TELEPHONE & DATA SYSTEMS INC /DE/ Form 10-O November 02, 2018 **UNITED STATES SECURITIES AND EXCHANGE COMMISSION** Washington, D.C. 20549 FORM 10-Q (Mark One) **OUARTERLY REPORT PURSUANT** TO SECTION 13 OR 15(d) [x] OF THE **SECURITIES EXCHANGE ACT OF 1934** For the quarterly period ended September 30, 2018 OR **TRANSITION REPORT PURSUANT** TO SECTION []13 OR 15(d) OF THE **SECURITIES EXCHANGE ACT OF 1934** For the transition period from to Commission file number 001-14157 TELEPHONE AND DATA SYSTEMS, INC. (Exact name of Registrant as specified in its charter) Delaware 36-2669023 (State or other jurisdiction of incorporation or organization) (IRS Employer Identification No.) 30 North LaSalle Street, Suite 4000, Chicago, Illinois 60602 (Address of principal executive offices) (Zip code) Registrant's telephone number, including area code: (312) 630-1900 No Yes Indicate by check mark [x][] whether the registrant (1)

has filed all reports required

to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of [x][] Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act. Accelerated [] Large accelerated filer [x] Smaller Non-accelerated filer [] reporting company Emerging growth [] company If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for [] complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. Indicate by check mark [] [x]

whether the registrant is a

shell company (as defined in Rule 12b-2 of the Exchange Act).
Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Outstanding at

Claseptember 30,

2018

Common

Shares,

\$0.005,**63**2,**4**\$6

par

value

Series

A

Common

Sha7e28 \$100res

\$0.01

par

value

Telephone and Data Systems, Inc.

Quarterly Report on Form 10-Q	
For the Period Ended September 30, 2018	
Index	Page No.
Management Discussion and Analysis of Financial Condition and Results of Operations	<u>1</u>
Executive Overview	<u>1</u>
Terms used by TDS	1 3 5 8
Results of Operations – TDS Consolidated	<u>5</u>
<u>U.S. Cellular Operations</u>	<u>8</u>
TDS Telecom Operations	<u>14</u>
Wireline Operations	<u>17</u>
<u>Cable Operations</u>	<u>21</u>
<u>Liquidity and Capital Resources</u>	<u>24</u>
Consolidated Cash Flow Analysis	<u>28</u>
Consolidated Balance Sheet Analysis	<u>29</u>
Supplemental Information Relating to Non-GAAP Financial Measures	<u>30</u>
Application of Critical Accounting Policies and Estimates	<u>35</u>
Recent Accounting Pronouncements	35 35 35
Regulatory Matters	<u>35</u>
Private Securities Litigation Reform Act of 1995 Safe Harbor Cautionary Statement	<u>37</u>
Risk Factors	<u>39</u>
Quantitative and Qualitative Disclosures About Market Risk	<u>39</u>
Financial Statements (Unaudited)	<u>40</u>
Consolidated Statement of Operations	<u>40</u>
Consolidated Statement of Comprehensive Income	<u>41</u>
Consolidated Statement of Cash Flows	<u>42</u>
Consolidated Balance Sheet	<u>43</u>
Consolidated Statement of Changes in Equity	<u>45</u>
Notes to Consolidated Financial Statements	<u>47</u>
Controls and Procedures	<u>68</u>
Legal Proceedings	<u>68</u>
Unregistered Sales of Equity Securities and Use of Proceeds	<u>68</u>
Other Information	<u>69</u>
<u>Exhibits</u>	<u>70</u>
Form 10-Q Cross Reference Index	<u>71</u>
<u>Signatures</u>	<u>72</u>

Table of Contents

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

Executive Overview

The following discussion and analysis compares Telephone and Data Systems, Inc.'s (TDS) financial results for the three and nine months ended September 30, 2018, to the three and nine months ended September 30, 2017. It should be read in conjunction with TDS' interim consolidated financial statements and notes included herein, and with the description of TDS' business, its audited consolidated financial statements and Management's Discussion and Analysis (MD&A) of Financial Condition and Results of Operations included in TDS' Annual Report on Form 10-K (Form 10-K) for the year ended December 31, 2017. 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-Q 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). See Note 12 — Business Segment Information in the Notes to Consolidated Financial Statements for summary financial information on each business segment.

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.

Table of Contents

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.

In 2018, TDS is working to build shareholder value by continuing to execute on its strategies to build strong, competitive businesses providing high-quality, data-focused services and products. Strategic efforts include:

- U.S. Cellular continues to offer 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 fixed wireless broadband. In addition, U.S. Cellular is focused on expanding its solutions available to business and government customers, including a growing suite of connected machine-to-machine solutions and software applications across various categories.
- 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 early 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 is committed to continuous technology innovation as demonstrated by its ongoing evaluation of 5G technology. U.S. Cellular continues to be engaged in efforts related to the development of 5G standards and identifying potential use cases for the technology. In addition, U.S. Cellular has successfully tested 5G technology in both indoor and outdoor environments and plans to conduct a trial utilizing 5G standards and equipment on its core LTE network commencing in the fourth quarter of 2018. When deployed commercially, 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 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.

TDS Telecom's Wireline business continues to focus on driving growth in its video, broadband, and managedIP 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 make network capacity investments and offer more advanced services in its markets in line with its strategy to increase broadband penetration.

TDS Telecom's Wireline and Cable businesses are investing in a Cloud TV platform to enhance video services.

Table of Contents

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 broadband technology.

5G – fifth generation wireless broadband technology.

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.

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).

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.

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, watches, 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.

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

Machine-to-Machine or M2M – technology that involves the transmission of data between networked devices, as well as the performance of actions by devices without human intervention. U.S. Cellular sells and supports M2M solutions to customers, provides connectivity for M2M solutions via the U.S. Cellular network, and has agreements with device manufacturers and software developers which offer M2M solutions.

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.

Table of Contents

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.

Table of Contents

Results of Operations — TDS Consolidated

Results of Operations — TDS Consolidated	Three M Septemb	Months E ber 30,	Nine Mo Septemb					
	20181	2017	2013 vs. 2017		20181	2017	201 vs. 201	
(Dollars in millions)								
Operating revenues								
U.S. Cellular	\$1,001	\$963	4	%	\$2,916	\$2,862	2	%
TDS Telecom	234	230	2		695	690	1	%
All other ²	62	58	6	%	166	184	(10)%
Total operating revenues	1,297	1,251	4	%	3,777	3,736	1	%
Operating expenses	•	•			,	,		
U.S. Cellular	967	1,323	(27)%	2,761	3,163	(13)%
TDS Telecom	206	203	2		624	601	4	%
All other ^{2, 3}	73	(42)	N/M	1	200	97	N/I	M
Total operating expenses	1,246	1,484			3,585	3,861	(7)%
Operating income (loss)	•		•		•		`	,
U.S. Cellular	34	(360)	N/M	1	155	(301) N/I	M
TDS Telecom	28	27	1	%	71	88	(20)%
All other ^{2, 3}	(11	100	N/M	1	(34)	88	N/I	M
Total operating income (loss)	51	(233)	N/M	1	192	(125) N/I	M
Investment and other income (expense)								
Equity in earnings of unconsolidated entities	42	35	19	%	121	101	20	%
Interest and dividend income	6	4	56	%	18	12	51	%
Interest expense	(43	(43)	–		(129)	(128) (1)%
Other, net	2	1	N/M	Ī	1	3	(32)%
Total investment and other income (expense)	7	(3)	N/M	I	11	(12) N/I	Л
Income (loss) before income taxes	58	(236)	N/M	I	203	(137) N/I	М
Income tax expense (benefit)	5	(5)	N/M	I	48	39	24	%
Net income (loss)	53	(231)	N/M	1	155	(176) N/I	M
Less: Net income (loss) attributable to noncontrolling interests,	7	(50)	N/M	ſ	36	(42) N/I	Л
net of tax	,	(30)	1 1N/1V.	ı	30	(42) 11/1	VΙ
Net income (loss) attributable to TDS shareholders	\$46	\$(181)	N/M	1	\$119	\$(134) N/I	Л
Adjusted OIBDA (Non-GAAP) ⁴	\$271	\$243	11	%	\$839	\$765	10	%
Adjusted EBITDA (Non-GAAP) ⁴	\$321	\$283	13		\$979	\$881	11	%
Capital expenditures	\$177	\$172	3		\$430	\$402	7	%
N/M - Percentage change not meaningful	4-11	₩ = / =	-	,0	¥ .50	Ψ.0 2	,	,0

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.

During the three months ended September 30, 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 three months ended September 30, 2017, TDS also recorded a goodwill impairment of \$35 million related to its HMS operations, included in "All other".

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.

Table of Contents

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 by the equity method. TDS' investment in the Los Angeles SMSA Limited Partnership (LA Partnership) contributed \$20 million and \$17 million for the three months ended September 30, 2018 and 2017, respectively, and \$58 million and \$50 million for the nine months ended September 30, 2018 and 2017, respectively, to Equity in earnings of unconsolidated entities. See Note 8 — Investments in Unconsolidated Entities in the Notes to Consolidated Financial Statements for additional information.

Income tax expense

See Note 5 — Income Taxes in the Notes to Consolidated Financial Statements for additional information related to income taxes. The bonus depreciation provision of the Tax Act is expected to substantially reduce TDS' current federal income tax liability in 2018.

Net income (loss) attributable to noncontrolling interests, net of tax

	Three	Nine							
	Months	Months							
	Ended	Ended							
	September	September							
	30,	30,							
	2012017	20182017							
	\$6 \$(50)	\$22 \$(44)							
	1 —	14 2							
ax	\$7 \$(50)	\$36 \$(42)							

(Dollars in millions)

U.S. Cellular noncontrolling public shareholders' \$6 \$(50) \$22 \$(44) Noncontrolling shareholders' or partners' 1 — 14 2

Net income (loss) attributable to noncontrolling interests, net of tax \$7 \$(50) \$36 \$(42)

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

Net income (loss) attributable to noncontrolling interests, net of tax increased during the nine months ended September 30, 2018, due primarily to an out-of-period adjustment recorded in the first quarter of 2018. TDS determined that this adjustment was not material to any of the periods impacted. See Note 10 — Variable Interest Entities in the Notes to Consolidated Financial Statements for additional information.

<u>Table of Contents</u>
Earnings
(Dollars in millions)
Three and Nine Months Ended
Net income (loss) increased due primarily to the recognition of a loss on impairment related to the U.S. Cellular reporting unit and HMS business recognized in the third quarter of 2017. Adjusted EBITDA increased due primarily to increased Operating revenues at U.S. Cellular. The loss on impairment of goodwill in the third quarter of 2017 was not included as a component of Adjusted EBITDA.

*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.

Table of Contents

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 approximately 5.1 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 5,700 associates

6,506 cell sites including 4,119 owned towers in service

Table of Contents

Operational Overview

As of
September2018 2017
30,
Retail Connections –
End of Period
Postpaid 4,466,000 4,513,000
Prepaid 528,000 515,000
Total 4,994,000 5,028,000

	Q3 2018	}	Q3 2017		YTD 2018	3	YTD 201	7
Postpaid Activity and Churn								
Gross Additions								
Handsets	133,000		139,000		340,000		357,000	
Connected Devices	39,000		52,000		107,000		154,000	
Total Gross Additions	172,000		191,000		447,000		511,000	
Net Additions (Losses)								
Handsets	15,000		29,000		3,000		20,000	
Connected Devices	(16,000)	6,000		(55,000)	11,000	
Total Net Additions (Losses)	(1,000)	35,000		(52,000)	31,000	
Churn	1.29	%	1.16	%	1.24	%	1.19	%

Postpaid net additions decreased for the three and nine months ended September 30, 2018, when compared to the same period last year, due to lower gross additions, as well as an increase in tablet churn. U.S. Cellular believes lower gross additions resulted from aggressive, industry-wide promotional activity on handsets and, in part, reflects U.S. Cellular's decision to curtail promotions of heavily discounted tablets.

Table of Contents

Postpaid Revenue

•	Three M	onths	Nine Mo	onths	
	Ended		Ended		
	Septemb	er 30,	September 30		
	2018	2017	2018	2017	
Average Revenue Per User (ARPU)	\$45.31	\$43.41	\$44.79	\$44.46	
Average Billings Per User (ABPU) ¹	\$59.41	\$54.71	\$58.07	\$55.21	

Average Revenue Per Account (ARPA) \$119.42 \$116.36 \$118.71 \$119.26 Average Billings Per Account (ABPA) \$156.57 \$146.65 \$153.92 \$148.12

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 and Postpaid ARPA increased for the three months ended September 30, 2018, when compared to the same period last year, due to several factors including: having proportionately more handset connections, which on a per-unit basis contribute more revenue than connected device connections; a shift in mix to higher-priced service plans; and increases in device protection plan and regulatory recovery revenues. Such factors were partially offset by the impact of adopting the provisions of ASU 2014-09. Application of the new accounting standard had the impact of reducing ARPU and ARPA for the three months ended September 30, 2018, by \$0.23 and \$0.61, respectively.

Postpaid ARPU increased for the nine months ended September 30, 2018, when compared to the same period last year, due to the reasons mentioned above. Postpaid ARPA slightly decreased for the nine months ended September 30, 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 for the nine months ended September 30, 2018, by \$0.39 and \$1.03, 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 for the three and nine months ended September 30, 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 cost per device sold.

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.

Table of Contents

Financial Overview - U.S. Cellular

		Months mber 30		ed	Nine Mo Septemb	ded		
	2018						2018	
	20181	s ¹ 2017 vs 20		7	20181	2017	vs. 201	.7
(Dollars in millions)								
Retail service	\$659	\$636	4	%	\$1,960	\$1,940	1	%
Inbound roaming	50	37	35	%	116	94	23	%
Other	50	64	(22)%	148	189	(22)%
Service revenues	759	737	3	%	2,224	2,223	_	
Equipment sales	242	226	7	%	692	639	8	%
Total operating revenues	1,001	963	4	%	2,916	2,862	2	%
System operations (excluding Depreciation, amortization and accretion reported below)	200	185	8	%	566	549	3	%
Cost of equipment sold	258	261	(1)%	716	749	(4)%
Selling, general and administrative	346	350	(1)%	1,014	1,041	(2)%
Depreciation, amortization and accretion	160	153	4	%	478	460	4	%
Loss on impairment of goodwill		370	N/M	[370	N/N	Л
(Gain) loss on asset disposals, net	3	5	(36)%	5	14	(61)%
(Gain) loss on sale of business and other exit costs, net		(1)	N/M	[(1) N/N	Л
(Gain) loss on license sales and exchanges, net		_	N/M	[(18)	(19	6 (%
Total operating expenses	967	1,323	(27)%	2,761	3,163	(13)%
Operating income (loss)	\$34	\$(360)	N/M	[\$155	\$(301) N/N	Л
Net income (loss)	\$37	\$(298)	N/M	[\$143	\$(259) N/N	Л
Adjusted OIBDA (Non-GAAP) ²	\$197	\$167	18	%	\$620	\$523	18	%
Adjusted EBITDA (Non-GAAP) ²	\$243	\$204	19	%	\$750	\$631	19	%
Capital expenditures	\$118	\$112	6	%	\$274	\$257	7	%
N/M - Percentage change not meaningful								

As of January 1, 2018, U.S. Cellular 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 Refer to Supplemental Information Relating to Non-GAAP Financial Measures within this MD&A for a reconciliation of this measure.

Table of Contents

Operating Revenues Three Months Ended September 30, 2018 and 2017 (Dollars in millions)

Operating Revenues Nine Months Ended September 30, 2018 and 2017 (Dollars in millions) Service revenues consist of:

Retail Service - Charges for access, airtime, recovery of regulatory costs and value added services, including data services and products

Inbound Roaming - Charges to other wireless carriers whose customers use U.S. Cellular's wireless systems when roaming

Other Service - Amounts received from the Federal USF and tower rental revenues. Imputed interest on equipment installment plan contracts is included in 2017; however, it is not included in 2018 due to the impact of adopting the provisions of ASU 2014-09

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 for the three and nine months ended September 30, 2018, primarily as a result of the changes in Postpaid ARPU as previously discussed in the Operational Overview section. In the nine months comparison, an increase in the average number of connections also was a factor.

Inbound roaming revenues increased for the three and nine months ended September 30, 2018, primarily driven by higher data usage, partially offset by lower rates.

Other service revenues decreased for the three and nine months ended September 30, 2018, reflecting the exclusion of imputed interest income in 2018 due to the impact of adopting the provisions of ASU 2014-09. The impact of imputed interest income was \$19 million and \$52 million for the three and nine months ended September 30, 2017. Federal USF revenues remained flat at \$23 million and \$69 million for the three and nine months ended September 30, 2018. See the Regulatory Matters section in this MD&A for a description of the Phase II Connect America Mobility Fund (MF2 Order) and its expected impacts on U.S. Cellular's current Federal USF support.

Equipment sales revenues increased for the three and nine months ended September 30, 2018, due to the impact of adopting the provisions of ASU 2014-09, an increase in the average revenue per device sold, and a mix shift from feature phones and connected devices to higher end smartphone devices. Such factors were partially offset by a decrease in the number of devices sold and a reduction in guarantee liability amortization for equipment installment contracts as a result of changes in plan offerings.

Table of Contents

See Note 2 — Revenue Recognition in the Notes to Consolidated Financial Statements for additional details on the financial statement impact of ASU 2014-09.

System operations expenses

System operations expenses increased for the three and nine months ended September 30, 2018, due to an increase in roaming expenses primarily driven by higher data roaming usage, partially offset by lower rates. Also contributing to the increase were higher maintenance, utility and cell site expenses largely reflecting the growth in cell sites and other network facilities as U.S. Cellular continues to add capacity, enhance quality, and deploy new technologies.

Cost of equipment sold

Cost of equipment sold decreased for the three and nine months ended September 30, 2018, due primarily to a decrease in the number of devices sold, as well as the impact of adopting the provisions of ASU 2014-09. Such factors were partially offset by increases due to a higher average cost per device sold as well as a mix shift from feature phones and connected devices to higher cost smartphones.

Depreciation, amortization and accretion

Depreciation, amortization, and accretion increased for the three and nine months ended September 30, 2018, due to additional network assets being placed into service as well as an increase in amortization expense related to billing system upgrades.

Loss on impairment of goodwill

During the third quarter of 2017, U.S. Cellular recorded a \$370 million loss on impairment of goodwill.

(Gain) loss on asset disposals, net

Loss on asset disposals, net decreased primarily as a result of fewer disposals of certain network assets.

(Gain) loss on license sales and exchanges, net

Net gains in 2018 and 2017 were due to gains recognized on license sale and exchange transactions with various third parties.

Table of Contents

TDS TELECOM OPERATIONS

Business Overview

TDS Telecom operates in two reportable segments: Wireline and Cable. TDS Telecom's business objective is to provide a wide range of communication services to both residential and commercial customers, focused on high-quality broadband and video products.

OPERATIONS

TDS Telecom provides broadband, video and voice services to approximately 1.2 million connections in 31 states.

Employs approximately 2,600 employees.

Wireline operates incumbent local exchange carriers (ILEC) and competitive local exchange carriers (CLEC) in 27 states.

Cable operates primarily in Colorado, New Mexico, Texas, Utah, and Oregon.

Table of Contents

Financial Overview — TDS Telecom

	Three	Mont	hs	Nine Months						
	Ende	d		Ended						
	Septe	mber 3	30,	September 30,						
			2018		2018					
	20181	2017	vs.	20181	2017	7 vs.				
			2017			2017				
(Dollars in millions)										
Operating revenues										
Wireline	\$177	\$179	(1)%	\$526	\$538	(2)%			
Cable	58	52	11 %	170	152	12	%			
TDS Telecom operating revenues	234	230	2 %	695	690	1	%			
Operating expenses										
Wireline	149	153	(3)%	451	457	(1)%			
Cable	58	50	16 %	174	145	20	%			
TDS Telecom operating expenses	206	203	2 %	624	601	4	%			
TDS Telecom operating income	\$28	\$27	1 %	\$71	\$88	(20))%			
Net income	\$36	\$18	94 %	\$72	\$58	25	%			
	\$ <i>7</i> 7				\$236					
Adjusted OIBDA (Non-GAAP) ²		\$77					1			
Adjusted EBITDA (Non-GAAP) ²			1 %							
Capital expenditures	\$54	\$56	(3)%	\$140	\$127	11	%			
Numbers may not foot due to rour	iding.									

As of January 1, 2018, TDS adopted ASU 2014-09 using a modified retrospective approach. Under this method, the ¹ 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.

Operating Revenues (Dollars in millions)

Total operating revenues

Operating revenues increased for the three and nine months ended September 30, 2018. Price increases, Cable broadband and Cable and Wireline video connection growth, and higher Wireline support revenue provided through the A-CAM program increased revenues. Wireline wholesale access revenue and legacy voice and commercial

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

products revenues decreased.

Table of Contents

Total operating expenses

Operating expenses increased for the three and nine months ended September 30, 2018, due primarily to higher Wireline and Cable video programming costs and Wireline network maintenance. Operating expenses also increased due to amortization of Cable franchise rights. See Note 1 - Basis of Presentation in the Notes to Consolidated Financial Statements for additional information related to Cable franchise rights. In addition, operating expenses increased due to the impacts of adopting the provisions of ASU 2014-09. See Note 2 — Revenue Recognition in the Notes to Consolidated Financial Statements for additional information. Capital expenditures

Capital spending increased for the nine months ended September 30, 2018, to support strategic build-outs including market expansions, A-CAM and Cloud TV.

Table of Contents

WIRELINE OPERATIONS

Business Overview

TDS Telecom's Wireline business provides broadband, video and voice services. These services are provided to residential, commercial, and wholesale customers in a mix of rural, small town and suburban markets, with the largest concentration of its customers in the Upper Midwest and the Southeast. TDS Telecom's strategy is to offer its residential customers broadband, video, and voice services through value-added bundling. In its commercial business, TDS Telecom's focus is on small- to medium-sized businesses and its sales efforts emphasize advanced IP-based data and voice services.

Operational Overview

ILEC Residential Broadband Connections by Speeds As of September 30,

Residential broadband customers are increasingly choosing higher speeds in ILEC markets with 61% choosing speeds of 10 Mbps or greater and 30% choosing speeds of 50 Mbps or greater.

Wireline Residential Revenue per Connection

Increases in broadband speeds, video connection growth, and price increases drove increases in average residential revenue per connection.

Table of Contents

Residential Connections As of September 30,

Total residential connections decreased by 1% as declines in voice connections outpaced the growth in video and broadband connections.

Commercial Connections As of September 30,

Total commercial connections decreased by 7% due primarily to a 9% decrease in voice connections, mostly in CLEC markets.

Table of Contents

Financial Overview — Wireline

	Ende	e Mon d ember			Nine N Septer	as Ended 30,		
			2013	8			201	8
	2018 ¹ 2017 vs.				2018^{1}	2017	vs.	
			2017				2017	
(Dollars in millions)								
Residential	\$81	\$ 80	1	%	\$241	\$240	1	%
Commercial	46	50	(8)%	140	151	(7)%
Wholesale	50	49	2	%	144	147	(2)%
Service revenues	176	178	(1)%	524	537	(2)%
Equipment and product sales	_	_	15	%	1	1	31	%
Total operating revenues	177	179	(1)%	526	538	(2)%
Cost of services (excluding Depreciation, amortization and accretion reported below)	68	66	4	%	200	194	3	%
Cost of equipment and products	_	_	(35)%	1	2	(33)%
Selling, general and administrative	49	49	(1)%	146	147	(1)%
Depreciation, amortization and accretion	35	38	(6)%	108	114	(5)%
(Gain) loss on asset disposals, net	(4)		N/M	1	(3)	1	N/N	1
Total operating expenses	149	153	(3)%				