease income by \$5 million for the year ended December 31, 2019. TDS determined that this adjustment was not material to any of the periods impacted.

The maturities of expected lease payments to be received are as follows:

	Operating Leases
(Dollars in millions)	
2021	\$ 93
2022	77
2023	51
2024	35
2025	16
Thereafter	19
Total future lease maturities	<u>\$ 291</u>

Note 11 Asset Retirement Obligations

UScellular is subject to asset retirement obligations associated with its leased cell sites, switching office sites, retail store sites and office locations. Asset retirement obligations generally include obligations to restore leased land, towers, retail store and office premises to their pre-lease conditions.

TDS Telecom owns poles, cable and wire and certain buildings and also leases office space and property used for housing central office switching equipment and fiber cable. These assets and leases often have removal or remediation requirements associated with them. For example, TDS Telecom's poles, cable and wire are often located on property that is not owned by TDS Telecom and may be subject to the provisions of easements, permits, or leasing arrangements. Pursuant to the terms of the permits, easements, or leasing arrangements, TDS Telecom is often required to remove these assets and return the property to its original condition at a future date.

Asset retirement obligations are included in Other deferred liabilities and credits in the Consolidated Balance Sheet.

In 2020 and 2019, UScellular and TDS Telecom performed a review of the assumptions and estimated costs related to asset retirement obligations. The results of the reviews (identified as Revisions in estimated cash outflows) and other changes in asset retirement obligations during 2020 and 2019, were as follows:

	2020	2019
(Dollars in millions)		
Balance at beginning of year	\$ 342	\$ 307
Additional liabilities accrued	5	13
Revisions in estimated cash outflows	11	2
Acquisition of assets	—	1
Disposition of assets	(1)	(1)
Accretion expense	20	20
Balance at end of year	<u>\$ 377</u>	<u>\$ 342</u>

Note 12 Debt

Revolving Credit Agreements

At December 31, 2020, TDS and UScellular had revolving credit agreements available for general corporate purposes. Amounts under the revolving credit agreements may be borrowed, repaid and reborrowed from time to time until maturity in March 2025. Interest expense representing commitment fees on the unused portion of the revolving lines of credit was \$2 million in each of 2020, 2019 and 2018. The commitment fees are based on the unsecured senior debt ratings assigned to TDS and UScellular by certain ratings agencies.

The following table summarizes the revolving credit agreements as of December 31, 2020:

	TDS		UScellular	
(Dollars in millions)				
Maximum borrowing capacity	\$	400	\$	300
Letters of credit outstanding	\$	1	\$	2
Amount borrowed	\$	—	\$	—
Amount available for use	\$	399	\$	298

Borrowings under the revolving credit agreements bear interest either at a London Inter-bank Offered Rate (LIBOR) plus 1.50% or at an alternative Base Rate as defined in the revolving credit agreement plus 0.50%, at TDS' or UScellular's option. TDS and UScellular may select a borrowing period of either one, two, three or six months (or other period of twelve months or less if requested by TDS or UScellular and approved by the lenders). TDS' and UScellular's credit spread and commitment fees on their revolving credit agreements may be subject to increase if their current credit ratings from nationally recognized credit rating agencies are lowered, and may be subject to decrease if the ratings are raised.

In connection with UScellular's revolving credit agreement, TDS and UScellular entered into a subordination agreement together with the administrative agent for the lenders under UScellular's revolving credit agreement. Pursuant to this subordination agreement, (a) any consolidated funded indebtedness from UScellular to TDS will be unsecured and (b) any (i) consolidated funded indebtedness from UScellular to TDS (other than "refinancing indebtedness" as defined in the subordination agreement) in excess of \$105 million and (ii) refinancing indebtedness in excess of \$250 million will be subordinated and made junior in right of payment to the prior payment in full of obligations to the lenders under UScellular's revolving credit agreement. As of December 31, 2020, UScellular had no outstanding consolidated funded indebtedness or refinancing indebtedness that was subordinated to the revolving credit agreement pursuant to the subordination agreement.

The continued availability of the revolving credit agreements requires TDS and UScellular to comply with certain negative and affirmative covenants, maintain certain financial ratios and make representations regarding certain matters at the time of each borrowing.

The revolving credit agreements include the following financial covenants:

- Consolidated Interest Coverage Ratio may not be less than 3.00 to 1.00 as of the end of any fiscal quarter.
- Consolidated Leverage Ratio may not be greater than 3.25 to 1.00 as of the end of any fiscal quarter.

Certain TDS and UScellular wholly-owned subsidiaries have jointly and severally unconditionally guaranteed the payment and performance of the obligations of TDS and UScellular under the revolving credit agreements. Other subsidiaries that meet certain criteria will be required to provide a similar guaranty in the future. TDS and UScellular believe that they were in compliance with all of the financial and other covenants and requirements set forth in their revolving credit agreements as of December 31, 2020.

Term Loan Agreements

At December 31, 2020, TDS and UScellular had senior term loan credit agreements available for general corporate purposes. The term loans may be drawn in one or more advances by the one-year anniversary of the date of the agreement, which is January 6, 2021 for TDS and June 11, 2021 for UScellular; amounts not drawn by that time will cease to be available.

The following table summarizes the term loan credit agreements as of December 31, 2020:

	TDS		UScellular	
(Dollars in millions)				
Maximum borrowing capacity	\$	200	\$	300
Amount borrowed	\$	125	\$	83
Amount available for use	\$	75	\$	217

Borrowings under the TDS term loan bear interest at a rate of LIBOR plus 2.0%. Principal reductions are due and payable in quarterly installments of \$0.5 million beginning in June 2021. The remaining unpaid balance will be due and payable in January 2027. In January 2021, TDS borrowed \$75 million under the senior term loan credit agreement.

Borrowings under the UScellular term loan bear interest at a rate of LIBOR plus 2.25%. Principal reductions are due and payable in quarterly installments of \$0.75 million beginning in September 2021. The remaining unpaid balance will be due and payable in June 2027. In connection with UScellular's term loan credit agreement, TDS and UScellular entered into a subordination agreement together with the administrative agent for the lenders under UScellular's term loan credit agreement, which is substantially the same as the subordination agreement for UScellular as described above under the "Revolving Credit Agreements." As of December 31, 2020, UScellular had no outstanding consolidated funded indebtedness or refinancing indebtedness that was subordinated to the term loan agreement pursuant to this subordination agreement.

The senior term loan credit agreements contain financial covenants and subsidiary guarantees that are consistent with the revolving credit agreements described above. TDS and UScellular believe that they were in compliance with all of the financial and other covenants and requirements set forth in their term loan credit agreements as of December 31, 2020.

Receivables Securitization Agreement

At December 31, 2020, UScellular had a receivables securitization agreement for securitized borrowings using its equipment installment receivables for general corporate purposes. Amounts under the receivables securitization agreement may be borrowed, repaid and reborrowed from time to time until maturity in December 2022, which may be extended from time to time as specified therein. The outstanding borrowings bear interest at floating rates. In April 2020, UScellular borrowed \$125 million under its receivables securitization agreement. In October 2020, UScellular amended and restated its agreement to increase its total borrowing capacity to \$300 million. In December 2020, UScellular repaid \$100 million of the outstanding borrowing. As of December 31, 2020, the outstanding borrowings under the agreement were \$25 million and the unused capacity was \$275 million, subject to sufficient collateral to satisfy the asset borrowing base provisions of the agreement. As of December 31, 2020, the USCC Master Note Trust held \$205 million of assets available to be pledged as collateral for the receivables securitization agreement. Interest expense representing commitment fees on the unused portion of the agreement was \$1 million in each of 2020, 2019 and 2018.

In connection with entering into the receivables securitization agreement in 2017, UScellular formed a wholly-owned subsidiary, USCC Master Note Trust (Trust), which qualifies as a bankruptcy remote entity. Under the terms of the agreement, UScellular, through its subsidiaries, transfers eligible equipment installment receivables to the Trust. The Trust then utilizes the transferred assets as collateral for notes payables issued to third party financial institutions. Since UScellular retains effective control of the transferred assets in the Trust, any activity associated with this receivables securitization agreement will be treated as a secured borrowing. Therefore, TDS will continue to report equipment installment receivables and any related balances on the Consolidated Balance Sheet. Cash received from borrowings under the receivables securitization agreement will be reported as Debt. Refer to Note 15 — Variable Interest Entities for additional information.

UScellular entered into a performance guaranty whereby UScellular guarantees the performance of certain wholly-owned subsidiaries of UScellular under the receivables securitization agreement.

The continued availability of the receivables securitization agreement requires UScellular to comply with certain negative and affirmative covenants, maintain certain financial ratios and provide representations on certain matters at the time of each borrowing. The covenants include the same financial covenants for UScellular as described above under the "Revolving Credit Agreements." TDS believes that UScellular was in compliance as of December 31, 2020, with all of the financial covenants and requirements set forth in its receivables securitization agreement.

Other Long-Term Debt

In August 2020, UScellular issued \$500 million of 6.25% Senior Notes due 2069, and received cash proceeds of \$483 million after payment of debt issuance costs of \$17 million. These funds will be used for general corporate purposes.

In December 2020, UScellular issued \$500 million of 5.5% Senior Notes due 2070, and received cash proceeds of \$483 million after payment of debt issuance costs of \$17 million. These funds will be used for general corporate purposes.

Long-term debt as of December 31, 2020 and 2019, was as follows:

	Issuance date	Maturity date	Call date (any time on or after)	December 31, 2020			December 31, 2019		
				Principal Amount	Less Unamortized discounts and debt issuance costs	Total	Principal Amount	Less Unamortized discount and debt issuance costs	Total
(Dollars in millions)									
TDS Unsecured Senior Notes									
6.625%	Mar 2005	Mar 2045	Mar 2010	\$ 116	\$ 3	\$ 113	\$ 116	\$ 3	\$ 113
6.875%	Nov 2010	Nov 2059	Nov 2015	225	7	218	225	7	218
7.000%	Mar 2011	Mar 2060	Mar 2016	300	9	291	300	9	291
5.875%	Dec 2012	Dec 2061	Dec 2017	195	7	188	195	7	188
UScellular Unsecured Senior Notes									
6.700%	Dec 2003 and June 2004	Dec 2033	Dec 2003 and June 2004	\$ 544	\$ 13	\$ 531	\$ 544	\$ 13	\$ 531
6.950%	May 2011	May 2060	May 2016	342	11	331	342	11	331
7.250%	Dec 2014	Dec 2063	Dec 2019	275	10	265	275	10	265
7.250%	Nov 2015	Dec 2064	Dec 2020	300	10	290	300	10	290
6.250%	Aug 2020	Sep 2069	Sep 2025	500	17	483	—	—	—
5.500%	Dec 2020	Mar 2070	Mar 2026	500	17	483	—	—	—
UScellular Term Loan				83	3	80	83	1	82
TDS Term Loan				125	2	123	—	—	—
EIP Securitization				25	—	25	—	—	—
Finance lease obligations				7	—	7	8	—	8
Installment payment agreement				—	—	—	8	1	7
Other long-term notes				1	—	1	2	—	2
Total long-term debt				\$ 3,538	\$ 109	\$ 3,429	\$ 2,398	\$ 72	\$ 2,326
Long-term debt, current						\$ 5			\$ 10
Long-term debt, noncurrent						\$ 3,424			\$ 2,316

TDS may redeem its callable notes and UScellular may redeem its 6.95% Senior Notes, 7.25% 2063 Senior Notes, 7.25% 2064 Senior Notes, 6.25% Senior Notes and 5.5% Senior Notes, in whole or in part at any time after the respective call date, at a redemption price equal to 100% of the principal amount redeemed plus accrued and unpaid interest. UScellular may redeem the 6.7% Senior Notes, in whole or in part, at any time prior to maturity at a redemption price equal to the greater of (a) 100% of the principal amount of such notes, plus accrued and unpaid interest, or (b) the sum of the present values of the remaining scheduled payments of principal and interest thereon discounted to the redemption date on a semi-annual basis at the Treasury Rate plus 30 basis points.

Interest on the Senior Notes outstanding at December 31, 2020, is payable quarterly, with the exception of UScellular's 6.7% Senior Notes for which interest is payable semi-annually.

The annual requirements for principal payments on long-term debt are approximately \$5 million, \$30 million, \$5 million, \$5 million and \$5 million for the years 2021 through 2025, respectively.

The covenants associated with TDS and its subsidiaries' long-term debt obligations, among other things, restrict TDS' ability, subject to certain exclusions, to incur additional liens, enter into sale and leaseback transactions, and sell, consolidate or merge assets.

TDS' and UScellular's long-term debt notes do not contain any provisions resulting in acceleration of the maturities of outstanding debt in the event of a change in TDS' or UScellular's credit rating.

Note 13 Employee Benefit Plans

Defined Contribution Plans

TDS sponsors a qualified noncontributory defined contribution pension plan. The plan provides benefits for certain employees of TDS Corporate, TDS Telecom and UScellular. Under this plan, pension costs are calculated separately for each participant and are funded annually. Total pension costs were \$16 million in 2020, \$17 million in 2019 and \$16 million in 2018. In addition, TDS sponsors a defined contribution retirement savings plan (401(k) plan). Total costs incurred from TDS' contributions to the 401(k) plan were \$27 million in 2020, \$25 million in 2019 and \$28 million in 2018.

TDS also sponsors an unfunded nonqualified deferred supplemental executive retirement plan for certain employees to offset the reduction of benefits caused by the limitation on annual employee compensation under the tax laws.

Other Post-Retirement Benefits

TDS sponsors a defined benefit post-retirement plan that provides medical benefits to retirees and that covers certain employees of TDS Corporate and TDS Telecom, which is not significant to TDS' financial position or operating results. The plan is contributory, with retiree contributions adjusted annually. TDS recognizes the funded status of the plan as a component of Other assets and deferred charges in the Consolidated Balance Sheet as of December 31, 2020 and 2019. Changes in the funded status are included in Accumulated other comprehensive income (loss) in the Consolidated Balance Sheet before affecting such amounts for income taxes to the extent that such changes are not recognized in earnings as a component of net periodic benefit cost.

The post-retirement benefit fund invests mainly in mutual funds that hold U.S. equities, international equities, and debt securities. The post-retirement benefit fund does not hold any debt or equity securities issued by TDS, UScellular or any related parties. The fair value of the plan assets of the post-retirement benefit fund was \$69 million and \$63 million as of December 31, 2020 and 2019, respectively. The total plan benefit obligations were \$57 million and \$55 million as of December 31, 2020 and 2019, respectively. Therefore, the total funded status was an asset of \$12 million and \$8 million as of December 31, 2020 and 2019, respectively.

TDS is not required to set aside current funds for its future retiree health insurance benefits. The decision to contribute to the plan assets is based upon several factors, including the funded status of the plan, market conditions, alternative investment opportunities, tax benefits and other circumstances. In accordance with applicable income tax regulations, annual contributions to fund the costs of future retiree medical benefits may not exceed certain thresholds. TDS has not determined whether it will make a contribution to the plan in 2021.

Note 14 Commitments and Contingencies

Indemnifications

TDS enters into agreements in the normal course of business that provide for indemnification of counterparties. The terms of the indemnifications vary by agreement. The events or circumstances that would require TDS to perform under these indemnities are transaction specific; however, these agreements may require TDS to indemnify the counterparty for costs and losses incurred from litigation or claims arising from the underlying transaction. TDS is unable to estimate the maximum potential liability for these types of indemnifications as the amounts are dependent on the outcome of future events, the nature and likelihood of which cannot be determined at this time. Historically, TDS has not made any significant indemnification payments under such agreements.

Legal Proceedings

TDS is involved or may be involved from time to time in legal proceedings before the FCC, other regulatory authorities, and/or various state and federal courts. If TDS believes that a loss arising from such legal proceedings is probable and can be reasonably estimated, an amount is accrued in the financial statements for the estimated loss. If only a range of loss can be determined, the best estimate within that range is accrued; if none of the estimates within that range is better than another, the low end of the range is accrued. The assessment of the expected outcomes of legal proceedings is a highly subjective process that requires judgments about future events. The legal proceedings are reviewed at least quarterly to determine the adequacy of accruals and related financial statement disclosures. The ultimate outcomes of legal proceedings could differ materially from amounts accrued in the financial statements.

TDS accrued less than \$1 million and \$2 million with respect to legal proceedings and unasserted claims as of December 31, 2020 and 2019, respectively. TDS is unable to estimate any contingent loss in excess of the amounts accrued.

In April 2018, the United States Department of Justice (DOJ) notified TDS that it was conducting inquiries of UScellular and TDS under the federal False Claims Act relating to UScellular's participation in wireless spectrum license auctions 58, 66, 73 and 97 conducted by the FCC. UScellular is/was a limited partner in several limited partnerships which qualified for the 25% bid credit in each auction. The investigation arose from civil actions under the Federal False Claims Act brought by private parties in the U.S. District Court for the Western District of Oklahoma. In November and December 2019, following the DOJ's investigation, the DOJ informed TDS and UScellular that it would not intervene in the above-referenced actions. Subsequently, the private party plaintiffs filed amended complaints in both actions in the U.S. District Court for the Western District of Oklahoma and are continuing the action on their own. In July 2020, these actions were transferred to the U.S. District Court for the District of Columbia. TDS and UScellular believe that UScellular's arrangements with the limited partnerships and the limited partnerships' participation in the FCC auctions complied with applicable law and FCC rules. At this time, TDS cannot predict the outcome of any proceeding.

Other Commitments

Subsequent to December 31, 2020, UScellular committed to purchase wireless spectrum licenses for approximately \$1,460 million inclusive of associated costs, subject to regulatory approval.

Note 15 Variable Interest Entities

Consolidated VIEs

TDS consolidates VIEs in which it has a controlling financial interest as defined by GAAP and is therefore deemed the primary beneficiary. TDS reviews the criteria for a controlling financial interest at the time it enters into agreements and subsequently when events warranting reconsideration occur. These VIEs have risks similar to those described in the “Risk Factors” in TDS’ Form 10-K for the year ended December 31, 2020.

UScellular formed USCC EIP LLC (Seller/Sub-Servicer), USCC Receivables Funding LLC (Transferor) and the Trust, collectively the special purpose entities (SPEs), to facilitate a securitized borrowing using its equipment installment plan receivables. Under a Receivables Sale Agreement, UScellular wholly-owned, majority-owned and unconsolidated entities, collectively referred to as “affiliated entities”, transfer device equipment installment plan contracts to the Seller/Sub-Servicer. The Seller/Sub-Servicer aggregates device equipment installment plan contracts, and performs servicing, collection and all other administrative activities related to accounting for the equipment installment plan contracts. The Seller/Sub-Servicer sells the eligible equipment installment plan receivables to the Transferor, a bankruptcy remote entity, which subsequently sells the receivables to the Trust. The Trust, which is bankruptcy remote and isolated from the creditors of UScellular, will be responsible for issuing asset-backed variable funding notes (Notes), which are collateralized by the equipment installment plan receivables owned by the Trust. Given that UScellular has the power to direct the activities of these SPEs, and that these SPEs lack sufficient equity to finance their activities, UScellular is deemed to have a controlling financial interest in the SPEs and, therefore, consolidates them. All transactions with third parties (e.g., issuance of the asset-backed variable funding notes) will be accounted for as a secured borrowing due to the pledging of equipment installment plan contracts as collateral, significant continuing involvement in the transferred assets, subordinated interests of the cash flows, and continued evidence of control of the receivables. Refer to Note 12 — Debt, Receivables Securitization Agreement for additional details regarding the securitization agreement for which these entities were established.

The following VIEs were formed to participate in FCC auctions of wireless spectrum licenses and to fund, establish, and provide wireless service with respect to any FCC wireless spectrum licenses won in the auctions:

- Advantage Spectrum, L.P. (Advantage Spectrum) and Sunshine Spectrum, Inc., the general partner of Advantage Spectrum; and
- King Street Wireless, L.P. (King Street Wireless) and King Street Wireless, Inc., the general partner of King Street Wireless.

These particular VIEs are collectively referred to as designated entities. The power to direct the activities that most significantly impact the economic performance of these VIEs is shared. Specifically, the general partner of these VIEs has the exclusive right to manage, operate and control the limited partnerships and make all decisions to carry on the business of the partnerships. The general partner of each partnership needs the consent of the limited partner, an indirect TDS subsidiary, to sell or lease certain wireless spectrum licenses, to make certain large expenditures, admit other partners or liquidate the limited partnerships. Although the power to direct the activities of these VIEs is shared, TDS has the most significant level of exposure to the variability associated with the economic performance of the VIEs, indicating that TDS is the primary beneficiary of the VIEs. Therefore, in accordance with GAAP, these VIEs are consolidated.

TDS also consolidates other VIEs that are limited partnerships that provide wireless service. A limited partnership is a variable interest entity unless the limited partners hold substantive participating rights or kick-out rights over the general partner. For certain limited partnerships, UScellular is the general partner and manages the operations. In these partnerships, the limited partners do not have substantive kick-out or participating rights and, further, such limited partners do not have the authority to remove the general partner. Therefore, these limited partnerships also are recognized as VIEs and are consolidated under the variable interest model.

The following table presents the classification and balances of the consolidated VIEs' assets and liabilities in TDS' Consolidated Balance Sheet.

December 31,	2020	2019
(Dollars in millions)		
Assets		
Cash and cash equivalents	\$ 18	\$ 19
Short-term investments	3	—
Accounts receivable	638	637
Inventory, net	3	5
Other current assets	21	7
Licenses	637	647
Property, plant and equipment, net	99	95
Operating lease right-of-use assets	37	42
Other assets and deferred charges	347	347
Total assets	<u>\$ 1,803</u>	<u>\$ 1,799</u>
Liabilities		
Current liabilities	\$ 26	\$ 30
Long-term operating lease liabilities	34	39
Other deferred liabilities and credits	19	13
Total liabilities	<u>\$ 79</u>	<u>\$ 82</u>

Unconsolidated VIEs

TDS manages the operations of and holds a variable interest in certain other limited partnerships, but is not the primary beneficiary of these entities and, therefore, does not consolidate them under the variable interest model.

TDS' total investment in these unconsolidated entities was \$5 million at both December 31, 2020 and 2019, and is included in Investments in unconsolidated entities in TDS' Consolidated Balance Sheet. The maximum exposure from unconsolidated VIEs is limited to the investment held by TDS in those entities.

Other Related Matters

TDS made contributions, loans or advances to its VIEs totaling \$111 million, \$255 million and \$152 million during 2020, 2019 and 2018, respectively; of which \$83 million in 2020, \$214 million in 2019 and \$116 million in 2018 are related to USCC EIP LLC as discussed above. TDS may agree to make additional capital contributions and/or advances to these or other VIEs and/or to their general partners to provide additional funding for operations or the development of wireless spectrum licenses granted in various auctions. TDS may finance such amounts with a combination of cash on hand, borrowings under its revolving credit or receivables securitization agreements and/or other long-term debt. There is no assurance that TDS will be able to obtain additional financing on commercially reasonable terms or at all to provide such financial support.

The limited partnership agreement of Advantage Spectrum also provides the general partner with a put option whereby the general partner may require the limited partner, a subsidiary of UScellular, to purchase its interest in the limited partnership. The general partner's put option related to its interest in Advantage Spectrum will be exercisable in 2021, and if not exercised at that time, will be exercisable in 2022. The greater of the carrying value of the general partner's investment or the value of the put option, net of any borrowings due to TDS, is recorded as Noncontrolling interests with redemption features in TDS' Consolidated Balance Sheet. Also in accordance with GAAP, minority share of income or changes in the redemption value of the put option, net of interest accrued on the loans, are recorded as a component of Net income attributable to noncontrolling interests, net of tax, in TDS' Consolidated Statement of Operations.

During the first quarter of 2018, TDS recorded an out-of-period adjustment attributable to 2016 and 2017 due to errors in the application of accounting guidance applicable to the calculation of Noncontrolling interests with redemption features related to King Street Wireless, Inc. This out-of-period adjustment had the impact of increasing Net income attributable to noncontrolling interests, net of tax, by \$6 million and decreasing Net income attributable to TDS shareholders by \$6 million in 2018. TDS determined that this adjustment was not material to any of the periods impacted.

Note 16 Noncontrolling Interests

The following schedule discloses the effects of Net income attributable to TDS shareholders and changes in TDS' ownership interest in UScellular on TDS' equity:

Year Ended December 31,	2020	2019	2018
(Dollars in millions)			
Net income attributable to TDS shareholders	\$ 226	\$ 121	\$ 135
Transfers (to) from noncontrolling interests			
Change in TDS' Capital in excess of par value from UScellular's issuance of UScellular shares	(38)	(23)	(30)
Change in TDS' Capital in excess of par value from UScellular's repurchases of UScellular shares	14	6	—
Purchase of ownership in subsidiaries from noncontrolling interests	(9)	—	—
Net transfers (to) from noncontrolling interests	(33)	(17)	(30)
Net income attributable to TDS shareholders after transfers (to) from noncontrolling interests	\$ 193	\$ 104	\$ 105

Mandatorily Redeemable Noncontrolling Interests in Finite-Lived Subsidiaries

TDS' consolidated financial statements include certain noncontrolling interests that meet the GAAP definition of mandatorily redeemable financial instruments. These mandatorily redeemable noncontrolling interests represent interests held by third parties in consolidated partnerships, where the terms of the underlying partnership agreement provide for a defined termination date at which time the assets of the subsidiary are to be sold, the liabilities are to be extinguished and the remaining net proceeds are to be distributed to the noncontrolling interest holders and TDS in accordance with the respective partnership agreements. The termination dates of these mandatorily redeemable noncontrolling interests range from 2085 to 2092.

The estimated aggregate amount that would be due and payable to settle all of these noncontrolling interests, assuming an orderly liquidation of the finite-lived consolidated partnerships on December 31, 2020, net of estimated liquidation costs, is \$20 million. This amount excludes redemption amounts recorded in Noncontrolling interests with redemption features in the Consolidated Balance Sheet. The estimate of settlement value was based on certain factors and assumptions which are subjective in nature. Changes in those factors and assumptions could result in a materially larger or smaller settlement amount. The corresponding carrying value of the mandatorily redeemable noncontrolling interests in finite-lived consolidated partnerships at December 31, 2020, was \$6 million, and is included in Noncontrolling interests in the Consolidated Balance Sheet. The excess of the aggregate settlement value over the aggregate carrying value of these mandatorily redeemable noncontrolling interests is due primarily to the unrecognized appreciation of the noncontrolling interest holders' share of the underlying net assets in the consolidated partnerships. Neither the noncontrolling interest holders' share, nor TDS' share, of the appreciation of the underlying net assets of these subsidiaries is reflected in the consolidated financial statements.

Note 17 Common Shareholders' Equity

Common Stock

Series A Common Shares are convertible on a share-for-share basis into Common Shares. In matters other than the election of directors, each Series A Common Share is entitled to ten votes per share, compared to one vote for each Common Share. The Series A Common Shares are entitled to elect eight directors, and the Common Shares elect four. TDS has reserved 7,284,000 Common Shares at December 31, 2020, for possible issuance upon conversion of Series A Common Shares.

The following table summarizes the number of Common and Series A Common Shares issued.

	Common Shares	Series A Common Shares	Common Treasury Shares
(Shares in millions)			
Balance at December 31, 2017	126	7	22
Dividend reinvestment, incentive and compensation plans	—	—	(3)
Balance at December 31, 2018	126	7	19
Dividend reinvestment, incentive and compensation plans	—	—	(1)
Balance at December 31, 2019	126	7	18
Repurchase of Common Shares	—	—	1
Balance at December 31, 2020	126	7	19

On August 2, 2013, the Board of Directors of TDS authorized a \$250 million stock repurchase program for the purchase of TDS Common Shares from time to time pursuant to open market purchases, block transactions, private purchases or otherwise, depending on market conditions. This authorization does not have an expiration date. As of December 31, 2020, the maximum dollar value of TDS Common Shares that may yet be purchased under TDS' program was \$185 million.

In November 2009, UScellular announced by Form 8-K that the Board of Directors of UScellular authorized the repurchase of up to 1,300,000 Common Shares on an annual basis beginning in 2009 and continuing each year thereafter, on a cumulative basis. In December 2016, the UScellular Board amended this authorization to provide that, beginning on January 1, 2017, the authorized repurchase amount with respect to a particular year will be any amount from zero to 1,300,000 Common Shares, as determined by the Pricing Committee of the Board of Directors, and that if the Pricing Committee did not specify an amount for any year, such amount would be zero for such year. The Pricing Committee has not specified any increase in the authorization since that time. The Pricing Committee also was authorized to decrease the cumulative amount of the authorization at any time, but has not taken any action to do so at this time. As of December 31, 2020, the total cumulative amount of Common Shares authorized to be purchased is 4,507,000. The authorization provides that share repurchases will be made pursuant to open market purchases, block purchases, private purchases, or otherwise, depending on market prices and other conditions. This authorization does not have an expiration date.

Tax-Deferred Savings Plan

At December 31, 2020, TDS has reserved 90,000 Common Shares for issuance under the TDS Tax-Deferred Savings Plan, a qualified profit-sharing plan pursuant to Sections 401(a) and 401(k) of the Internal Revenue Code. Participating employees have the option of investing their contributions and TDS' contributions in a TDS Common Share fund, a UScellular Common Share fund or certain unaffiliated funds.

Note 18 Stock-Based Compensation

TDS Consolidated

The following table summarizes stock-based compensation expense recognized during 2020, 2019 and 2018:

Year Ended December 31,	2020	2019	2018
(Dollars in millions)			
Stock option awards	\$ 3	\$ 3	\$ 5
Restricted stock unit awards	30	33	30
Performance share unit awards	17	21	17
Deferred compensation bonus and matching stock unit awards	1	—	—
Awards under Non-Employee Director compensation plan	2	2	2
Total stock-based compensation, before income taxes	53	59	54
Income tax benefit	(13)	(15)	(14)
Total stock-based compensation expense, net of income taxes	\$ 40	\$ 44	\$ 40

At December 31, 2020, unrecognized compensation cost for all stock-based compensation awards was \$55 million and is expected to be recognized over a weighted average period of 2.0 years.

The following table provides a summary of the classification of stock-based compensation expense included in the Consolidated Statement of Operations for the years ended:

December 31,	2020	2019	2018
(Dollars in millions)			
Selling, general and administrative expense	\$ 48	\$ 54	\$ 49
Cost of services expense	5	5	5
Total stock-based compensation	\$ 53	\$ 59	\$ 54

TDS' tax benefits realized from the exercise of stock options and the vesting of other awards totaled \$10 million in 2020.

TDS (Excluding UScellular)

The information in this section relates to stock-based compensation plans using the equity instruments of TDS. Participants in these plans are employees of TDS Corporate and TDS Telecom and Non-employee Directors of TDS. Information related to plans using the equity instruments of UScellular are shown in the UScellular section following the TDS section.

Under the TDS Long-Term Incentive Plans, TDS may grant fixed and performance-based incentive and non-qualified stock options, restricted stock, restricted stock units, and deferred compensation stock unit awards to key employees.

TDS had reserved 17,025,000 Common Shares at December 31, 2020, for equity awards granted and to be granted under the TDS Long-Term Incentive Plans in effect. At December 31, 2020, the only types of awards outstanding are fixed non-qualified stock option awards, restricted stock unit awards, performance share awards and deferred compensation stock unit awards.

TDS has also established a Non-Employee Directors' compensation plan under which it has reserved 182,000 TDS Common Shares at December 31, 2020, for issuance as compensation to members of the Board of Directors who are not employees of TDS.

TDS uses treasury stock to satisfy requirements for shares issued pursuant to its various stock-based compensation plans.

Long-Term Incentive Plan – Stock Options

Stock options granted to key employees are exercisable over a specified period not in excess of ten years. Stock options generally vest over periods up to three years from the date of grant. Stock options outstanding at December 31, 2020, expire between 2021 and 2030. However, vested stock options typically expire 30 days after the effective date of an employee's termination of employment for reasons other than retirement. Employees who leave at the age of retirement have 90 days (or one year if they satisfy certain requirements) within which to exercise their vested stock options. The exercise price of options equals the market value of TDS common stock on the date of grant.

TDS estimated the fair value of stock options granted in 2020, 2019 and 2018 using the Black-Scholes valuation model and the assumptions shown in the table below:

	2020	2019	2018
Expected life	6.2 years	6.2 years	6.3 years
Expected annual volatility rate	35.0 %	29.0 %	28.6 %
Dividend yield	3.6 %	2.1 %	2.5 %
Risk-free interest rate	0.5 %	2.4 %	2.9 %

Pre-vesting forfeitures and expected life are estimated based on historical experience related to similar awards, giving considerations to the contractual terms of the stock-based awards, vesting schedules and expectations of future employee behavior. TDS believes that its historical experience provides the best estimates of future pre-vesting forfeitures and future expected life. The expected volatility assumption is based on historical volatility of TDS' common stock over a period commensurate with the expected life. The dividend yield assumption is equal to the dividends declared in the most recent year as a percentage of the share price on the date of grant. The risk-free interest rate assumption is determined using the U.S. Treasury Yield Curve Rate with a term length that approximates the expected life of the stock options.

A summary of TDS stock options (total and portion exercisable) and changes during 2020 is presented in the tables and narrative below.

Common Share Options	Number of Options	Weighted Average Exercise Prices	Aggregate Intrinsic Value (in millions)	Weighted Average Remaining Contractual Life (in years)
Outstanding at December 31, 2019	4,091,000	\$ 26.63		
Granted	387,000	\$ 19.15		
Forfeited	(4,000)	\$ 26.64		
Expired	(188,000)	\$ 26.90		
Outstanding at December 31, 2020	4,286,000	\$ 25.94	\$ —	4.7
(3,176,000 exercisable)		\$ 26.50	\$ —	3.4

The weighted average grant date fair value per share of the TDS stock options granted in 2020, 2019 and 2018 was \$4.24, \$7.70 and \$6.33, respectively. The aggregate intrinsic value of TDS stock options exercised in 2019 and 2018 was \$7 million and \$14 million, respectively. There were no TDS stock options exercised in 2020. The aggregate intrinsic value at December 31, 2020, presented in the table above represents the total pre-tax intrinsic value (the difference between TDS' closing stock prices and the exercise price, multiplied by the number of in-the-money options) that would have been received by option holders had all options been exercised on December 31, 2020.

Long-Term Incentive Plans – Restricted Stock Units

TDS also grants restricted stock unit awards to key employees. Each outstanding restricted stock unit is convertible into one Common Share Award. The restricted stock unit awards currently outstanding were granted in 2018, 2019 and 2020 and will vest in 2021, 2022 and 2023, respectively.

TDS estimates the fair value of restricted stock units by reducing the grant-date price of TDS' shares by the present value of the dividends expected to be paid on the underlying shares during the requisite service period, discounted at the appropriate risk-free interest rate, since employees are not entitled to dividends declared on the underlying shares while the restricted stock is unvested. The fair value is then recognized as compensation cost on a straight-line basis over the requisite service periods of the awards, which is generally the vesting period.

A summary of TDS nonvested restricted stock units and changes during 2020 is presented in the table below:

Common Restricted Stock Units	Number	Weighted Average Grant Date Fair Value
Nonvested at December 31, 2019	1,233,000	\$ 26.16
Granted	661,000	\$ 17.19
Vested	(377,000)	\$ 25.99
Forfeited	(21,000)	\$ 24.89
Nonvested at December 31, 2020	<u>1,496,000</u>	<u>\$ 22.26</u>

The total fair values as of the respective vesting dates of restricted stock units vested during 2020, 2019 and 2018 were \$7 million, \$11 million and \$9 million, respectively. The weighted average grant date fair value per share of the restricted stock units granted in 2020, 2019 and 2018 was \$17.19, \$28.81 and \$23.87, respectively.

Long-Term Incentive Plans – Performance Share Units

Beginning in 2016, TDS granted performance share units to certain TDS executive officers, and beginning in 2019, to certain key TDS Corporate and TDS Telecom employees. Each recipient may be entitled to shares of TDS common stock equal to 0% to 200% of a communicated target award depending on the achievement of predetermined performance-based and market-based operating targets over three years. Performance-based operating targets for the TDS awards include Total Revenue and Return on Capital. Market-based operating targets are measured against TDS' total shareholder return relative to a defined peer group. Performance-based operating targets for the TDS Telecom employees' awards include Total Revenue, Return on Capital and Adjusted EBITDA Margin Percent. Performance shares accumulate dividend equivalents, which are forfeitable if the performance metrics are not achieved. If the predetermined performance-based and market-based operating targets are met, the TDS units granted in 2018, 2019 and 2020 will vest in 2021, 2022 and 2023, respectively, and the TDS Telecom employees' units granted in 2019 and 2020 will vest in 2022 and 2023, respectively.

TDS estimates fair value of performance-based operating targets using TDS' closing stock price on the date of grant. An estimate of the number of performance units expected to vest based upon achieving the performance-based operating targets is made and the fair value is expensed on a straight-line basis over the requisite service period. Each reporting period these estimates are reviewed and stock compensation expense is adjusted accordingly to reflect the new estimates of total units expected to vest. If any part of the performance share units do not vest as a result of the established performance-based operating targets not being achieved, the related stock compensation expense is reversed.

TDS estimates the market-based operating target's fair value using an internally developed valuation model. This estimated fair value approximated TDS' closing stock price at the date of grant for market-based share units granted in 2020, 2019 and 2018. This market-based operating target value determined at the date of grant is expensed on a straight-line basis over the requisite service period and the stock compensation expense is not adjusted during the performance period for the subsequent changes in the value of the market-based unit awards and will not be reversed even if the market-based operating target is not achieved.

A summary of TDS nonvested performance share units and changes during 2020 is presented in the table below:

Common Performance Share Units	Number	Weighted Average Grant Date Fair Value
Nonvested at December 31, 2019	489,000	\$ 28.53
Granted	521,000	\$ 19.15
Vested	(63,000)	\$ 27.79
Change in units based on approved performance factors	4,000	\$ 27.79
Forfeited	(55,000)	\$ 27.83
Accumulated dividend equivalents	28,000	\$ 23.91
Nonvested at December 31, 2020	<u>924,000</u>	<u>\$ 23.18</u>

The total fair value of performance share units that vested during 2020 and 2019 was \$2 million and \$4 million, respectively. No performance share units vested during 2018. The weighted average grant date fair value per share of the performance share units granted in 2020, 2019 and 2018 was \$19.15, \$30.72 and \$25.70, respectively.

Long-Term Incentive Plans – Deferred Compensation Stock Units

Certain TDS employees may elect to defer receipt of all or a portion of their annual bonuses and to receive a company matching contribution on the amount deferred. All bonus compensation that is deferred by employees electing to participate is immediately vested and is deemed to be invested in TDS Common Share units. The amount of TDS' matching contribution depends on the portion of the annual bonus that is deferred. Participants receive a 25% stock unit match for amounts deferred up to 50% of their total annual bonus and a 33% match for amounts that exceed 50% of their total annual bonus; such matching contributions also are deemed to be invested in TDS Common Share units and vest over three years.

The total fair values of deferred compensation stock units that vested during 2020, 2019 and 2018 were less than \$1 million in each respective year. The weighted average grant date fair value per share of the deferred compensation stock units granted in 2020, 2019 and 2018 was \$19.44, \$31.05 and \$28.96, respectively. As of December 31, 2020, there were 107,000 vested but unissued deferred compensation stock units valued at \$2 million.

Compensation of Non-Employee Directors

TDS issued 43,000, 28,000 and 32,000 Common Shares under its Non-Employee Director plan in 2020, 2019 and 2018, respectively.

Dividend Reinvestment Plans

TDS had reserved 2,393,000 Common Shares at December 31, 2020, for issuance under Automatic Dividend Reinvestment and Stock Purchase Plans and 129,000 Series A Common Shares for issuance under the Series A Common Share Automatic Dividend Reinvestment Plan. These plans enabled holders of TDS' Common Shares to reinvest cash dividends in Common Shares and holders of Series A Common Shares to reinvest cash dividends in Series A Common Shares. The purchase price of the shares is 95% of the market value, based on the average of the daily high and low sales prices for TDS' Common Shares on the New York Stock Exchange for the ten trading days preceding the date on which the purchase is made. These plans are considered non-compensatory plans; therefore, no compensation expense is recognized for stock issued under these plans.

UScellular

The information in this section relates to stock-based compensation plans using the equity instruments of UScellular. Participants in these plans are employees of UScellular and Non-employee Directors of UScellular. Information related to plans using the equity instruments of TDS are shown in the previous section.

UScellular has established the following stock-based compensation plans: Long-Term Incentive Plans and a Non-Employee Director compensation plan.

Under the UScellular Long-Term Incentive Plans, UScellular may grant fixed and performance-based incentive and non-qualified stock options, restricted stock, restricted stock units, and deferred compensation stock unit awards to key employees. At December 31, 2020, the only types of awards outstanding are fixed non-qualified stock option awards, restricted stock unit awards, performance share awards and deferred compensation stock unit awards.

Under the Non-Employee Director compensation plan, UScellular may grant Common Shares to members of the Board of Directors who are not employees of UScellular or TDS.

At December 31, 2020, UScellular had reserved 12,193,000 Common Shares for equity awards granted and to be granted under the Long-Term Incentive Plans and 105,000 Common Shares for issuance under the Non-Employee Director compensation plan.

UScellular uses treasury stock to satisfy requirements for Common Shares issued pursuant to its various stock-based compensation plans.

Long-Term Incentive Plans – Stock Options

UScellular's last stock option grant occurred in 2016.

Stock options outstanding, and the related weighted average exercise price, at December 31, 2020 and 2019 were 418,000 units at \$42.23 and 460,000 units at \$42.20, respectively. All stock options are exercisable and expire between 2021 and 2026.

The aggregate intrinsic value of UScellular stock options exercised in 2019 and 2018 was \$3 million and \$19 million, respectively. No stock options were exercised in 2020.

Long-Term Incentive Plans – Restricted Stock Units

Restricted stock unit awards granted to key employees generally vest after three years. The restricted stock unit awards currently outstanding were granted in 2018, 2019 and 2020 and will vest in 2021, 2022 and 2023, respectively.

UScellular estimates the fair value of restricted stock units based on the closing market price of UScellular shares on the date of grant. The fair value is then recognized as compensation cost on a straight-line basis over the requisite service periods of the awards, which is generally the vesting period.

A summary of UScellular nonvested restricted stock units and changes during 2020 is presented in the table below:

Common Restricted Stock Units	Number	Weighted Average Grant Date Fair Value
Nonvested at December 31, 2019	1,461,000	\$ 40.90
Granted	1,020,000	\$ 29.18
Vested	(653,000)	\$ 35.54
Forfeited	(168,000)	\$ 34.81
Nonvested at December 31, 2020	<u>1,660,000</u>	<u>\$ 36.43</u>

The total fair value of restricted stock units that vested during 2020, 2019 and 2018 was \$20 million, \$25 million and \$16 million, respectively. The weighted average grant date fair value per share of the restricted stock units granted in 2020, 2019 and 2018 was \$29.18, \$46.81 and \$38.19, respectively.

Long-Term Incentive Plans – Performance Share Units

Beginning in 2017, UScellular granted performance share units to key employees. The performance share units generally vest after three years. Each recipient may be entitled to shares of UScellular common stock equal to 50% to 200% of a communicated target award depending on the achievement of predetermined performance-based operating targets over the performance period, which is generally a one-year period beginning on January 1 in the year of grant to December 31 in the year of grant. The remaining time through the end of the vesting period is considered the “time-based period”. Performance-based operating targets for grants made prior to 2020 include Simple Free Cash Flow, Consolidated Total Operating Revenues and Postpaid Handset Voluntary Defections, and for grants made during 2020 include Consolidated Total Service Revenues, Consolidated Operating Cash Flow, Consolidated Capital Expenditures and Postpaid Handset Voluntary Defections. Subject to vesting during the time-based period, the performance share unit award agreement provides that in no event shall the award be less than 50% of the target opportunity as of the grant date. The performance share units currently outstanding were granted in 2018, 2019 and 2020 and will vest in 2021, 2022 and 2023, respectively.

Additionally, UScellular granted performance share units during 2020 to a newly appointed President and Chief Executive Officer. The recipient may be entitled to shares of UScellular common stock equal to 100% of the communicated target award depending on the achievement of predetermined performance-based operating targets over the performance period, which is any two calendar-year period commencing no earlier than January 1, 2021 and ending no later than December 31, 2026. Performance-based operating targets include Average Total Revenue Growth and Average Annual Return on Capital. If one, or both, of the performance targets are not satisfied, the award will be forfeited.

UScellular estimates the fair value of performance share units using UScellular’s closing stock price on the date of grant. An estimate of the number of performance share units expected to vest based upon achieving the performance-based operating targets is made and the aggregate fair value is expensed on a straight-line basis over the requisite service period. Each reporting period, during the performance period, the estimate of the number of performance share units expected to vest is reviewed and stock compensation expense is adjusted as appropriate to reflect the revised estimate of the aggregate fair value of the performance share units expected to vest.

A summary of UScellular’s nonvested performance share units and changes during 2020 is presented in the table below:

Common Performance Share Units	Number	Weighted Average Grant Date Fair Value
Nonvested at December 31, 2019	1,245,000	\$ 40.16
Granted	582,000	\$ 29.71
Vested	(398,000)	\$ 36.92
Change in units based on approved performance factors	20,000	\$ 46.43
Forfeited	(144,000)	\$ 40.05
Nonvested at December 31, 2020	<u>1,305,000</u>	<u>\$ 36.60</u>

The total fair value of performance share units that vested during 2020 and 2019 was \$11 million and less than \$1 million, respectively. No performance share units vested during 2018. The weighted average grant date fair value per share of the performance share units granted in 2020, 2019 and 2018 was \$29.71, \$46.43 and \$38.81, respectively.

Long-Term Incentive Plans – Deferred Compensation Stock Units

Certain UScellular employees may elect to defer receipt of all or a portion of their annual bonuses and to receive a company matching contribution on the amount deferred. All bonus compensation that is deferred by employees electing to participate is immediately vested and is deemed to be invested in UScellular Common Share stock units. The amount of UScellular’s matching contribution depends on the portion of the annual bonus that is deferred. Participants receive a 25% match for amounts deferred up to 50% of their total annual bonus and a 33% match for amounts that exceed 50% of their total annual bonus; such matching contributions also are deemed to be invested in UScellular Common Share stock units and vest over three years.

The total fair value of deferred compensation stock units that vested during 2020 was \$1 million. The total fair value of deferred compensation stock units that vested during 2019 and 2018 was less than \$1 million in each respective year. The weighted average grant date fair value per share of the deferred compensation stock units granted in 2020 and 2018 was \$31.79 and \$40.72, respectively. There were no deferred compensation stock units granted during 2019. As of December 31, 2020, there were 63,000 vested but unissued deferred compensation stock units valued at \$2 million.

Compensation of Non-Employee Directors

UScellular issued 19,000, 13,000 and 18,000 Common Shares in 2020, 2019 and 2018, respectively, under its Non-Employee Director compensation plan.

Note 19 Business Segment Information

UScellular and TDS Telecom are billed for services they receive from TDS, consisting primarily of information processing, accounting and finance, and general management services. Such billings are based on expenses specifically identified to UScellular and TDS Telecom and on allocations of common expenses. Management believes the method used to allocate common expenses is reasonable and that all expenses and costs applicable to UScellular and TDS Telecom are reflected in the accompanying business segment information on a basis that is representative of what they would have been if UScellular and TDS Telecom operated on a stand-alone basis.

Financial data for TDS' reportable segments for 2020, 2019 and 2018, is as follows. See Note 1 — Summary of Significant Accounting Policies and Recent Accounting Pronouncements for additional information.

Year ended or as of December 31, 2020	TDS Telecom				Corporate, Eliminations and Other	Total
	UScellular	Wireline	Cable	TDS Telecom Total ¹		
(Dollars in millions)						
Operating revenues						
Service	\$ 3,067	\$ 684	\$ 292	\$ 975	\$ 94	\$ 4,136
Equipment and product sales	970	1	—	1	118	1,089
Total operating revenues	4,037	685	292	976	212	5,225
Cost of services (excluding Depreciation, amortization and accretion expense reported below)	782	269	123	392	70	1,244
Cost of equipment and products	1,011	1	—	1	98	1,110
Selling, general and administrative	1,368	199	72	270	43	1,681
Depreciation, amortization and accretion	683	124	78	203	23	909
(Gain) loss on asset disposals, net	25	—	1	1	1	27
(Gain) loss on license sales and exchanges, net	(5)	—	—	—	—	(5)
Operating income (loss)	173	92	18	110	(24)	259
Equity in earnings of unconsolidated entities	179	—	—	—	2	181
Interest and dividend income	8	4	1	5	2	15
Gain (loss) on investments	2	—	—	—	—	2
Interest expense	(112)	4	—	4	(60)	(168)
Other, net	—	(1)	—	(1)	—	(1)
Income (loss) before income taxes	250	99	18	117	(79)	288
Income tax expense (benefit) ²	17	—	—	18	(16)	19
Net income (loss)	233	—	—	100	(64)	269
Add back:						
Depreciation, amortization and accretion	683	124	78	203	23	909
(Gain) loss on asset disposals, net	25	—	1	1	1	27
(Gain) loss on license sales and exchanges, net	(5)	—	—	—	—	(5)
Gain (loss) on investments	(2)	—	—	—	—	(2)
Interest expense	112	(4)	—	(4)	60	168
Income tax expense (benefit) ²	17	—	—	18	(16)	19
Adjusted EBITDA³	\$ 1,063	\$ 220	\$ 97	\$ 317	\$ 5	\$ 1,385
Investments in unconsolidated entities	\$ 435	\$ 4	\$ —	\$ 4	\$ 38	\$ 477
Total assets	\$ 9,681	\$ 1,641	\$ 730	\$ 2,359	\$ 485	\$ 12,525
Capital expenditures	\$ 940	\$ 293	\$ 75	\$ 368	\$ 9	\$ 1,317

TDS Telecom

Year Ended or as of December 31, 2019	UScellular	Wireline	Cable	TDS Telecom Total ¹	Corporate, Eliminations and Other	Total
(Dollars in millions)						
Operating revenues						
Service	\$ 3,035	\$ 682	\$ 247	\$ 928	\$ 96	\$ 4,059
Equipment and product sales	987	1	—	1	129	1,117
Total operating revenues	4,022	683	247	930	224	5,176
Cost of services (excluding Depreciation, amortization and accretion expense reported below)	756	263	105	368	78	1,202
Cost of equipment and products	1,028	1	—	1	106	1,135
Selling, general and administrative	1,406	199	62	260	51	1,717
Depreciation, amortization and accretion	702	132	68	200	30	932
(Gain) loss on asset disposals, net	19	(8)	1	(7)	—	12
(Gain) loss on sale of business and other exit costs, net	(1)	—	—	—	—	(1)
Operating income (loss)	112	96	11	107	(40)	179
Equity in earnings of unconsolidated entities	166	—	—	—	2	168
Interest and dividend income	17	10	2	12	—	29
Interest expense	(110)	3	—	3	(58)	(165)
Income (loss) before income taxes	185	110	13	122	(96)	211
Income tax expense (benefit) ²	52	—	—	30	(18)	64
Net income (loss)	133	—	—	92	(78)	147
Add back:						
Depreciation, amortization and accretion	702	132	68	200	30	932
(Gain) loss on asset disposals, net	19	(8)	1	(7)	—	12
(Gain) loss on sale of business and other exit costs, net	(1)	—	—	—	—	(1)
Interest expense	110	(3)	—	(3)	58	165
Income tax expense (benefit) ²	52	—	—	30	(18)	64
Adjusted EBITDA³	\$ 1,015	\$ 231	\$ 82	\$ 313	\$ (9)	\$ 1,319
Investments in unconsolidated entities	\$ 447	\$ 4	\$ —	\$ 4	\$ 37	\$ 488
Total assets ⁴	\$ 8,164	\$ 1,471	\$ 734	\$ 2,196	\$ 421	\$ 10,781
Capital expenditures	\$ 710	\$ 243	\$ 73	\$ 316	\$ 6	\$ 1,032

TDS Telecom

Year Ended or as of December 31, 2018	UScellular	Wireline	Cable	TDS Telecom Total ¹	Corporate, Eliminations and Other	Total
(Dollars in millions)						
Operating revenues						
Service	\$ 2,978	\$ 697	\$ 230	\$ 925	\$ 96	\$ 3,999
Equipment and product sales	989	2	—	2	119	1,110
Total operating revenues	3,967	699	230	927	215	5,109
Cost of services (excluding Depreciation, amortization and accretion expense reported below)	758	266	104	369	79	1,206
Cost of equipment and products	1,031	1	—	1	98	1,130
Selling, general and administrative	1,388	197	57	254	52	1,694
Depreciation, amortization and accretion	640	142	69	212	31	883
(Gain) loss on asset disposals, net	10	(3)	1	(2)	1	9
(Gain) loss on license sales and exchanges, net	(18)	—	—	—	—	(18)
Operating income (loss)	158	95	(2)	93	(46)	205
Equity in earnings of unconsolidated entities	159	—	—	—	1	160
Interest and dividend income	15	7	1	8	3	26
Interest expense	(116)	2	—	2	(58)	(172)
Other, net	(1)	3	—	2	1	2
Income (loss) before income taxes	215	106	(1)	105	(99)	221
Income tax expense (benefit) ²	51	—	—	16	(21)	46
Net income (loss)	164	—	—	89	(78)	175
Add back:						
Depreciation, amortization and accretion	640	142	69	212	31	883
(Gain) loss on asset disposals, net	10	(3)	1	(2)	1	9
(Gain) loss on license sales and exchanges, net	(18)	—	—	—	—	(18)
Interest expense	116	(2)	—	(2)	58	172
Income tax expense (benefit) ²	51	—	—	16	(21)	46
Adjusted EBITDA³	\$ 963	\$ 243	\$ 70	\$ 313	\$ (9)	\$ 1,267
Investments in unconsolidated entities	\$ 441	\$ 4	\$ —	\$ 4	\$ 35	\$ 480
Total assets	\$ 7,274	\$ 1,304	\$ 639	\$ 1,934	\$ 575	\$ 9,783
Capital expenditures	\$ 515	\$ 176	\$ 56	\$ 232	\$ 20	\$ 767

Numbers may not foot due to rounding.

- ¹ TDS Telecom Total includes eliminations between the Wireline and Cable segments.
- ² Income tax expense (benefit) is not provided at the individual segment level for Wireline and Cable. TDS calculates income tax expense for "TDS Telecom Total".
- ³ Adjusted earnings before interest, taxes, depreciation, amortization and accretion (Adjusted EBITDA) is a segment measure reported to the chief operating decision maker for purposes of assessing their performance. Adjusted EBITDA is defined as net income, adjusted for the items set forth in the reconciliation above. TDS believes Adjusted EBITDA is a useful measure of TDS' operating results before significant recurring non-cash charges, gains and losses, and other items as presented above as they provide additional relevant and useful information to investors and other users of TDS' financial data in evaluating the effectiveness of its operations and underlying business trends in a manner that is consistent with management's evaluation of business performance.
- ⁴ As of January 1, 2019, UScellular adopted ASC 842 using a modified retrospective method. Under this method, the new accounting standard is applied only to the most recent period presented. As a result, 2019 includes the impacts of ASC 842, but prior periods remain as previously reported. See Note 10 — Leases for additional information.

Note 20 Supplemental Cash Flow Disclosures

Following are supplemental cash flow disclosures regarding interest paid and income taxes paid.

Year Ended December 31,	2020	2019	2018
(Dollars in millions)			
Interest paid	\$ 160	\$ 162	\$ 168
Income taxes paid, net of refunds received	(23)	44	40

Following are supplemental cash flow disclosures regarding transactions related to stock-based compensation awards. In certain situations, TDS and UScellular withhold shares that are issuable upon the exercise of stock options or the vesting of restricted shares to cover, and with a value equivalent to, the exercise price and/or the amount of taxes required to be withheld from the stock award holder at the time of the exercise or vesting. TDS and UScellular then pay the amount of the required tax withholdings to the taxing authorities in cash.

TDS:

Year Ended December 31,	2020	2019	2018
(Dollars in millions)			
Common Shares withheld	153,000	814,000	676,000
Aggregate value of Common Shares withheld	\$ 3	\$ 29	\$ 21
Cash receipts upon exercise of stock options	—	2	48
Cash disbursements for payment of taxes	(3)	(8)	(6)
Net cash receipts (disbursements) from exercise of stock options and vesting of other stock awards	<u>\$ (3)</u>	<u>\$ (6)</u>	<u>\$ 42</u>

UScellular:

Year Ended December 31,	2020	2019	2018
(Dollars in millions)			
Common Shares withheld	376,000	452,000	1,550,000
Aggregate value of Common Shares withheld	\$ 11	\$ 23	\$ 73
Cash receipts upon exercise of stock options	—	1	29
Cash disbursements for payment of taxes	(11)	(10)	(11)
Net cash receipts (disbursements) from exercise of stock options and vesting of other stock awards	<u>\$ (11)</u>	<u>\$ (9)</u>	<u>\$ 18</u>

Note 21 Certain Relationships and Related Transactions

The following persons are partners of Sidley Austin LLP, the principal law firm of TDS and its subsidiaries: Walter C.D. Carlson, a trustee and beneficiary of a voting trust that controls TDS, the non-executive Chairman of the Board and member of the Board of Directors of TDS and a director of UScellular, a subsidiary of TDS and certain subsidiaries of TDS; and Stephen P. Fitzell, the General Counsel and/or an Assistant Secretary of TDS and UScellular and certain other subsidiaries of TDS. Walter C.D. Carlson does not provide legal services to TDS or its subsidiaries. TDS, UScellular and their subsidiaries incurred legal costs from Sidley Austin LLP of \$11 million, \$10 million and \$10 million in 2020, 2019 and 2018, respectively.

The Audit Committee of the Board of Directors of TDS is responsible for the review and evaluation of all related-party transactions as such term is defined by the rules of the New York Stock Exchange.

Reports of Management

Management's Responsibility for Financial Statements

Management of Telephone and Data Systems, Inc. has the responsibility for preparing the accompanying consolidated financial statements and for their integrity and objectivity. The statements were prepared in accordance with accounting principles generally accepted in the United States of America and, in management's opinion, were fairly presented. The financial statements included amounts that were based on management's best estimates and judgments. Management also prepared the other information in the annual report and is responsible for its accuracy and consistency with the financial statements.

PricewaterhouseCoopers LLP, an independent registered public accounting firm, has audited these consolidated financial statements in accordance with the standards of the Public Company Accounting Oversight Board (United States) and has expressed herein its unqualified opinion on these financial statements.

/s/ LeRoy T. Carlson, Jr.

LeRoy T. Carlson, Jr.
President and Chief Executive Officer
(principal executive officer)

/s/ Peter L. Sereda

Peter L. Sereda
Executive Vice President and Chief Financial Officer
(principal financial officer)

/s/ Anita J. Kroll

Anita J. Kroll
Vice President - Controller and Chief Accounting Officer
(principal accounting officer)

Management's Report on Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. TDS' internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America (GAAP). TDS' internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the issuer; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, and that receipts and expenditures of the issuer are being made only in accordance with authorizations of management and, where required, the Board of Directors of the issuer; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the issuer's assets that could have a material effect on the interim or annual consolidated financial statements.

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

Under the supervision and with the participation of TDS' management, including its principal executive officer and principal financial officer, TDS conducted an evaluation of the effectiveness of its internal control over financial reporting as of December 31, 2020, based on the criteria established in the 2013 version of *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Management has concluded that TDS maintained effective internal control over financial reporting as of December 31, 2020, based on criteria established in the 2013 version of *Internal Control – Integrated Framework* issued by the COSO.

The effectiveness of TDS' internal control over financial reporting as of December 31, 2020, has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in the firm's report included herein.

/s/ LeRoy T. Carlson, Jr.

LeRoy T. Carlson, Jr.

President and Chief Executive Officer

(principal executive officer)

/s/ Peter L. Sereda

Peter L. Sereda

Executive Vice President and Chief Financial Officer

(principal financial officer)

/s/ Anita J. Kroll

Anita J. Kroll

Vice President - Controller and Chief Accounting Officer

(principal accounting officer)

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of Telephone and Data Systems, Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Telephone and Data Systems, Inc. and its subsidiaries (“the Company”) as of December 31, 2020 and 2019, and the related consolidated statements of operations, comprehensive income, changes in equity, and cash flows for each of the three years in the period ended December 31, 2020, including the related notes (collectively referred to as the “consolidated financial statements”). We also have audited the Company’s internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Changes in Accounting Principles

As discussed in Note 10 and 2 to the consolidated financial statements, the Company changed the manner in which it accounts for leases in 2019 and the manner in which it accounts for revenue from contracts with customers in 2018.

Basis for Opinions

The Company’s management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management’s Report on Internal Control Over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company’s consolidated financial statements and on the Company’s internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

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

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

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that (i) relate to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Goodwill Impairment Assessment - Wireline Reporting Unit

As described in Notes 1 and 7 to the consolidated financial statements, the Company's consolidated goodwill balance was \$547 million as of December 31, 2020, of which \$409 million relates to the Wireline reporting unit. Management performs its annual impairment assessment as of November 1 of each year or more frequently if there are events or circumstances that cause management to believe it is more likely than not that the carrying value of individual reporting unit exceeds the respective fair value. Goodwill impairment loss is measured as the amount by which a reporting unit's carrying amount exceeds its fair value. The discounted cash flow approach and guideline public company method was used to value the Wireline reporting unit for the annual impairment test. As disclosed by management, the discounted cash flow approach uses various inputs and considers current economic factors as well as risks specific to the industry and the reporting unit. The significant assumptions made by management in this process were the revenue growth rates, the terminal revenue growth rate and the discount rate. The guideline public company method develops an indication of fair value by calculating average market pricing multiples for selected publicly-traded companies. The developed multiples were applied to applicable financial measures of the respective reporting unit to determine fair value. The discounted cash flow approach and guideline public company method were weighted to arrive at the total fair value used for impairment testing. Based on the annual impairment assessment performed, Wireline did not have an impairment of its goodwill in 2020.

The principal considerations for our determination that performing procedures relating to the goodwill impairment assessment for the Wireline reporting unit is a critical audit matter are (i) the significant judgment by management when developing the fair value of the reporting unit; (ii) a high degree of auditor judgment, subjectivity, effort in performing procedures and evaluating management's significant assumptions related to revenue growth rates, terminal revenue growth rate, and the discount rate; and (iii) the audit effort involved the use of professionals with specialized skill and knowledge.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to management's annual goodwill impairment assessment, including controls over the valuation of the Wireline reporting unit. These procedures also included, among others, (i) testing management's process for developing the fair value estimate of the Wireline reporting unit; (ii) evaluating the appropriateness of the discounted cash flow model and guideline public company method; (iii) testing the completeness and accuracy of underlying data used in the model; and (iv) evaluating the reasonableness of the significant assumptions used by management related to revenue growth rates, terminal revenue growth rate, and the discount rate. Evaluating management's assumptions related to the revenue growth rates involved evaluating whether the assumptions used by management were reasonable considering (i) the current and past performance of the reporting unit; (ii) the consistency with external market and industry data; and (iii) whether these assumptions were consistent with evidence obtained in other areas of the audit. Professionals with specialized skill and knowledge were used to assist in the evaluation of the Company's discounted cash flow model and the terminal growth rate and discount rate assumptions.

Intangible Asset Impairment Assessment – Wireless Spectrum Licenses (UScellular Licenses)

As described in Notes 1 and 7 to the consolidated financial statements, the Company's consolidated licenses balance was \$2,638 million as of December 31, 2020, of which \$2,633 million relates to the UScellular licenses. Management performs its annual impairment assessment of licenses as of November 1 of each year or more frequently if there are events or circumstances that cause management to believe it is more likely than not that the carrying value of licenses exceeds fair value. A qualitative impairment assessment was performed as of November 1, 2020, to determine whether the wireless spectrum licenses were impaired. As disclosed by management, the qualitative assessment considered several qualitative factors, including analyst estimates of wireless spectrum license values which contemplated recent spectrum auction results, recent UScellular and other market participant transactions and other industry and market factors. Based on this assessment, management concluded that it was not more likely than not that the carrying value of the wireless spectrum licenses in each unit of accounting exceeded their respective fair values. Therefore, no quantitative impairment evaluation was completed.

The principal considerations for our determination that performing procedures relating to the intangible asset impairment assessment for the UScellular licenses is a critical audit matter are (i) the significant judgment by management when performing the qualitative impairment assessment; and (ii) a high degree of auditor judgment and subjectivity in performing procedures and evaluating management's qualitative impairment assessment.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to management's annual intangible asset impairment assessment, including management's review of qualitative factors affecting the UScellular licenses. These procedures also included, among others, evaluating management's qualitative assessment by (i) obtaining analyst estimates of wireless spectrum license values; and (ii) considering recent UScellular and other market participant transactions and external market and industry data.

/s/ PricewaterhouseCoopers LLP
Chicago, Illinois
February 18, 2021

We have served as the Company's auditor since 2002.

Telephone and Data Systems, Inc.

Shareholder Information

Stock and Dividend Information

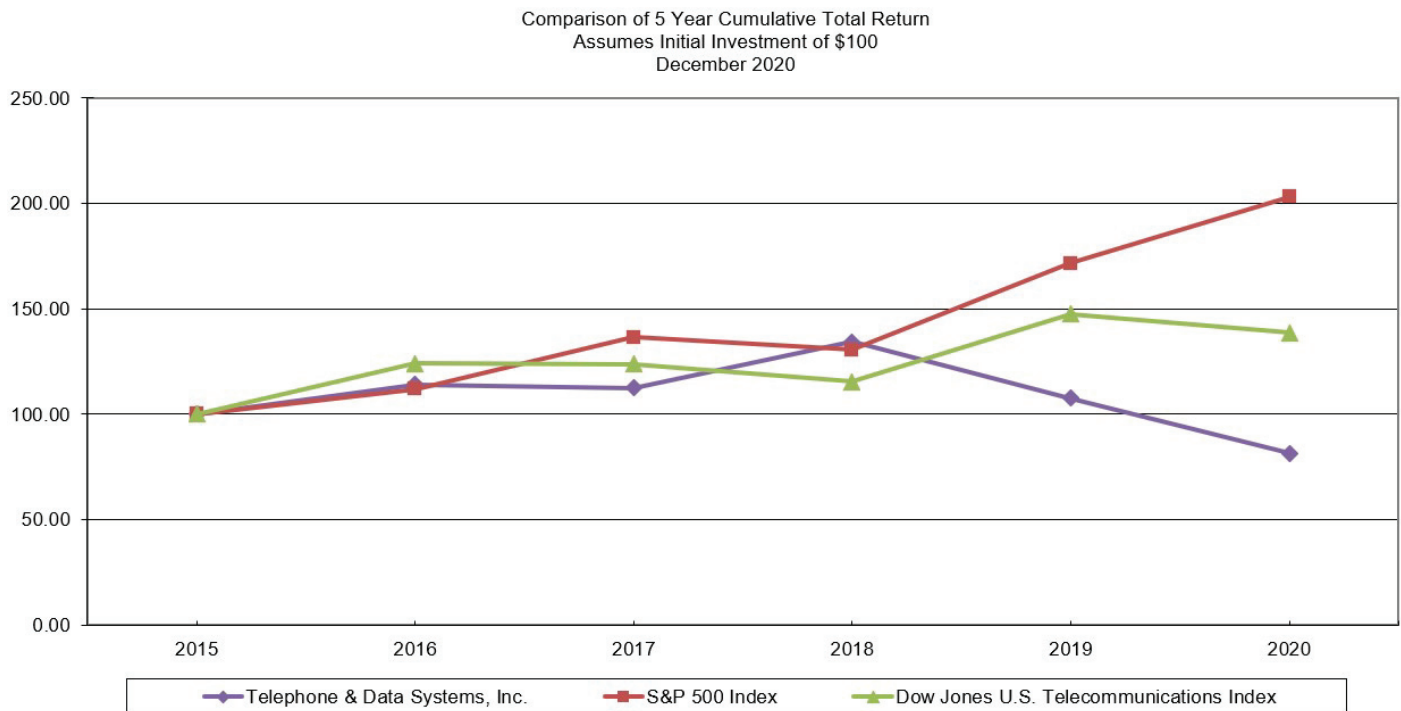
TDS' Common Shares are listed on the New York Stock Exchange under the symbol "TDS." As of January 29, 2021, the last trading day of the month, TDS Common Shares were held by 1,586 record owners, and the Series A Common Shares were held by 68 record owners.

TDS has paid cash dividends on its common stock since 1974, and paid dividends of \$0.68 per Common and Series A Common Share during 2020. During 2019, TDS paid dividends of \$0.66 per Common and Series A Common Share.

The Common Shares of United States Cellular Corporation, an 82%-owned subsidiary of TDS, are listed on the NYSE under the symbol "USM."

Stock Performance Graph

The following chart provides a comparison of TDS' cumulative total return to shareholders (stock price appreciation plus dividends) during the previous five years to the returns of the Standard & Poor's 500 Composite Stock Price Index and the Dow Jones U.S. Telecommunications Index.



Note: Cumulative total return assumes reinvestment of dividends.

	2015	2016	2017	2018	2019	2020
Telephone and Data Systems Common Shares (NYSE: TDS) \$	100	\$ 113.94	\$ 112.36	\$ 134.36	\$ 107.51	\$ 81.38
S&P 500 Index	100	111.96	136.40	130.42	171.49	203.04
Dow Jones U.S. Telecommunications Index	100	123.96	123.61	115.30	147.45	138.72

The comparison above assumes \$100.00 invested at the close of trading on the last trading day preceding the first day of 2015, in TDS Common Shares, S&P 500 Index and the Dow Jones U.S. Telecommunications Index.

Dividend Reinvestment Plan

TDS' dividend reinvestment plans provide its common shareholders with a convenient and economical way to participate in the future growth of TDS. Holders of record of ten (10) or more Common Shares may purchase Common Shares with their reinvested dividends at a five percent discount from market price. Common Shares may also be purchased on a monthly basis through optional cash payments by participants in this plan. The initial ten (10) shares cannot be purchased directly from TDS. An authorization card and prospectus will be mailed automatically by the transfer agent to all registered record holders with ten (10) or more shares. Once enrolled in the plan, there are no brokerage commissions or service charges for purchases made under the plan.

Investor relations

TDS' annual report, SEC filings and news releases are available to investors, securities analysts and other members of the investment community. These reports are provided, without charge, upon request to our Investor Relations department at the address below. Investors may also access these and other reports through the Investor Relations portion of the TDS website (www.tdsinc.com).

Questions regarding lost, stolen or destroyed certificates, consolidation of accounts, transferring of shares and name or address changes should be directed to:

Julie Mathews, IRC, Director — Investor Relations
Telephone and Data Systems, Inc.
30 North LaSalle Street, Suite 4000
Chicago, IL 60602
julie.mathews@tdsinc.com

General inquiries by investors, securities analysts and other members of the investment community should be directed to:

Jane W. McCahon, Senior Vice President — Corporate Relations and Corporate Secretary
Telephone and Data Systems, Inc.
30 North LaSalle Street, Suite 4000
Chicago, IL 60602
jane.mccahon@tdsinc.com

Directors and executive officers

See “Election of Directors” and “Executive Officers” sections of the Proxy Statement issued in 2021 for the 2021 Annual Meeting.

Principal counsel

Sidley Austin LLP, Chicago, Illinois

Transfer agent

Computershare Trust Company, N.A.
462 South 4th Street, Suite 1600
Louisville, KY 40202
877.337.1575

Independent registered public accounting firm

PricewaterhouseCoopers LLP

Visit TDS' web site at www.tdsinc.com

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Bridging the Digital Divide



UScellular was built on the foundation of bringing connectivity to the underserved. Today this means making sure our customers in rural and suburban America can access a high-quality and affordable network.

The Digital Divide — the gulf between those who have access to connected devices and the internet and those who don't — is of particular concern in many of the rural communities that UScellular serves.

UScellular Introduces “Learn with US” Resource Hub

UScellular’s goal is that every child in our network footprint has access to high-speed broadband, an affordable device and the resources they need to enable remote education. UScellular launched “Learn with US” resource hub for students and parents to access helpful tips and resources from UScellular and its associated business resources.

Bridging the Digital Divide

Three things UScellular is doing:

1. Investing in and modernizing our network
2. Developing affordable wireless solutions
3. Connecting families in need with connectivity and education resources



TDS Telecom’s continuous advocacy for federal support



TDS Telecom has advocated for and is leveraging funding from the Federal Communications Commission’s (FCC) Alternative Connect America Cost Model (A-CAM) to enhance and improve the speeds delivered on our rural broadband networks.

Under A-CAM, TDS is working to enhance and improve speeds delivered to about 160,000 service addresses by 2028.



Reaching Rural America with State Grants

We are working with state legislators and regulators to obtain funding to deploy broadband in areas where it is otherwise not financially viable.

TDS Telecom is a recipient of over \$32 million in state grants from 2013-2020 to provide and support enhanced broadband services to over 22,500 service addresses in five states.





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Thank you to each of our associates, whose hard work, perseverance, resilience, and creativity have kept the TDS Family of Businesses strong throughout this challenging year.

