TELEPHONE & DATA SYSTEMS INC /DE/
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TELEPHONE AND DATA SYSTEMS, INC.

ANNUAL REPORT TO SHAREHOLDERS FOR THE YEAR ENDED DECEMBER 31, 2018
Pursuant to SEC Rule 14a-3

The following audited financial statements and certain other financial information for the year ended December 31, 2018, represent Telephone and Data Systems' annual report to shareholders as required by the rules and regulations of the Security and Exchange Commission (SEC).

The following information was filed with the SEC on February 22, 2019, as Exhibit 13 to Telephone and Data Systems' Annual Report on Form 10-K for the year ended December 31, 2018. 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.

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Telephone and Data Systems, Inc. Exhibit 13

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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, 2018, 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 a reconciliation 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.

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 (U.S. Cellular). TDS also provides wireline and cable services, through its wholly-owned subsidiary, TDS Telecommunications LLC (TDS Telecom). TDS' segments operate almost entirely in the United States. See Note 18 Business Segment Information in the Notes to Consolidated Financial Statements for additional information about TDS' segments.

TDS re-evaluated internal reporting roles with regard to its hosted and managed services (HMS) business unit and, as a result, changed its reportable segments. Effective January 1, 2018, HMS was considered a non-reportable segment and is no longer being reported under TDS Telecom. Prior periods have been recast to conform to this revised presentation.

2018 Operating Revenues by Segment

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MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

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, 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 capital to be reinvested in its operating businesses to strengthen their competitive positions and financial performance, while also returning value to TDS shareholders through the payment of a regular quarterly cash dividend and share repurchases.

Throughout 2018, 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. Looking ahead to 2019, TDS will continue to execute on its strategies to build strong, competitive businesses providing high-quality, data-focused services and products.

Invest in the business to improve returns and pursue initiatives that align with long-term strategies

Consistent with its strategy, TDS made significant investments in 2018 to improve the performance of its networks. U.S. Cellular added capacity to its 4G LTE network responding to customers' growing use of data. U.S. Cellular enhanced its service and product offerings by commercially deploying VoLTE technology in California, Iowa, Oregon, Washington and Wisconsin and deployments in several additional operating markets will occur in 2019. 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. In addition, the deployment of VoLTE technology expands U.S. Cellular's ability to offer roaming services to other wireless carriers.

U.S. Cellular continues to engage in efforts related to the development of 5G standards and identifying potential use cases for 5G technology. When deployed commercially, 5G technology is expected to help address customers' growing demand for data services and create opportunities for new services requiring high speed and reliability as well as low latency. In the fourth quarter of 2018, U.S. Cellular began conducting a trial utilizing 5G standards and equipment on its core LTE network.

TDS Telecom's Wireline business continues to focus on driving growth in its broadband and video services by investing in fiber inside existing markets and in new out-of-territory markets. With support from the FCC's A-CAM program, Wireline will deploy higher speed broadband services to more rural areas. TDS Telecom's Cable business continues to increase its broadband penetration by making network capacity investments and by offering more advanced services in its markets. TDS Telecom's Wireline and Cable businesses also are investing in a next generation video platform called TDS TV+ to enhance video services.

Return value to shareholders

During 2018, TDS paid $72 million in regular quarterly cash dividends. TDS increased the dividend per share paid to its investors by 3% in 2018 which marks the 44th consecutive year of dividend increases and in February 2019, TDS increased its quarterly dividend per share from $0.16 to $0.165. There were no TDS or U.S. Cellular share repurchases in 2018. As of December 31, 2018, $199 million was available for share repurchase under the announced TDS stock repurchase program. There is no assurance that TDS will continue to increase the dividend rate or pay dividends and no assurance that TDS or U.S. Cellular will make any significant amount of share repurchases in the future.

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MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Annual Dividends Per TDS Share

Significant Financial and Operating Matters

The following is a summary of certain selected information contained in the comprehensive MD&A that follows. The overview does not contain all of the information that may be important. You should carefully read the entire MD&A and not rely solely on the highlights.

§ Net income available to TDS common shareholders was $135 million in 2018, compared to $153 million in 2017. Diluted earnings per share was $1.17 in 2018 compared to $1.37 a year ago.

§ Total additions to Property, plant and equipment were $767 million including expenditures to enhance and maintain TDS' wireless network coverage, invest in information technology to support existing and new services and products, maintain and enhance existing infrastructure including build-out requirements to meet state broadband and A-CAM programs, build a TDS TV+ platform, and expand fiber deployment.

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MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

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 is expected to help address customers' growing demand for data services as well as create 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 annually for ten years beginning in 2017. This support comes with an obligation to build defined broadband speeds to a certain number of locations.

§ **ASU 2014-09** the Financial Accounting Standards Board (FASB) Accounting Standards Update (ASU) 2014-09, Revenue from Contracts with Customers, including any subsequent modifications to such guidance. This ASU replaces existing revenue recognition rules with a single comprehensive model to use in accounting for revenue arising from contracts with customers.

§ **Auctions 101 and 102** Auction 101 is an FCC auction of 28 GHz spectrum licenses that started in November 2018 and concluded in January 2019. Auction 102 is an FCC auction of 24 GHz spectrum licenses that is expected to start in early 2019. The spectrum auctioned in each of these auctions, referred to as Millimeter Wave spectrum, is expected to be used primarily to deliver 5G technology.

§ **Auctions 1000, 1001, and 1002** Auction 1000 is an FCC auction of 600 MHz spectrum licenses that started in 2016 and concluded in 2017 involving: (1) a "reverse auction" in which broadcast television licensees submitted bids to voluntarily relinquish spectrum usage rights in exchange for payments (referred to as Auction 1001); (2) a "repacking" of the broadcast television bands in order to free up certain broadcast spectrum for other uses; and (3) a "forward auction" of licenses for spectrum cleared through this process to be used for wireless communications (referred to as Auction 1002).

§ **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 U.S. Cellular network. Connected devices include products such as tablets, wearables, modems, and hotspots.

§ **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.

§ **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.

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MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

§

IPTV Connections represents the number of Wireline customers provided video services using IP networking technology.

§

ManagedIP Connections refers to the number of telephone handsets, data lines and IP trunks providing communications using IP networking technology.

§

Net Additions 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.

§

Partial Economic Areas service areas of certain FCC licenses based on geography.

§

Postpaid Average Billings per Account (Postpaid ABPA) non-GAAP metric which is calculated by dividing total postpaid service revenues plus equipment installment plan billings by the average number of postpaid accounts and by the number of months in the period. See Supplemental Information Relating to Non-GAAP Financial Measures within this MD&A for additional information.

§

Postpaid Average Billings per User (Postpaid ABPU) non-GAAP metric which is calculated by dividing total postpaid service revenues plus equipment installment plan billings by the average number of postpaid connections and by the number of months in the period. 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 U.S. Cellular postpaid connections and U.S. Cellular 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.

§

U.S. Cellular Connections individual lines of service associated with each device activated by a customer. Connections include all types of devices that connect directly to the U.S. Cellular network.

§

Video Connections 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 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 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.

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MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

RESULTS OF OPERATIONS TDS CONSOLIDATED

Year Ended December 31,	20181	2017	2016	2018 vs. 2017	2017 vs. 2016
(Dollars in millions)					
Operating revenues					
U.S. Cellular	**$ 3,967**	$ 3,890	$ 3,990	**2%**	(3)%
TDS Telecom	**927**	919	882	**1%**	4%
All other2	**215**	235	283	**(9)%**	(17)%
Total operating revenues	**5,109**	5,044	5,155	**1%**	(2)%
Operating expenses					
U.S. Cellular	**3,809**	4,194	3,942	**(9)%**	6%
TDS Telecom	**834**	803	803	**4%**	
All other2 3	**261**	155	302	**68%**	(49)%
Total operating expenses	**4,904**	5,152	5,047	**(5)%**	2%
Operating income (loss)					
U.S. Cellular	**158**	(304)	48	**N/M**	N/M
TDS Telecom	**93**	116	79	**(20)%**	47%
All other2 3	**(46)**	80	(19)	**N/M**	N/M
Operating income (loss)	**205**	(108)	108	**N/M**	N/M
Investment and other income (expense)					
Equity in earnings of unconsolidated entities	**160**	137	140	**17%**	(2)%
Interest and dividend income	**26**	15	11	**67%**	42%
Interest expense	**(172)**	(170)	(170)	**(1)%**	
Other, net	**2**	4	3	**(22)%**	30%
Total investment and other income (expense)	**16**	(14)	(16)	**N/M**	17%
Income (loss) before income taxes	**221**	(122)	92	**N/M**	N/M
Income tax expense (benefit)	**46**	(279)	40	**N/M**	N/M
Net income	**175**	157	52	**11%**	N/M
Less: Net income attributable to noncontrolling interests, net of tax	**40**	4	9	**N/M**	(55)%
Net income attributable to TDS shareholders	**$ 135**	$ 153	$ 43	**(12)%**	N/M

Adjusted OIBDA (Non-GAAP)4	**$**	**1,079**	$	996	$	964	**8%**	3%
Adjusted EBITDA (Non-GAAP)4	**$**	**1,267**	$	1,152	$	1,118	**10%**	3%
Capital expenditures	**$**	**767**	$	694	$	630	**11%**	10%

N/M Percentage change not meaningful

1 As of January 1, 2018, TDS adopted ASU 2014-09 using a modified retrospective approach. Under this method, the new accounting standard is applied only to the most recent period presented. See Note 2 Revenue Recognition in the Notes to Consolidated Financial Statements for additional information.

2 Consists of corporate and other operations and intercompany eliminations.

3 During the third quarter of 2017, U.S. Cellular recorded a goodwill impairment of $370 million while TDS recorded a goodwill impairment of the U.S. Cellular reporting unit of $227 million. Prior to 2009, TDS accounted for U.S. Cellular's share repurchases as step acquisitions, allocating a portion of the share repurchase value to TDS' Goodwill. Further, goodwill of the U.S. Cellular reporting unit was impaired at the TDS level in 2003 but not at U.S. Cellular. Consequently, U.S. Cellular's goodwill on a stand-alone basis and any resulting impairments of goodwill does not equal the TDS consolidated goodwill related to U.S. Cellular. The TDS adjustment of $143 million is included in "All other". During the third quarter of 2017, TDS also recorded a goodwill impairment of $35 million related to its HMS operations, included in "All other". For further information on the goodwill impairment see Note 7 Intangible Assets in the Notes to Consolidated Financial Statements.

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

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

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

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 $77 million, $66 million and $71 million to Equity in earnings of unconsolidated entities in 2018, 2017 and 2016, respectively.

Income tax expense (benefit)

The effective tax rate on Income (loss) before income taxes for 2018 was 21.0%. The effective tax rate is lower than a normalized rate inclusive of federal and state tax, due primarily to an income tax accounting method change that accelerated depreciation on certain assets for the 2017 tax year, resulting in a discrete tax benefit recorded in the third quarter of 2018.

TDS' effective tax rate on Income (loss) before income taxes for 2017 was not meaningful due to the effect of the Tax Act combined with the tax impact of the impairment of goodwill in the U.S. Cellular and HMS reporting units, since portions of the goodwill balance are not amortizable for income tax purposes. The effective tax rate for 2016 was 43.2% and was consistent with a normalized tax rate inclusive of federal and state tax note that the federal statutory rate prior to the Tax Act was 35%.

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,	**2018**	2017	2016
(Dollars in millions)			
U.S. Cellular noncontrolling public shareholders'	**$ 26**	$ 2	$ 8
Noncontrolling shareholders' or partners'	**14**	2	1
Net income attributable to noncontrolling interests, net of tax	**$ 40**	$ 4	$ 9

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

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MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Earnings
(Dollars in millions)

2018-2017 Commentary

Net income and Adjusted EBITDA increased from 2017 to 2018 due primarily to improved operating results at U.S. Cellular and an increase in income from equity investments. Net income also increased due to the recognition of a loss on impairment of goodwill related to the U.S. Cellular and HMS reporting units recognized in the third quarter of 2017. The loss on impairment of goodwill is not included as a component of Adjusted EBITDA.

2017-2016 Commentary

Net income increased from 2016 to 2017 due primarily to the reduction of income tax expense as result of the Tax Act partially offset by a loss on impairment of goodwill at the U.S. Cellular and HMS reporting units. Income tax expense and the loss on impairment of goodwill are added back into Adjusted EBITDA. The increase in Adjusted EBITDA was due primarily to a combination of improved operating results at TDS Telecom and cost savings initiatives at U.S. Cellular.

* 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.

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MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

U.S. CELLULAR OPERATIONS

BUSINESS OVERVIEW

U.S. Cellular owns, operates, and invests in wireless markets throughout the United States. U.S. Cellular is an 82%-owned subsidiary of TDS. U.S. Cellular'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 local focus.

OPERATIONS

- Serves customers with 5.0 million connections including 4.5 million postpaid, 0.5 million prepaid and 0.1 million reseller and other connections
- Operates in 22 states
- Employs approximately 5,600 associates
- 6,531 cell sites including 4,129 owned towers in service

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MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Trends and Developments

U.S. Cellular'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 mid-sized and rural markets served.

Network and Technology:

§ U.S. Cellular continues to devote efforts to enhance its network capabilities. VoLTE technology has been launched successfully in California, Iowa, Oregon, Washington and Wisconsin, and deployments in several additional operating markets will occur in 2019. 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. In addition, the deployment of VoLTE technology expands U.S. Cellular's ability to offer roaming services to other wireless carriers.

§ 5G technology is expected to help address customers' growing demand for data services as well as create opportunities for new services requiring high speed and reliability as well as low latency. U.S. Cellular is committed to continuous technology innovation and continues to prepare for deployment of 5G technology beginning in 2019, including commencing a trial utilizing 5G standards and equipment on its core LTE network in the fourth quarter of 2018. U.S. Cellular is partnering with leading companies in the wireless infrastructure and handset ecosystem to provide rich 5G experiences for customers. In addition, in the markets where U.S. Cellular commercially deploys 5G technology, which will include cities and towns large and small, customers using U.S. Cellular's 4G LTE network will experience increased network speed due to U.S. Cellular's modernization efforts.

Asset Management:

§ U.S. Cellular 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, U.S. Cellular actively seeks attractive opportunities to acquire wireless spectrum, including pursuant to FCC auctions. In 2018, U.S. Cellular acquired $26 million of spectrum licenses through purchase and exchange transactions and divested $12 million of spectrum licenses covering non-strategic areas through sale and exchange transactions. In October 2018, the FCC announced that U.S. Cellular was a qualified bidder for Auction 101, which covered spectrum licenses that are expected to be used primarily to deliver 5G technology. Auction 101 closed on January 24, 2019 but the results of the auction have not yet been announced.

Services and Products:

§ U.S. Cellular's customers are able to choose from a variety of national plans with voice, messaging and data usage options and pricing that are designed to fit different customer needs, usage patterns and budgets. In 2018, U.S. Cellular introduced the Unlimited with Payback plan that provides a monthly bill credit to postpaid customers if they have used less than 3 gigabytes of data per line.

§ U.S. Cellular offers a comprehensive range of wireless devices such as handsets, tablets, modems, and hotspots. In addition, U.S. Cellular also offers a wide range of accessories, including wireless basics such as cases, screen protectors, chargers, and memory cards as well as an assortment of consumer electronics such as headphones, smart speakers, wearables and home automation products (e.g. cameras, sensors, and thermostats). U.S. Cellular offers certain of these products for purchase on installment plans, which allow new and existing postpaid customers to purchase these products payable over a specified time period.

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MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

OPERATIONAL OVERVIEW

Retail Connection Composition

As of December 31, 2018

Year Ended December 31,	**2018**	2017	2016
Postpaid Activity and Churn			
Gross Additions			
Handsets	**475,000**	490,000	479,000
Connected Devices	**150,000**	198,000	294,000
Total Gross Additions	**625,000**	688,000	773,000
Net Additions (Losses)			
Handsets	**23,000**	38,000	(70,000)
Connected Devices	**(69,000)**	(2,000)	143,000
Total Net Additions (Losses)	**(46,000)**	36,000	73,000

Churn			
Handsets	**0.98%**	0.99%	1.18%
Connected Devices	**2.96%**	2.52%	2.11%
Total Churn	**1.25%**	1.21%	1.31%

2018-2017 Commentary

Postpaid net additions decreased in 2018 due primarily to lower gross additions, as well as an increase in tablet churn. The decrease in connected devices gross additions reflects U.S. Cellular's decision to discontinue promotions of heavily discounted tablets in 2018.

2017-2016 Commentary

Postpaid net additions decreased in 2017 mainly due to lower connected devices net additions which reflected both lower tablet gross additions and an increase in tablet churn. The decline in tablet gross additions reflects industry-wide trends including (i) reduced consumer demand for network-connected tablets, and (ii) carriers including U.S. Cellular have curtailed promotions of heavily discounted tablets designed to stimulate demand due to poor economics. The decrease in connected devices net additions was partially offset by an improvement in handsets net additions driven by both higher gross additions and a decrease in churn.

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MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Postpaid Revenue

Year Ended December 31,	2018	2017	2016
Average Revenue Per User (ARPU)	**$ 44.98**	$ 44.38	$ 46.96
Average Billings Per User (ABPU)1	**$ 58.67**	$ 55.60	$ 56.12
Average Revenue Per Account (ARPA)	**$ 118.93**	$ 118.96	$ 124.09
Average Billings Per Account (ABPA)1	**$ 155.11**	$ 149.02	$ 148.29

1 Postpaid ABPU and Postpaid ABPA are non-GAAP financial measures. Refer to Supplemental Information Relating to Non-GAAP Financial Measures within this MD&A for a reconciliation of these measures.

2018-2017 Commentary

On January 1, 2018, U.S Cellular adopted the provisions of ASU 2014-09, using a modified retrospective method. Under this method, the new accounting standard is applied only to the most recent period presented, recognizing the cumulative effect of the accounting change as an adjustment to retained earnings at January 1, 2018. See Note 2 Revenue Recognition in the Notes to Consolidated Financial Statements for additional details.

Postpaid ARPU increased in 2018 due primarily to several factors including: increases in device protection plan and regulatory recovery revenues as well as having proportionately more handset connections, which on a per-unit basis contribute more revenue than tablet connections. Such factors were partially offset by the impact of adopting the provisions of ASU 2014-09, as well as the impact of overall price reductions on plan offerings. Postpaid ARPA decreased slightly in 2018 due primarily to a decrease in postpaid connections per account driven by higher tablet churn. Application of the new accounting standard had the impact of reducing ARPU and ARPA by $0.21 and $0.55, respectively.

Under equipment installment plans, customers pay for their wireless devices in installments over a period of time. In order to show the trend in estimated cash collections from postpaid customer billings for service and equipment, U.S. Cellular has presented Postpaid ABPU and Postpaid ABPA, which are calculated as Postpaid ARPU and Postpaid ARPA plus average monthly installment plan billings per connection and account, respectively.

Postpaid ABPU and ABPA increased in 2018 due primarily to (i) an increase in equipment installment plan billings driven by increased penetration of equipment installment plans and (ii) a higher average price per device sold.

2017-2016 Commentary

Postpaid ARPU and Postpaid ARPA decreased in 2017 due primarily to industry-wide price competition resulting in overall price reductions on plan offerings.

Equipment installment plan billings increased in 2017 due to increased penetration of equipment installment plans. Postpaid ABPU decreased in 2017 as the increase in equipment installment plan billings was more than offset by the decline in Postpaid ARPU discussed above. Postpaid ABPA, however, increased slightly in 2017 as the increase in equipment installment plan billings more than offset the decline in Postpaid ARPA discussed above.

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MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

FINANCIAL OVERVIEW   U.S. CELLULAR

Year Ended December 31,	**2018[1]**	2017	2016	**2018 vs. 2017**	2017 vs. 2016
(Dollars in millions)					
Retail service	**$ 2,623**	$ 2,589	$ 2,700	**1%**	(4)%
Inbound roaming	**154**	129	152	**20%**	(15)%
Other	**201**	260	229	**(23)%**	13%