

T-Mobile®

Q4 and Full-Year 2016
Financial Results, Supplementary Data,
Non-GAAP Reconciliations,
Reconciliation of Operating Measures

A REVOLUTION DRIVING RESULTS



Definitions of Terms

Operating and financial measures are utilized by T-Mobile's management to evaluate its operating performance and, in certain cases, its ability to meet liquidity requirements. Although companies in the wireless industry may not define measures in precisely the same way, T-Mobile believes the measures facilitate key operating performance comparisons with other companies in the wireless industry to provide management, investors and analysts with useful information to assess and evaluate past performance and assist in forecasting future performance.

- 1 Customer - SIM card with a unique T-Mobile mobile identity number which generates revenue. Branded customers generally include customers that are qualified either for postpaid service, where they generally pay after incurring service, or prepaid service, where they generally pay in advance. Wholesale customers include Machine-to-Machine (M2M) and Mobile Virtual Network Operator (MVNO) customers that operate on T-Mobile's network, but are managed by wholesale partners.
- 2 Churn - Number of customers whose service was disconnected as a percentage of the average number of customers during the specified period. The number of customers whose service was disconnected is presented net of customers that subsequently have their service restored within a certain period of time.
- 3 Customers per account - The number of branded postpaid customers as of the end of the period divided by the number of branded postpaid accounts as of the end of the period. An account may include branded postpaid phone and mobile broadband customers.
- 4 Average Revenue Per User (ARPU) - Average monthly service revenue earned from customers. Service revenues for the specified period divided by the average customers during the period, further divided by the number of months in the period.

Branded postpaid phone ARPU excludes mobile broadband customers and related revenues.

Average Billings per User (ABPU) - Average monthly branded postpaid service revenue earned from customers plus monthly EIP billings and lease revenues divided by the average branded postpaid customers during the period, further divided by the number of months in the period. T-Mobile believes branded postpaid ABPU is indicative of estimated cash collections, including device financing payments, from T-Mobile's postpaid customers each month.

Service revenues - Branded postpaid, including handset insurance, branded prepaid, wholesale, and roaming and other service revenues.

- 5 Cost of services - Costs directly attributable to providing wireless service through the operation of T-Mobile's network, including direct switch and cell site costs, such as rent, network access and transport costs, utilities, maintenance, associated labor costs, long distance costs, regulatory program costs, roaming fees paid to other carriers and data content costs.

Cost of equipment sales - Costs of devices and accessories sold to customers and dealers, device costs to fulfill insurance and warranty claims, write-downs of inventory related to shrinkage and obsolescence, and shipping and handling costs.

Selling, general and administrative expenses - Costs not directly attributable to providing wireless service for the operation of sales, customer care and corporate activities. These include commissions paid to dealers and retail employees for activations and upgrades, labor and facilities costs associated with retail sales force and administrative space, marketing and promotional costs, customer support and billing, bad debt expense and administrative support activities.

- 6 Net income margin - Margin % calculated as Net income divided by service revenues.
- 7 Adjusted EBITDA - Earnings before interest expense, net of interest income, income tax expense, depreciation and amortization expense, non-cash stock-based compensation and certain expenses not reflective of T-Mobile's ongoing operating performance. Adjusted EBITDA margin represents Adjusted EBITDA divided by service revenues. Adjusted EBITDA is a non-GAAP financial measure utilized by T-Mobile's management to monitor the financial performance of our operations. T-Mobile uses Adjusted EBITDA internally as a metric to evaluate and compensate its personnel and management for their performance, and as a benchmark to evaluate T-Mobile's operating performance in comparison to its competitors. Management believes analysts and investors use Adjusted EBITDA as a supplemental measure to evaluate overall operating performance and facilitate comparisons with other wireless communications companies because it is indicative of T-Mobile's ongoing operating performance and trends by excluding the impact of interest expense from financing, non-cash depreciation and amortization from capital investments, non-cash stock-based compensation, network decommissioning costs as they are not indicative of T-Mobile's ongoing operating performance and certain other nonrecurring expenses. Adjusted EBITDA has limitations as an analytical tool and should not be considered in isolation or as a substitute for income from operations, net income or any other measure of financial performance reported in accordance with GAAP. The Company is making an accounting change in 2017 to include imputed interest associated with equipment installment plan ("EIP") receivables in Other revenues which will be included in Adjusted EBITDA.
- 8 Adjusted EBITDA Margin - Margin % calculated as Adjusted EBITDA divided by service revenues.
- 9 Cash capital expenditures - Amounts paid for construction and the purchase of property and equipment.
- 10 Smartphones - UMTS/HSPA/HSPA+ 21/HSPA+ 42/4G LTE enabled converged devices, which integrate voice and data services.
- 11 Free Cash Flow - Net cash provided by operating activities less cash capital expenditures for property and equipment. Free Cash Flow is utilized by T-Mobile's management, investors, and analysts to evaluate cash available to pay debt and provide further investment in the business. The reconciliation of Free Cash Flow to net cash provided by operating activities is detailed in the Reconciliation of Non-GAAP Financial Measures to GAAP Financial Measures schedule.
- 12 Adjusted Free Cash Flow - Free Cash Flow excluding decommissioning payments related to the shutdown of the CDMA portion of the MetroPCS network.
- 13 Net debt - Short-term debt, long-term debt to affiliates, and long-term debt (excluding tower obligations), less cash and cash equivalents and short-term investments.

T-Mobile US, Inc. Supplementary Operating and Financial Data

(in thousands)	Quarter								Year Ended December 31,	
	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	2015	2016
Customers, end of period										
Branded postpaid phone customers	26,835	27,595	28,438	29,355	30,232	30,878	30,364	31,297	29,355	31,297
Branded postpaid mobile broadband customers	1,475	1,723	1,965	2,340	2,504	2,748	2,866	3,130	2,340	3,130
Total branded postpaid customers	28,310	29,318	30,403	31,695	32,736	33,626	33,230	34,427	31,695	34,427
Branded prepaid customers	16,389	16,567	17,162	17,631	18,438	18,914	19,272	19,813	17,631	19,813
Total branded customers	44,699	45,885	47,565	49,326	51,174	52,540	52,502	54,240	49,326	54,240
Wholesale customers	12,137	13,023	13,655	13,956	14,329	14,844	16,852	17,215	13,956	17,215
Total customers, end of period	56,836	58,908	61,220	63,282	65,503	67,384	69,354	71,455	63,282	71,455

(in thousands)	Quarter								Year Ended December 31,	
	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	2015	2016
Net customer additions										
Branded postpaid phone customers	991	760	843	917	877	646	851	933	3,511	3,307
Branded postpaid mobile broadband customers	134	248	242	375	164	244	118	264	999	790
Total branded postpaid customers	1,125	1,008	1,085	1,292	1,041	890	969	1,197	4,510	4,097
Branded prepaid customers	73	178	595	469	807	476	684	541	1,315	2,508
Total branded customers	1,198	1,186	1,680	1,761	1,848	1,366	1,653	1,738	5,825	6,605
Wholesale customers	620	886	632	301	373	515	317	363	2,439	1,568
Total net customer additions	1,818	2,072	2,312	2,062	2,221	1,881	1,970	2,101	8,264	8,173
Transfer from branded postpaid phone customers	—	—	—	—	—	—	(1,365)	—	—	(1,365)
Transfer from branded prepaid customers	—	—	—	—	—	—	(326)	—	—	(326)
Transfer to wholesale customers	—	—	—	—	—	—	1,691	—	—	1,691

	Quarter								Year Ended December 31,	
	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	2015	2016
Branded postpaid phone churn	1.30%	1.32%	1.46%	1.46%	1.33%	1.27%	1.32%	1.28%	1.39%	1.30%
Branded prepaid churn	4.62%	4.93%	4.09%	4.20%	3.84%	3.91%	3.82%	3.94%	4.45%	3.88%

T-Mobile US, Inc. Supplementary Operating and Financial Data (Continued)

	Quarter								Year Ended December 31,	
	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	2015	2016
Financial Metrics										
Service revenues (in millions)	\$ 5,819	\$ 6,144	\$ 6,302	\$ 6,556	\$ 6,578	\$ 6,888	\$ 7,133	\$ 7,245	\$ 24,821	\$ 27,844
Total revenues (in millions)	\$ 7,778	\$ 8,179	\$ 7,849	\$ 8,247	\$ 8,599	\$ 9,222	\$ 9,246	\$ 10,175	\$ 32,053	\$ 37,242
Net income (loss) (in millions)	\$ (63)	\$ 361	\$ 138	\$ 297	\$ 479	\$ 225	\$ 366	\$ 390	\$ 733	\$ 1,460
Net income margin	(1)%	6%	2%	5%	7%	3%	5%	5%	3%	5%
Adjusted EBITDA (in millions)	\$ 1,388	\$ 1,817	\$ 1,908	\$ 2,280	\$ 2,749	\$ 2,464	\$ 2,630	\$ 2,548	\$ 7,393	\$ 10,391
Adjusted EBITDA margin	24%	30%	30%	35%	42%	36%	37%	35%	30%	37%
Cash capex - Property & Equipment (in millions)	\$ 982	\$ 1,191	\$ 1,120	\$ 1,431	\$ 1,335	\$ 1,349	\$ 1,159	\$ 859	\$ 4,724	\$ 4,702
Capitalized Interest (in millions)	\$ 78	\$ 61	\$ 57	\$ 50	\$ 36	\$ 18	\$ 17	\$ 71	\$ 246	\$ 142
Cash capex - Property & Equipment excluding cap interest (in millions)	\$ 904	\$ 1,130	\$ 1,063	\$ 1,381	\$ 1,299	\$ 1,331	\$ 1,142	\$ 788	\$ 4,478	\$ 4,560
Net cash provided by operating activities (in millions)	\$ 489	\$ 1,161	\$ 1,531	\$ 2,233	\$ 1,025	\$ 1,768	\$ 1,740	\$ 1,602	\$ 5,414	\$ 6,135
Net cash used in investing activities (in millions)	\$ (2,692)	\$ (1,337)	\$ (1,209)	\$ (4,322)	\$ (1,860)	\$ (667)	\$ (1,859)	\$ (1,294)	\$ (9,560)	\$ (5,680)
Net cash provided by (used in) financing activities (in millions)	\$ (80)	\$ (214)	\$ (331)	\$ 4,038	\$ (100)	\$ 790	\$ (67)	\$ (160)	\$ 3,413	\$ 463
Free Cash Flow (in millions)	\$ (493)	\$ (30)	\$ 411	\$ 802	\$ (310)	\$ 419	\$ 581	\$ 743	\$ 690	\$ 1,433
Adjusted Free Cash Flow (in millions)	\$ (422)	\$ 73	\$ 487	\$ 897	\$ (247)	\$ 485	\$ 624	\$ 780	\$ 1,035	\$ 1,642
Revenue Metrics										
Branded postpaid phone ARPU	\$ 46.43	\$ 48.19	\$ 47.99	\$ 48.05	\$ 46.21	\$ 47.11	\$ 48.15	\$ 48.37	\$ 47.68	\$ 47.47
Branded postpaid ABPU	\$ 60.94	\$ 63.29	\$ 62.96	\$ 63.74	\$ 61.90	\$ 62.59	\$ 63.38	\$ 63.08	\$ 62.77	\$ 62.75
Branded prepaid ARPU	\$ 37.81	\$ 37.83	\$ 37.46	\$ 37.63	\$ 37.58	\$ 37.86	\$ 38.01	\$ 38.20	\$ 37.68	\$ 37.92
Branded postpaid accounts, end of period (in thousands)	11,831	12,061	12,250	12,456	12,639	12,753	11,932	12,055	12,456	12,055
Branded postpaid customers per account	2.39	2.43	2.48	2.54	2.59	2.64	2.78	2.86	2.54	2.86
Device Sales and Leased Devices										
Smartphone units (in millions)	8.0	7.4	8.1	10.0	8.8	8.1	8.7	9.9	33.5	35.5
Branded postpaid handset upgrade rate	8%	9%	9%	10%	7%	6%	7%	10%	36%	30%
Device Financing										
Gross EIP financed (in millions)	\$ 1,483	\$ 1,697	\$ 1,107	\$ 926	\$ 1,246	\$ 1,562	\$ 1,372	\$ 1,956	\$ 5,213	\$ 6,136
EIP billings (in millions)	\$ 1,292	\$ 1,393	\$ 1,409	\$ 1,400	\$ 1,324	\$ 1,344	\$ 1,394	\$ 1,370	\$ 5,494	\$ 5,432
EIP receivables, net (in millions)	\$ 4,842	\$ 5,114	\$ 4,771	\$ 3,225	\$ 3,053	\$ 2,662	\$ 2,508	\$ 2,914	\$ 3,225	\$ 2,914
Lease revenues (in millions)	\$ -	\$ -	\$ 30	\$ 194	\$ 342	\$ 367	\$ 353	\$ 354	\$ 224	\$ 1,416
Leased devices transferred from inventory to property and equipment (in millions)	\$ -	\$ -	\$ 854	\$ 1,597	\$ 784	\$ 157	\$ 234	\$ 413	\$ 2,451	\$ 1,588
Returned leased devices transferred from property and equipment to inventory (in millions)	\$ -	\$ -	\$ (32)	\$ (134)	\$ (131)	\$ (105)	\$ (186)	\$ (180)	\$ (166)	\$ (602)
Customer Quality										
EIP receivables classified as prime	52%	52%	52%	48%	47%	42%	42%	44%	48%	44%
EIP receivables classified as prime (including EIP receivables sold)	52%	52%	52%	52%	52%	53%	53%	53%	52%	53%
Total bad debt expense and losses from sales of receivables (in millions)	\$ 169	\$ 156	\$ 198	\$ 228	\$ 173	\$ 165	\$ 177	\$ 190	\$ 751	\$ 705

T-Mobile US, Inc.
Condensed Consolidated Balance Sheets
(Unaudited)

(in millions, except share and per share amounts)	December 31, 2016	December 31, 2015
Assets		
Current assets		
Cash and cash equivalents	\$ 5,500	\$ 4,582
Short-term investments	—	2,998
Accounts receivable, net of allowances of \$102 and \$116	1,896	1,788
Equipment installment plan receivables, net	1,930	2,378
Accounts receivable from affiliates	40	36
Inventories	1,111	1,295
Asset purchase deposit	2,203	—
Other current assets	1,537	1,813
Total current assets	14,217	14,890
Property and equipment, net	20,943	20,000
Goodwill	1,683	1,683
Spectrum licenses	27,014	23,955
Other intangible assets, net	376	594
Equipment installment plan receivables due after one year, net	984	847
Other assets	674	444
Total assets	\$ 65,891	\$ 62,413
Liabilities and Stockholders' Equity		
Current liabilities		
Accounts payable and accrued liabilities	\$ 7,152	\$ 8,084
Payables to affiliates	125	135
Short-term debt	354	182
Deferred revenue	986	717
Other current liabilities	405	410
Total current liabilities	9,022	9,528
Long-term debt	21,832	20,461
Long-term debt to affiliates	5,600	5,600
Tower obligations	2,621	2,658
Deferred tax liabilities	4,938	4,061
Deferred rent expense	2,616	2,481
Other long-term liabilities	1,026	1,067
Total long-term liabilities	38,633	36,328
Commitments and contingencies		
Stockholders' equity		
5.50% Mandatory Convertible Preferred Stock Series A, par value \$0.00001 per share, 100,000,000 shares authorized; 20,000,000 and 20,000,000 shares issued and outstanding; \$1,000 and \$1,000 aggregate liquidation value	—	—
Common Stock, par value \$0.00001 per share, 1,000,000,000 shares authorized; 827,768,818 and 819,773,724 shares issued, 826,357,331 and 818,391,219 shares outstanding	—	—
Additional paid-in capital	38,846	38,666
Treasury stock, at cost, 1,411,487 and 1,382,505 shares issued	(1)	—
Accumulated other comprehensive income (loss)	1	(1)
Accumulated deficit	(20,610)	(22,108)
Total stockholders' equity	18,236	16,557
Total liabilities and stockholders' equity	\$ 65,891	\$ 62,413

T-Mobile US, Inc.
Condensed Consolidated Statements of Comprehensive Income
(Unaudited)

(in millions, except share and per share amounts)	Three Months Ended			Year Ended December 31,	
	December 31, 2016	September 30, 2016	December 31, 2015	2016	2015
Revenues					
Branded postpaid revenues	\$ 4,680	\$ 4,647	\$ 4,337	\$ 18,138	\$ 16,383
Branded prepaid revenues	2,227	2,182	1,956	8,553	7,553
Wholesale revenues	258	238	200	903	692
Roaming and other service revenues	80	66	63	250	193
Total service revenues	7,245	7,133	6,556	27,844	24,821
Equipment revenues	2,740	1,948	1,536	8,727	6,718
Other revenues	190	165	155	671	514
Total revenues	10,175	9,246	8,247	37,242	32,053
Operating expenses					
Cost of services, exclusive of depreciation and amortization shown separately below	1,445	1,436	1,384	5,731	5,554
Cost of equipment sales	3,287	2,539	2,019	10,819	9,344
Selling, general and administrative	2,959	2,898	2,755	11,378	10,189
Depreciation and amortization	1,548	1,568	1,369	6,243	4,688
Cost of MetroPCS business combination	(6)	15	21	104	376
Gains on disposal of spectrum licenses	—	(199)	(139)	(835)	(163)
Total operating expenses	9,233	8,257	7,409	33,440	29,988
Operating income	942	989	838	3,802	2,065
Other income (expense)					
Interest expense	(335)	(376)	(305)	(1,418)	(1,085)
Interest expense to affiliates	(64)	(76)	(134)	(312)	(411)
Interest income	63	62	85	261	420
Other expense, net	—	(1)	(3)	(6)	(11)
Total other expense, net	(336)	(391)	(357)	(1,475)	(1,087)
Income before income taxes	606	598	481	2,327	978
Income tax expense	(216)	(232)	(184)	(867)	(245)
Net income	390	366	297	1,460	733
Dividends on preferred stock	(14)	(13)	(14)	(55)	(55)
Net income attributable to common stockholders	\$ 376	\$ 353	\$ 283	\$ 1,405	\$ 678
Net income	\$ 390	\$ 366	\$ 297	\$ 1,460	\$ 733
Other comprehensive income (loss), net of tax					
Unrealized gain (loss) on available-for-sale securities, net of tax effect of \$0, \$1, \$0, \$1 and \$(1)	—	2	—	2	(2)
Other comprehensive income (loss)	—	2	—	2	(2)
Total comprehensive income	\$ 390	\$ 368	\$ 297	\$ 1,462	\$ 731
Earnings per share					
Basic	\$ 0.46	\$ 0.43	\$ 0.35	\$ 1.71	\$ 0.83
Diluted	\$ 0.45	\$ 0.42	\$ 0.34	\$ 1.69	\$ 0.82
Weighted average shares outstanding					
Basic	824,982,734	822,998,697	816,585,782	822,470,275	812,994,028
Diluted	867,262,400	832,257,819	824,716,119	833,054,545	822,617,938

T-Mobile US, Inc.
Condensed Consolidated Statements of Cash Flows
(Unaudited)

(in millions)	Three Months Ended			Year Ended December 31,	
	December 31, 2016	September 30, 2016	December 31, 2015	2016	2015
Operating activities					
Net income	\$ 390	\$ 366	\$ 297	\$ 1,460	\$ 733
Adjustments to reconcile net income to net cash provided by operating activities					
Depreciation and amortization	1,548	1,568	1,369	6,243	4,688
Stock-based compensation expense	64	59	48	235	201
Deferred income tax expense	291	219	174	914	256
Bad debt expense	119	118	163	477	547
Losses from sales of receivables	71	59	65	228	204
Deferred rent expense	24	32	36	121	167
Gains on disposal of spectrum licenses	—	(199)	(139)	(835)	(163)
Change in embedded derivatives	(14)	(13)	59	(25)	148
Changes in operating assets and liabilities					
Accounts receivable	(141)	(155)	(103)	(603)	(259)
Equipment installment plan receivables	(459)	104	1,439	97	1,089
Inventories	(305)	301	(1,522)	(802)	(2,495)
Deferred purchase price from sales of receivables	(71)	(16)	(139)	(270)	(185)
Other current and long-term assets	(164)	(98)	(159)	(133)	(217)
Accounts payable and accrued liabilities	367	(731)	657	(1,201)	693
Other current and long-term liabilities	(168)	112	20	158	22
Other, net	50	14	(32)	71	(15)
Net cash provided by operating activities	<u>1,602</u>	<u>1,740</u>	<u>2,233</u>	<u>6,135</u>	<u>5,414</u>
Investing activities					
Purchases of property and equipment, including capitalized interest of \$71, \$17, \$50, \$142 and \$246	(859)	(1,159)	(1,431)	(4,702)	(4,724)
Purchases of spectrum licenses and other intangible assets, including deposits	(424)	(705)	3	(3,968)	(1,935)
Purchases of short-term investments	—	—	(2,997)	—	(2,997)
Sales of short-term investments	—	—	—	2,998	—
Other, net	(11)	5	103	(8)	96
Net cash used in investing activities	<u>(1,294)</u>	<u>(1,859)</u>	<u>(4,322)</u>	<u>(5,680)</u>	<u>(9,560)</u>
Financing activities					
Proceeds from issuance of long-term debt	—	—	3,979	997	3,979
Proceeds from tower obligations	—	—	140	—	140
Repayments of capital lease obligations	(72)	(54)	(33)	(205)	(57)
Repayments of short-term debt for purchases of inventory, property and equipment, net	—	—	(1)	(150)	(564)
Repayments of long-term debt	(5)	(5)	—	(20)	—
Proceeds from exercise of stock options	4	11	1	29	47
Tax withholdings on share-based awards	(69)	(3)	(56)	(121)	(156)
Dividends on preferred stock	(14)	(13)	(14)	(55)	(55)
Other, net	(4)	(3)	22	(12)	79
Net cash provided by (used in) financing activities	<u>(160)</u>	<u>(67)</u>	<u>4,038</u>	<u>463</u>	<u>3,413</u>
Change in cash and cash equivalents	148	(186)	1,949	918	(733)
Cash and cash equivalents					
Beginning of period	5,352	5,538	2,633	4,582	5,315
End of period	<u>\$ 5,500</u>	<u>\$ 5,352</u>	<u>\$ 4,582</u>	<u>\$ 5,500</u>	<u>\$ 4,582</u>
Supplemental disclosure of cash flow information					
Interest payments, net of amounts capitalized	\$ 389	\$ 478	\$ 329	\$ 1,681	\$ 1,298
Income tax payments	2	4	13	25	54
Changes in accounts payable for purchases of property and equipment	592	(79)	(48)	285	46
Leased devices transferred from inventory to property and equipment	413	234	1,597	1,588	2,451
Returned leased devices transferred from property and equipment to inventory	(180)	(186)	(134)	(602)	(166)
Issuance of short-term debt for financing of property and equipment	—	—	—	150	500
Assets acquired under capital lease obligations	120	384	161	799	470

T-Mobile US, Inc.

Reconciliation of Non-GAAP Financial Measures to GAAP Financial Measures

(Unaudited)

This Investor Factbook includes non-GAAP financial measures. The non-GAAP financial measures should be considered in addition to, but not as a substitute for, the information provided in accordance with GAAP. Reconciliations for the non-GAAP financial measures to the most directly comparable GAAP financial measures are provided below. T-Mobile is not able to forecast net income on a forward looking basis without unreasonable efforts due to the high variability and difficulty in predicting certain items that affect GAAP net income including, but not limited to, income tax expense, stock based compensation expense, interest expense and interest income. The Company is making an accounting change in 2017 to include imputed interest associated with EIP receivables in Other revenues which will be included in Adjusted EBITDA.

Adjusted EBITDA is reconciled to net income (loss) as follows:

(in millions)	Quarter								Year Ended December 31,	
	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	2015	2016
Net income (loss)	\$ (63)	\$ 361	\$ 138	\$ 297	\$ 479	\$ 225	\$ 366	\$ 390	\$ 733	\$ 1,460
Adjustments:										
Interest expense	261	257	262	305	339	368	376	335	1,085	1,418
Interest expense to affiliates	64	92	121	134	79	93	76	64	411	312
Interest income	(112)	(114)	(109)	(85)	(68)	(68)	(62)	(63)	(420)	(261)
Other expense (income), net	8	(1)	1	3	2	3	1	—	11	6
Income tax expense (benefit)	(41)	2	100	184	272	147	232	216	245	867
Operating income	117	597	513	838	1,103	768	989	942	2,065	3,802
Depreciation and amortization	1,087	1,075	1,157	1,369	1,552	1,575	1,568	1,548	4,688	6,243
Cost of MetroPCS business combination	128	34	193	21	36	59	15	(6)	376	104
Stock-based compensation ⁽¹⁾	56	71	43	52	53	61	57	64	222	235
Other, net ⁽¹⁾	—	40	2	—	5	1	1	—	42	7
Adjusted EBITDA	\$ 1,388	\$ 1,817	\$ 1,908	\$ 2,280	\$ 2,749	\$ 2,464	\$ 2,630	\$ 2,548	\$ 7,393	\$ 10,391

(1) Stock-based compensation includes payroll tax impacts and may not agree to stock-based compensation expense in the condensed consolidated financial statements. Other, net may not agree to the Consolidated Statements of Comprehensive Income primarily due to certain non-routine operating activities, such as other special items that would not be expected to reoccur, and are therefore excluded in Adjusted EBITDA.

Net debt (excluding Tower Obligations) to last twelve months adjusted EBITDA ratio is calculated as follows:

(in millions, except net debt ratio)	Mar 31, 2015	Jun 30, 2015	Sep 30, 2015	Dec 31, 2015	Mar 31, 2016	Jun 30, 2016	Sep 30, 2016	Dec 31, 2016
Short-term debt	\$ 467	\$ 386	\$ 114	\$ 182	\$ 365	\$ 258	\$ 325	\$ 354
Long-term debt to affiliates	5,600	5,600	5,600	5,600	5,600	5,600	5,600	5,600
Long-term debt ⁽¹⁾	16,248	16,373	16,430	20,461	20,505	21,574	21,825	21,832
Less: Cash and cash equivalents	(3,032)	(2,642)	(2,633)	(4,582)	(3,647)	(5,538)	(5,352)	(5,500)
Less: Short-term investments	—	—	—	(2,998)	(2,925)	—	—	—
Net Debt (excluding Tower Obligations)	\$ 19,283	\$ 19,717	\$ 19,511	\$ 18,663	\$ 19,898	\$ 21,894	\$ 22,398	\$ 22,286
Divided by: Last twelve months Adjusted EBITDA	\$ 5,936	\$ 6,302	\$ 6,864	\$ 7,393	\$ 8,754	\$ 9,401	\$ 10,123	\$ 10,391
Net Debt (excluding Tower Obligations) to Last Twelve Months Adjusted EBITDA Ratio	3.2	3.1	2.8	2.5	2.3	2.3	2.2	2.1

(1) Long-term debt as of March 31, 2015 through December 31, 2015 has been restated for the adoption of Accounting Standards Update 2015-03, "Simplifying the Presentation of Debt Issuance Costs" in Q1 2016. The impact to the Net Debt (excluding Tower Obligations) to Last Twelve Months Adjusted EBITDA Ratio was not significant.

Reconciliation of Non-GAAP Financial Measures to GAAP Financial Measures (continued)

(Unaudited)

Free cash flow and adjusted free cash flow is calculated as follows:

(in millions)	Quarter								Year Ended December 31,	
	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	2015	2016
Net cash provided by operating activities	\$ 489	\$ 1,161	\$ 1,531	\$ 2,233	\$ 1,025	\$ 1,768	\$ 1,740	\$ 1,602	\$ 5,414	\$ 6,135
Cash purchases of property and equipment	(982)	(1,191)	(1,120)	(1,431)	(1,335)	(1,349)	(1,159)	(859)	(4,724)	(4,702)
Free Cash Flow	(493)	(30)	411	802	(310)	419	581	743	690	1,433
MetroPCS CDMA network decommissioning payments	71	103	76	95	63	66	43	37	345	209
Adjusted Free Cash Flow	\$ (422)	\$ 73	\$ 487	\$ 897	\$ (247)	\$ 485	\$ 624	\$ 780	\$ 1,035	\$ 1,642
Net cash used in investing activities	\$ (2,692)	\$ (1,337)	\$ (1,209)	\$ (4,322)	\$ (1,860)	\$ (667)	\$ (1,859)	\$ (1,294)	\$ (9,560)	\$ (5,680)
Net cash provided by (used in) financing activities	\$ (80)	\$ (214)	\$ (331)	\$ 4,038	\$ (100)	\$ 790	\$ (67)	\$ (160)	\$ 3,413	\$ 463

Free cash flow three-year CAGR is calculated as follows:

(in millions, except CAGR Range)	2016	2019 Guidance Range		CAGR Range	
Net cash provided by operating activities	\$ 6,135	\$ 9,400	\$ 10,000	15%	18%
Cash purchases of property and equipment	(4,702)	(5,000)	(5,400)	2%	5%
Free Cash Flow	\$ 1,433	\$ 4,400	\$ 4,600	45%	48%

T-Mobile US, Inc.

Reconciliation of Operating Measures to Branded Postpaid Service Revenues

(Unaudited)

The following tables illustrate the calculation of ARPU and ABPU and reconcile these measures to the related service revenues, which we consider to be the most directly comparable GAAP financial measure to ARPU and ABPU:

(in millions, except average number of customers, ARPU and ABPU)	Quarter								Year Ended December 31,	
	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	2015	2016
Calculation of Branded Postpaid Phone ARPU										
Branded postpaid service revenues	\$ 3,774	\$ 4,075	\$ 4,197	\$ 4,337	\$ 4,302	\$ 4,509	\$ 4,647	\$ 4,680	\$ 16,383	\$ 18,138
Less: Branded postpaid mobile broadband revenues	(109)	(135)	(165)	(179)	(182)	(193)	(193)	(205)	(588)	(773)
Branded postpaid phone service revenues	\$ 3,665	\$ 3,940	\$ 4,032	\$ 4,158	\$ 4,120	\$ 4,316	\$ 4,454	\$ 4,475	\$ 15,795	\$ 17,365
Divided by: Average number of branded postpaid phone customers (in thousands) and number of months in period	26,313	27,250	28,003	28,849	29,720	30,537	30,836	30,842	27,604	30,484
Branded postpaid phone ARPU	\$ 46.43	\$ 48.19	\$ 47.99	\$ 48.05	\$ 46.21	\$ 47.11	\$ 48.15	\$ 48.37	\$ 47.68	\$ 47.47
Calculation of Branded Postpaid ABPU										
Branded postpaid service revenues	\$ 3,774	\$ 4,075	\$ 4,197	\$ 4,337	\$ 4,302	\$ 4,509	\$ 4,647	\$ 4,680	\$ 16,383	\$ 18,138
EIP billings	1,292	1,393	1,409	1,400	1,324	1,344	1,394	1,370	5,494	5,432
Lease revenues	—	—	30	194	342	367	353	354	224	1,416
Total billings for branded postpaid customers	\$ 5,066	\$ 5,468	\$ 5,636	\$ 5,931	\$ 5,968	\$ 6,220	\$ 6,394	\$ 6,404	\$ 22,101	\$ 24,986
Divided by: Average number of branded postpaid customers (in thousands) and number of months in period	27,717	28,797	29,838	31,013	32,140	33,125	33,632	33,839	29,341	33,184
Branded postpaid ABPU	\$ 60.94	\$ 63.29	\$ 62.96	\$ 63.74	\$ 61.90	\$ 62.59	\$ 63.38	\$ 63.08	\$ 62.77	\$ 62.75
Calculation of Branded Prepaid ARPU										
Branded prepaid service revenues	\$ 1,842	\$ 1,861	\$ 1,894	\$ 1,956	\$ 2,025	\$ 2,119	\$ 2,182	\$ 2,227	\$ 7,553	\$ 8,553
Divided by: Average number of branded prepaid customers (in thousands) and number of months in period	16,238	16,396	16,853	17,330	17,962	18,662	19,134	19,431	16,704	18,797
Branded prepaid ARPU	\$ 37.81	\$ 37.83	\$ 37.46	\$ 37.63	\$ 37.58	\$ 37.86	\$ 38.01	\$ 38.20	\$ 37.68	\$ 37.92