



April 29, 2021

Twitter Announces First Quarter 2021 Results

Reports 20% Year-over-Year Growth in Monetizable Daily Active Usage (mDAU) and Total Revenue of \$1.04 Billion

SAN FRANCISCO, California - Twitter, Inc. (NYSE: TWTR) today announced financial results for its first quarter 2021.

“People turn to Twitter to see and talk about what’s happening, and we are helping them find their interests more quickly while making it easier to follow and participate in conversations,” said Jack Dorsey, Twitter’s CEO. “Average monetizable DAU (mDAU) reached 199 million, up 20% year over year and up 7 million sequentially, driven by ongoing product improvements and global conversation around current events.”

“Q1 was a solid start to 2021, with total revenue of \$1.04 billion up 28% year-over-year, reflecting accelerating year-over-year growth in MAP revenue and brand advertising that improved throughout the quarter,” said Ned Segal, Twitter’s CFO. “Advertisers continue to benefit from updated ad formats, improved measurement, and new brand safety controls, contributing to 32% year-over-year growth in ad revenue in Q1.”

First Quarter 2021 Operational and Financial Highlights

Except as otherwise stated, all financial results discussed below are presented in accordance with generally accepted accounting principles in the United States of America, or GAAP. As supplemental information, we have provided certain non-GAAP financial measures in this press release’s supplemental tables, and such supplemental tables include a reconciliation of these non-GAAP measures to our GAAP results. The sum of individual metrics may not always equal total amounts indicated due to rounding.

- Q1 revenue totaled \$1.04 billion, an increase of 28% year-over-year.
 - Advertising revenue totaled \$899 million, an increase of 32%, or 30% on a constant currency basis.
 - Total ad engagements increased 11% year-over-year.
 - Cost per engagement (CPE) increased 19% year-over-year.
 - Data licensing and other revenue totaled \$137 million, an increase of 9% year-over-year.
 - US revenue totaled \$556 million, an increase of 19% year-over-year.
 - International revenue totaled \$480 million, an increase of 41%, or 38% on a constant currency basis.
- Q1 costs and expenses totaled \$984 million, an increase of 21% year-over-year. This resulted in operating income of \$52 million and 5% operating margin, compared to an operating loss of \$7 million or -1% in the same period of the previous year.
- Stock-based compensation (SBC) expense grew 13% year over year to \$111 million and was approximately 11% of total revenue.

- Q1 net income was \$68 million, representing a net margin of 7% and diluted EPS of \$0.08. This compares to a net loss of \$8 million, a net margin of -1% and diluted EPS of -\$0.01 in the same period of the previous year.
- Net cash provided by operating activities in the quarter was \$390 million, compared to \$247 million in the same period last year. Capital expenditures totaled \$179 million, compared to \$121 million in the same period last year, driven by infrastructure investments in data center build-outs to support audience growth and product innovation.
- Average monetizable daily active users (mDAU) were 199 million for Q1, compared to 166 million in the same period of the previous year and compared to 192 million in the previous quarter.
 - Average US mDAU were 38 million for Q1, compared to 33 million in the same period of the previous year and compared to 37 million in the previous quarter.
 - Average international mDAU were 162 million for Q1, compared to 133 million in the same period of the previous year and compared to 155 million in the previous quarter.

Outlook

We are attracting more great people to Twitter than ever before and investing in our highest priorities to deliver on our long-term goals across consumer product, revenue product, and platform. As a result, we now expect headcount growth to more closely mirror expense growth in 2021, with headcount -- and total costs and expenses -- growing 25% or more on a year-over-year basis in 2021, ramping in absolute dollars over the course of the year.

As a reminder, SBC expense is closely tied to headcount, the timing of grants, and vesting, and we typically see a significant sequential increase in Q2 driven by the timing of refresh grants in the early part of the year. As such, we expect to report a sequential increase in SBC expense of \$60 million or more in Q2. Expected full-year SBC expense has also increased to approximately \$600 million, from our previous range of \$525 million to \$575 million, reflecting increased hiring and retention grants.

We continue to expect total revenue to grow faster than expenses in 2021, assuming the global pandemic continues to improve and that we see modest impact from the rollout of changes associated with iOS 14.5. How much faster will depend on various factors, including our execution on our direct response roadmap and macroeconomic factors.

For Q2'21:

- Total revenue is expected to be between \$980 million and \$1.08 billion.
- GAAP operating loss is expected to be between \$170 million and \$120 million.

For FY21:

- Stock-based compensation expense is expected to be approximately \$600 million.
- Capital expenditures are expected to be between \$900 million and \$950 million.

Note that our outlook for Q2 and the full year 2021 reflects foreign exchange rates as of April 2021.

For more information regarding the non-GAAP financial measures discussed in this press release, please see "Non-GAAP Financial Measures" and the reconciliations of these non-GAAP financial measures to the most directly comparable financial measures calculated in accordance with GAAP below.

Appendix

First Quarter 2021 Webcast and Conference Call Details

Twitter will host a conference call today, Thursday, April 29, 2021, at 3pm Pacific Time (6pm Eastern Time) to discuss financial results for the first quarter of 2021. The company will be following the conversation about the earnings announcement on Twitter. To have your questions considered during the Q&A, Tweet your question to @TwitterIR using \$TWTR. To listen to a live audio webcast, please visit the company's Investor Relations page at investor.twitterinc.com. Twitter has used, and intends to continue to use, its Investor Relations website and the Twitter accounts of @jack, @nedsegal, @Twitter, and @TwitterIR as means of disclosing material nonpublic information and for complying with its disclosure obligations under Regulation FD.

Second Quarter Earnings Release Details

Twitter expects to release financial results for the second quarter of 2021 on July 22, 2021, after market close. Twitter will host a conference call on the same day to discuss these financial results at 3pm Pacific Time (6pm Eastern Time).

About Twitter, Inc. (NYSE: TWTR)

Twitter (NYSE: TWTR) is what's happening and what people are talking about right now. To learn more, visit about.twitter.com and follow @Twitter. Let's talk.

A Note About Metrics

Twitter defines monetizable daily active usage or users (mDAU) as people, organizations, or other accounts who logged in or were otherwise authenticated and accessed Twitter on any given day through twitter.com or Twitter applications that are able to show ads. Average mDAU for a period represents the number of mDAU on each day of such period divided by the number of days for such period. Changes in mDAU are a measure of changes in the size of our daily logged in or otherwise authenticated active total accounts. To calculate the year-over-year change in mDAU, we subtract the average mDAU for the three months ended in the previous year from the average mDAU for the same three months ended in the current year and divide the result by the average mDAU for the three months ended in the previous year. Additionally, our calculation of mDAU is not based on any standardized industry methodology and is not necessarily calculated in the same manner or comparable to similarly titled measures presented by other companies. Similarly, our measures of mDAU growth and engagement may differ from estimates published by third parties or from similarly titled metrics of our competitors due to differences in methodology.

The numbers of mDAU presented in our earnings materials are based on internal company data. While these numbers are based on what we believe to be reasonable estimates for the applicable period of measurement, there are inherent challenges in measuring usage and engagement across our large number of total accounts around the world. Furthermore, our metrics may be impacted by our information quality efforts, which are our overall efforts to reduce malicious activity on the service, inclusive of spam, malicious automation, and fake accounts. For example, there are a number of false or spam accounts in existence on our platform. We have performed an internal review of a sample of accounts and estimate that the average of false or spam accounts during the first quarter of 2021 represented fewer than 5% of our mDAU during the quarter. The false or spam accounts for a period represents the average of false or spam accounts in the samples during each monthly analysis period during the quarter. In making this determination, we applied significant judgment, so our estimation of false or spam accounts may not accurately represent the actual number of such accounts, and the actual number of false or spam accounts could be higher than we have estimated. We are continually seeking to improve our ability to estimate the total number of spam accounts and eliminate them from the calculation of our mDAU, and have made improvements in our spam detection capabilities that have resulted in the suspension of a large number of spam, malicious automation, and fake accounts. We intend to continue to make such improvements. After we determine an account is spam, malicious automation, or fake, we stop counting it in our mDAU, or other

related metrics. We also treat multiple accounts held by a single person or organization as multiple mDAU because we permit people and organizations to have more than one account. Additionally, some accounts used by organizations are used by many people within the organization. As such, the calculations of our mDAU may not accurately reflect the actual number of people or organizations using our platform.

In addition, geographic location data collected for purposes of reporting the geographic location of our mDAU is based on the IP address or phone number associated with the account when an account is initially registered on Twitter. The IP address or phone number may not always accurately reflect a person's actual location at the time they engaged with our platform. For example, someone accessing Twitter from the location of the proxy server that the person connects to rather than from the person's actual location.

We regularly review and may adjust our processes for calculating our internal metrics to improve their accuracy.

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Forward-looking statements generally relate to future events or Twitter's future financial or operating performance. In some cases, you can identify forward-looking statements because they contain words such as "may," "will," "should," "expects," "plans," "anticipates," "going to," "could," "intends," "target," "projects," "contemplates," "believes," "estimates," "predicts," "potential," or "continue," or the negative of these words or other similar terms or expressions that concern Twitter's expectations, strategy, priorities, plans, or intentions. Forward-looking statements in this press release include, but are not limited to, statements regarding Twitter's future financial and operating performance, including its outlook and guidance, the impact of the COVID-19 pandemic and the timing of recovery from the pandemic on Twitter's operations and personnel, on commercial activity and advertiser demand across Twitter's platform, and on Twitter's operating results, as well as on worldwide and regional economies; the impact of the rollout of iOS 14.5 on Twitter's business and operating results; Twitter's expectations and strategies regarding the growth of its revenue, including the drivers of such growth, audience, and engagement (including, in each case, any potential impact of COVID-19), advertiser base and spending, and allocation of resources; and Twitter's expectations regarding future capital expenditures, headcount growth and other expenses, including its SBC expenses. Twitter's expectations and beliefs regarding these matters may not materialize, and actual results in future periods are subject to risks and uncertainties, including changes in our plans or assumptions, that could cause actual results to differ materially from those projected. These risks include the possibility that: the COVID-19 pandemic and related impacts will continue to adversely impact our business, financial condition, and operating results and the achievement of our strategic objectives, as well as the markets in which we operate and worldwide and regional economies; Twitter's total accounts and engagement do not grow or decline; Twitter's strategies, priorities, or plans take longer to execute than anticipated; Twitter's new products and product features do not meet expectations or fail to drive mDAU growth; advertisers continue to reduce or discontinue their spending on Twitter; data partners reduce or discontinue their purchases of data licenses from Twitter; and Twitter experiences expenses that exceed its expectations. The forward-looking statements contained in this press release are also subject to other risks and uncertainties, including those more fully described in Twitter's Annual Report on Form 10-K for the fiscal year ended December 31, 2020, filed with the Securities and Exchange Commission. Additional information will also be set forth in Twitter's Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2021. The forward-looking statements in this press release are based on information available to Twitter as of the date hereof, and Twitter disclaims any obligation to update any forward-looking statements, except as required by law.

Non-GAAP Financial Measures

To supplement Twitter's financial information presented in accordance with generally accepted accounting principles in the United States of America, or GAAP, Twitter considers certain financial measures that are not prepared in accordance with GAAP, including revenues excluding foreign exchange effect, which we refer to as on a constant currency basis, non-GAAP income before income taxes, non-GAAP provision for (benefit from) income

taxes, non-GAAP net income (loss), non-GAAP diluted net income (loss) per share, adjusted EBITDA, non-GAAP costs and expenses, and adjusted free cash flow. In order to present revenues on a constant currency basis for the fiscal quarter ended March 31, 2021, Twitter translated the applicable measure using the prior year's monthly exchange rates for its settlement currencies other than the US dollar. Twitter defines non-GAAP income before income taxes as income (loss) before income taxes adjusted to exclude stock-based compensation expense, amortization of acquired intangible assets, non-cash interest expense related to convertible notes, non-cash expense related to acquisitions, impairment (gain) on investments in privately held companies, restructuring charges, and one-time non-recurring gain, if any; Twitter defines non-GAAP provision for (benefit from) income taxes as the current and deferred income tax expense commensurate with the non-GAAP measure of profitability using the estimated annual effective tax rate, which is dependent on the jurisdictional mix of earnings; and Twitter defines non-GAAP net income (loss) as net income (loss) adjusted to exclude stock-based compensation expense, amortization of acquired intangible assets, non-cash interest expense related to convertible notes, non-cash expense related to acquisitions, impairment (gain) on investments in privately held companies, restructuring charges, and one-time non-recurring gain, if any, and adjustment to income tax expense based on the non-GAAP measure of profitability using the estimated annual effective tax rate, which is dependent on the jurisdictional mix of earnings. Non-GAAP diluted net income (loss) per share is calculated by dividing non-GAAP net income (loss) by non-GAAP diluted share count. Non-GAAP diluted share count is GAAP basic share count plus potential common stock instruments such as stock options, RSUs, shares to be purchased under employee stock purchase plan, unvested restricted stock, the conversion feature of convertible senior notes, and warrants. Twitter defines adjusted EBITDA as net income (loss) adjusted to exclude stock-based compensation expense, depreciation and amortization expense, interest and other expense, net, provision for (benefit from) income taxes, restructuring charges, and one-time non-recurring gain, if any. Twitter defines non-GAAP costs and expenses as total costs and expenses adjusted to exclude stock-based compensation expense, amortization of acquired intangible assets, non-cash expense related to acquisitions, restructuring charges, and one-time non-recurring gain, if any. Adjusted free cash flow is GAAP net cash provided by operating activities less capital expenditures (i.e., purchases of property and equipment including equipment purchases that were financed through finance leases, less proceeds received from the disposition of property and equipment).

Twitter is presenting these non-GAAP financial measures to assist investors in seeing Twitter's operating results through the eyes of management, and because it believes that these measures provide an additional tool for investors to use in comparing Twitter's core business operating results over multiple periods with other companies in its industry.

Twitter believes that revenues on a constant currency basis, non-GAAP income before income taxes, non-GAAP provision for (benefit from) income taxes, non-GAAP net income (loss), non-GAAP diluted net income (loss) per share, adjusted EBITDA, and non-GAAP costs and expenses provide useful information about its operating results, enhance the overall understanding of Twitter's past performance and future prospects, and allow for greater transparency with respect to key metrics used by Twitter's management in its financial and operational decision-making. Twitter uses these measures to establish budgets and operational goals for managing its business and evaluating its performance.

Twitter believes that revenues on a constant currency basis is a useful metric that facilitates comparison to its historical performance. Twitter believes that non-GAAP net income (loss), non-GAAP diluted net income (loss) per share, adjusted EBITDA, and non-GAAP costs and expenses help identify underlying trends in its business that could otherwise be masked by expenses and one-time gains or charges, or the effects of the income tax benefits related to the establishment of deferred tax assets and the tax provisions from the establishment of a valuation allowance against deferred tax assets described above, which are non-operating benefits and expenses.

In addition, Twitter believes that adjusted free cash flow provides useful information to management and investors about the amount of cash from operations and that it is typically a more conservative measure of cash flows. However, adjusted free cash flow does not necessarily represent funds available for discretionary use and is not necessarily a measure of its ability to fund its cash needs.

These non-GAAP financial measures should not be considered in isolation from, or as a substitute for, financial information prepared in accordance with GAAP. These non-GAAP financial measures are not based on any standardized methodology prescribed by GAAP and are not necessarily comparable to similarly titled measures presented by other companies.

Contacts

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TWITTER, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(In thousands)
(Unaudited)

	March 31, 2021	December 31, 2020
Assets		
Current assets:		
Cash and cash equivalents	\$ 4,248,702	\$ 1,988,429
Short-term investments	4,557,585	5,483,873
Accounts receivable, net	850,075	1,041,743
Prepaid expenses and other current assets	207,380	123,063
Total current assets	9,863,742	8,637,108
Property and equipment, net	1,620,001	1,493,794
Operating lease right-of-use assets	1,001,109	930,139
Intangible assets, net	62,718	58,338
Goodwill	1,316,461	1,312,346
Deferred tax assets, net	933,245	796,326
Other assets	186,799	151,039
Total assets	<u>\$ 14,984,075</u>	<u>\$ 13,379,090</u>
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	\$ 219,899	\$ 194,281
Accrued and other current liabilities	684,697	663,532
Convertible notes, short-term	953,046	917,866
Operating lease liabilities, short-term	179,051	177,147
Total current liabilities	2,036,693	1,952,826
Convertible notes, long-term	3,552,784	1,875,878
Senior notes, long-term	693,241	692,994
Operating lease liabilities, long-term	899,757	819,748
Deferred and other long-term tax liabilities, net	32,033	31,463
Other long-term liabilities	32,917	36,099
Total liabilities	<u>7,247,425</u>	<u>5,409,008</u>
Stockholders' equity:		
Common stock	4	4
Additional paid-in capital	8,551,763	9,167,138
Treasury stock	(5,297)	(5,297)
Accumulated other comprehensive loss	(96,932)	(66,094)
Accumulated deficit	(712,888)	(1,125,669)
Total stockholders' equity	<u>7,736,650</u>	<u>7,970,082</u>
Total liabilities and stockholders' equity	<u>\$ 14,984,075</u>	<u>\$ 13,379,090</u>

TWITTER, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(In thousands, except per share data)
(Unaudited)

	Three Months Ended March 31,	
	2021	2020
Revenue	\$ 1,036,018	\$ 807,637
Costs and expenses		
Cost of revenue	381,008	284,037
Research and development	250,709	200,388
Sales and marketing	234,592	221,287
General and administrative	117,527	109,368
Total costs and expenses	983,836	815,080
Income (loss) from operations	52,182	(7,443)
Interest expense	(13,185)	(33,270)
Interest income	11,001	32,897
Other income (expense), net	6	(7,719)
Income (loss) before income taxes	50,004	(15,535)
Benefit from income taxes	(18,001)	(7,139)
Net income (loss)	\$ 68,005	\$ (8,396)
Net income (loss) per share:		
Basic	\$ 0.09	\$ (0.01)
Diluted	\$ 0.08	\$ (0.01)
Weighted-average shares used to compute net income (loss) per share:		
Basic	795,633	780,688
Diluted	872,187	780,688

TWITTER, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)
(Unaudited)

	Three Months Ended March 31,	
	2021	2020
Cash flows from operating activities		
Net income (loss)	\$ 68,005	\$ (8,396)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:		
Depreciation and amortization expense	131,052	120,649
Stock-based compensation expense	110,873	97,903
Amortization of discount on convertible notes	—	21,504
Bad debt expense	(1,405)	14,067
Deferred income taxes	(23,873)	(7,024)
Impairment of investments in privately-held companies	—	8,003
Other adjustments	4,739	(8,425)
Changes in assets and liabilities, net of assets acquired and liabilities assumed from acquisitions:		
Accounts receivable	189,297	168,932
Prepaid expenses and other assets	(80,989)	(6,252)
Operating lease right-of-use assets	49,246	38,749
Accounts payable	(24,808)	(14,480)
Accrued and other liabilities	6,382	(139,168)
Operating lease liabilities	(38,335)	(39,295)
Net cash provided by operating activities	<u>390,184</u>	<u>246,767</u>
Cash flows from investing activities		
Purchases of property and equipment	(181,181)	(122,667)
Proceeds from sales of property and equipment	1,835	1,623
Purchases of marketable securities	(1,370,830)	(1,233,530)
Proceeds from maturities of marketable securities	1,221,461	1,125,634
Proceeds from sales of marketable securities	1,067,603	722,253
Purchases of investments in privately-held companies	(30,867)	(1,339)
Investments in Finance Justice Fund	(10,200)	—
Business combinations, net of cash acquired	(8,378)	(14,780)
Other investing activities	(9,085)	(11,050)
Net cash provided by investing activities	<u>680,358</u>	<u>466,144</u>
Cash flows from financing activities		
Proceeds from issuance of convertible notes	1,437,500	1,000,000
Purchases of convertible note hedges	(213,469)	—
Proceeds from issuance of warrants concurrent with note hedges	161,144	—
Debt issuance costs	(16,769)	(14,662)
Repurchases of common stock	(161,552)	—
Taxes paid related to net share settlement of equity awards	(10,569)	(11,693)
Payments of finance lease obligations	(565)	(9,966)
Proceeds from exercise of stock options	1,958	305
Net cash provided by financing activities	<u>1,197,678</u>	<u>963,984</u>
Net increase in cash, cash equivalents and restricted cash	2,268,220	1,676,895
Foreign exchange effect on cash, cash equivalents and restricted cash	(8,018)	(11,948)
Cash, cash equivalents and restricted cash at beginning of period	2,011,276	1,827,666
Cash, cash equivalents and restricted cash at end of period	<u>\$ 4,271,478</u>	<u>\$ 3,492,613</u>
Supplemental disclosures of non-cash investing and financing activities		
Common stock issued in connection with acquisitions	\$ —	\$ 1,312
Changes in accrued property and equipment purchases	\$ 57,030	\$ 38,512
Reconciliation of cash, cash equivalents and restricted cash as shown in the consolidated statements of cash flows		
Cash and cash equivalents	\$ 4,248,702	\$ 3,463,349
Restricted cash included in prepaid expenses and other current assets	3,516	1,846
Restricted cash included in other assets	19,260	27,418
Total cash, cash equivalents and restricted cash	<u>\$ 4,271,478</u>	<u>\$ 3,492,613</u>

TWITTER, INC.
RECONCILIATION OF GAAP TO NON-GAAP FINANCIAL MEASURES
(In thousands, except per share data)
(Unaudited)

	Three Months Ended	
	March 31,	
	2021	2020
Non-GAAP net income and net income per share:		
Net income (loss)	\$ 68,005	\$ (8,396)
Exclude: Benefit from income taxes	(18,001)	(7,139)
Income (loss) before income taxes	50,004	(15,535)
Stock-based compensation expense	110,873	97,903
Amortization of acquired intangible assets	8,107	5,041
Non-cash interest expense related to convertible notes ⁽¹⁾	—	21,504
Impairment on investments in privately-held companies	—	8,003
Non-GAAP income before income taxes	168,984	116,916
Non-GAAP provision for income taxes	27,773	29,508
Non-GAAP net income	\$ 141,211	\$ 87,408
GAAP basic shares	795,633	780,688
Dilutive equity awards ⁽²⁾	76,554	9,987
Non-GAAP diluted shares ⁽³⁾	872,187	790,675
Non-GAAP diluted net income per share	\$ 0.16	\$ 0.11
Adjusted EBITDA:		
Net income (loss)	\$ 68,005	\$ (8,396)
Stock-based compensation expense	110,873	97,903
Depreciation and amortization expense	131,052	120,649
Interest and other expense (income), net	2,178	8,092
Benefit from income taxes	(18,001)	(7,139)
Adjusted EBITDA	\$ 294,107	\$ 211,109
Stock-based compensation expense by function:		
Cost of revenue	\$ 8,732	\$ 5,756
Research and development	65,156	60,587
Sales and marketing	21,171	18,839
General and administrative	15,814	12,721
Total stock-based compensation expense	\$ 110,873	\$ 97,903
Amortization of acquired intangible assets by function:		
Cost of revenue	\$ 6,499	\$ 5,041
Research and development	1,508	—
Sales and marketing	100	—
Total amortization of acquired intangible assets	\$ 8,107	\$ 5,041
Non-GAAP costs and expenses:		
Total costs and expenses	\$ 983,836	\$ 815,080
Less: stock-based compensation expense	(110,873)	(97,903)
Less: amortization of acquired intangible assets	(8,107)	(5,041)
Total non-GAAP costs and expenses	\$ 864,856	\$ 712,136
Adjusted free cash flow:		
Net cash provided by operating activities	\$ 390,184	\$ 246,767
Less: purchases of property and equipment	(181,181)	(122,667)
Plus: proceeds from sales of property and equipment	1,835	1,623
Adjusted free cash flow	\$ 210,838	\$ 125,723

⁽¹⁾ The Company adopted the new accounting standard update to simplify the accounting for convertible debt on January 1, 2021 using the modified retrospective method. The adoption eliminates the non-cash interest expense related to the conversion features of the convertible notes beginning in the first quarter of 2021.

⁽²⁾ Gives effect to potential common stock instruments such as stock options, RSUs, shares to be issued under ESPP, unvested restricted stocks and warrants. There is no dilutive effect of the notes or the related hedge and warrant transactions in the three months ended March 31, 2020. Dilutive equity awards in the three months ended March 31, 2021 reflect the dilutive effect of the convertible notes upon adoption of the new accounting standard update to simplify the accounting for convertible debt as of January 1, 2021.

⁽³⁾ GAAP dilutive shares are the same as non-GAAP dilutive shares for the three months ended March 31, 2021.

TWITTER, INC.
RECONCILIATION OF GAAP REVENUE TO NON-GAAP CONSTANT CURRENCY REVENUE
(In millions)
(Unaudited)

	Three Months Ended	
	March 31,	
	2021	2020
Revenue, advertising revenue, data licensing and other revenue, international revenue and international advertising revenue excluding foreign exchange effect ⁽¹⁾:		
Revenue	\$ 1,036	\$ 808
Foreign exchange effect on 2021 revenue using 2020 rates	(11)	
Revenue excluding foreign exchange effect	\$ 1,025	
Revenue year-over-year change percent		28 %
Revenue excluding foreign exchange effect year-over-year change percent		27 %
Advertising revenue	\$ 899	\$ 682
Foreign exchange effect on 2021 advertising revenue using 2020 rates	(11)	
Advertising revenue excluding foreign exchange effect	\$ 888	
Advertising revenue year-over-year change percent		32 %
Advertising revenue excluding foreign exchange effect year-over-year change percent		30 %
Data licensing and other revenue	\$ 137	\$ 125
Foreign exchange effect on 2021 data licensing and other revenue using 2020 rates	—	
Data licensing and other revenue excluding foreign exchange effect	\$ 137	
Data licensing and other revenue year-over-year change percent		9 %
Data licensing and other revenue excluding foreign exchange effect year-over-year change percent		9 %
International revenue	\$ 480	\$ 339
Foreign exchange effect on 2021 international revenue using 2020 rates	(11)	
International revenue excluding foreign exchange effect	\$ 469	
International revenue year-over-year change percent		41 %
International revenue excluding foreign exchange effect year-over-year change percent		38 %
International advertising revenue	\$ 435	\$ 301
Foreign exchange effect on 2021 international advertising revenue using 2020 rates	(11)	
International advertising revenue excluding foreign exchange effect	\$ 424	
International advertising revenue year-over-year change percent		45 %
International advertising revenue excluding foreign exchange effect year-over-year change percent		41 %

⁽¹⁾ The sum of individual amounts may not always equal total amounts indicated due to rounding.