UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

FORM 10-Q

☑	QUARTERLY REPORT P		NT TO SECTION 13 OR HE QUARTERLY PERIOD EN OR			ANGE ACT OF 1934
	TRANSITION REPORT P		NT TO SECTION 13 OR E TRANSITION PERIOD FROM COMMISSION FILE NUMB	м	то	ANGE ACT OF 1934
			RIUS XM HOLD (Exact name of registrant as specification)			
	Delaware				38-3916511	
	(State or other jurisdiction of organic				(I.R.S. Employer Identification	n No.)
		1221	1 Avenue of the Americas, 35th F (Address of Principal Execut 10020 (Zip Code)		rk, NY	
	Former nan	ie, former	ant's telephone number, including a address and former fiscal year, if cl curities registered pursuant to Sect	hanged since la	st report: Not Applicable	
	Title of each class		Trading Symbol(s)	<u> </u>	Name of exchange on	
	Common stock, \$0.001 par value		SIRI		The Nasdaq Stock	
preceding 12 90 days. Y Ind during the pr	icate by check mark whether the registr receding 12 months (or for such shorter icate by check mark whether the registr pany. See the definitions of "large accel	the registrant has sub period that ant is a larg	rant was required to file such report omitted electronically every Interact to the registrant was required to sub- ge accelerated filer, an accelerated	ts) and (2) has tive Data File mit such files). filer, a non-ac	been subject to such filing required to be submitted pursuan Yes ☑ No □ celerated filer, a smaller reporting	rements for the past t to Rule 405 of Regulation S-T g company or an emerging
	Large accelerated filer	\checkmark	Accelerated filer		Non-accelerated filer	
	Smaller reporting company		Emerging growth company			
financial acc Ind	n emerging growth company, indicate be counting standards provided pursuant to icate by check mark whether the registr icate the number of shares outstanding	Section 13 ant is a she	B(a) of the Exchange Act. ☐ ell company (as defined in Rule 12	b-2 of the Excl	hange Act). Yes □ No☑	ying with any new or revised
	(Class)				(Outstanding as of April 26,	2022)
	Common stock, \$0.001	par value			3,936,116,505 shares	

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SIRIUS XM HOLDINGS INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (UNAUDITED)

	Fo	For the Three Months Ended March 31,							
(in millions, except per share data)		2022	2021						
Revenue:									
Subscriber revenue	\$	1,713 \$	1,611						
Advertising revenue		383	354						
Equipment revenue		53	57						
Other revenue		37	36						
Total revenue		2,186	2,058						
Operating expenses:									
Cost of services:									
Revenue share and royalties		670	640						
Programming and content		140	130						
Customer service and billing		125	117						
Transmission		51	48						
Cost of equipment		3	4						
Subscriber acquisition costs		90	86						
Sales and marketing		272	217						
Engineering, design and development		67	64						
General and administrative		123	121						
Depreciation and amortization		135	132						
Impairment, restructuring and acquisition costs			245						
Total operating expenses		1,676	1,804						
Income from operations		510	254						
Other (expense) income:									
Interest expense		(103)	(100)						
Other income		2	3						
Total other (expense) income		(101)	(97)						
Income before income taxes		409	157						
Income tax (expense) benefit		(100)	62						
Net income	\$	309 \$	219						
Foreign currency translation adjustment, net of tax		8	5						
Total comprehensive income	\$	317 \$	224						
Net income per common share:									
Basic	\$	0.08 \$	0.05						
Diluted	\$	0.08 \$	0.05						
Weighted average common shares outstanding:	<u></u>								
Basic		3,948	4,137						
Diluted		4,024	4,222						
									

SIRIUS XM HOLDINGS INC. AND SUBSIDIARIES CONSOLIDATED BALANCE SHEETS

(in millions, except per share data)	Ma	arch 31, 2022	December 31, 2021	
ASSETS	(unaudited)		
Current assets:				
Cash and cash equivalents	\$	76	\$	191
Receivables, net		650		722
Related party current assets		13		21
Prepaid expenses and other current assets		317		246
Total current assets		1,056		1,180
Property and equipment, net		1,458		1,450
Intangible assets, net		3,166		3,186
Goodwill		3,180		3,151
Related party long-term assets		541		526
Deferred tax assets		200		200
Operating lease right-of-use assets		346		358
Other long-term assets		216		223
Total assets	\$	10,163	\$	10,274
LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIT)				
Current liabilities:				
Accounts payable and accrued expenses	\$	1,179	\$	1,299
Accrued interest		71		173
Current portion of deferred revenue		1,451		1,454
Operating lease current liabilities		52		49
Related party current liabilities		68		5
Total current liabilities		2,821		2,980
Long-term deferred revenue		91		97
Long-term debt		9,832		8,832
Deferred tax liabilities		512		478
Operating lease liabilities		344		362
Other long-term liabilities		150		150
Total liabilities	-	13,750	-	12,899
Commitments and contingencies (Note 15)		,		
Stockholders' equity (deficit):				
Common stock, par value \$0.001 per share; 9,000 shares authorized; 3,940 and 3,968 shares issued; 3,940 and 3,967 shares outstanding at March 31, 2022 and December 31, 2021, respectively		4		4
Accumulated other comprehensive income, net of tax		23		15
Additional paid-in capital		_		_
Treasury stock, at cost; — and 1 shares of common stock at March 31, 2022 and December 31, 2021, respectively		(2)		(8)
Accumulated deficit		(3,612)		(2,636)
Total stockholders' equity (deficit)		(3,587)		(2,625)
Total liabilities and stockholders' equity (deficit)	\$	10,163	\$	10,274
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SIRIUS XM HOLDINGS INC. AND SUBSIDIARIES CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY (DEFICIT) (UNAUDITED)

For the Three Months Ended March 31, 2022

	Common Stock				Accumulated Other Comprehensive		Additional	Treasui	ry Sto	ock	4	Total Stockholders'	
(in millions)	Shares Amount		Income			Paid-in Capital	Shares	Amount		Accumulated Deficit	Equity (Deficit)		
Balance at December 31, 2021	3,968	\$	4	\$	15	\$		1	\$	(8)	\$ (2,636)	\$ (2,625)	
Cumulative effect of change in accounting principles	_		_		_		_	_		_	(14)	(14)	
Comprehensive income, net of tax	_		_		8		_	_		_	309	317	
Share-based payment expense	_		_		_		50	_		_	_	50	
Exercise of stock options and vesting of restricted stock units	5		_		_		_	_		_	_	_	
Withholding taxes on net share settlement of stock-based compensation	_		_		_		(29)	_		_	_	(29)	
Tax Sharing Agreement with Liberty Media	_		_		_		_	_		_	(13)	(13)	
Cash dividends paid on common stock, \$0.2719615 per share	_		_		_		(21)	_		_	(1,052)	(1,073)	
Common stock repurchased	_		_		_		_	32		(200)	_	(200)	
Common stock retired	(33)		_		_		_	(33)		206	(206)	_	
Balance at March 31, 2022	3,940	\$	4	\$	23	\$	_		\$	(2)	\$ (3,612)	\$ (3,587)	

SIRIUS XM HOLDINGS INC. AND SUBSIDIARIES CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY (DEFICIT) (UNAUDITED)

For the Three Months Ended March 31, 2021

					Additional Treasury Stock					- Accumulated		Total Stockholders'		
(in millions)	Shares		Amount	,	Comprehensive Income		Capital	Shares	Amount		Deficit		Equity (Deficit)	
Balance at December 31, 2020	4,176	\$	4	\$	15	\$		3	\$	(19)	\$ (2	2,285)	\$	(2,285)
Comprehensive income, net of tax	_		_		5		_	_		_		219		224
Share-based payment expense	_		_		_		55	_		_		_		55
Exercise of stock options and vesting of restricted stock units	17		_		_		_	_		_		_		_
Withholding taxes on net share settlement of stock-based compensation	_		_		_		(20)	_		_		_		(20)
Cash dividends paid on common stock, \$0.014641 per share	_		_		_		(35)	_		_		(26)		(61)
Common stock repurchased	_		_		_		_	85		(516)		_		(516)
Common stock retired	(86)		_		_		_	(86)		522		(522)		_
Balance at March 31, 2021	4,107	\$	4	\$	20	\$	_	2	\$	(13)	\$ (2	2,614)	\$	(2,603)

SIRIUS XM HOLDINGS INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)

	For	For the Three Months Ended March 31,					
(in millions)		2022	2021				
Cash flows from operating activities:							
Net income	\$	309 \$	219				
Adjustments to reconcile net income to net cash provided by operating activities:							
Depreciation and amortization		135	132				
Non cash impairment and restructuring costs		_	245				
Non-cash interest expense, net of amortization of premium		5	5				
Provision for doubtful accounts		15	10				
(Gain) loss on unconsolidated entity investments, net		(3)	1				
Loss (gain) on other investments		3	(1)				
Share-based payment expense		45	51				
Deferred income tax expense (benefit)		29	(76)				
Amortization of right-of-use assets		12	15				
Changes in operating assets and liabilities:							
Receivables		57	45				
Related party, net		60	10				
Prepaid expenses and other current assets		(71)	(20)				
Other long-term assets		1	(4)				
Accounts payable and accrued expenses		(116)	(173)				
Accrued interest		(102)	(94)				
Deferred revenue		(9)	(59)				
Operating lease liabilities		(15)	(12)				
Other long-term liabilities		_	(2)				
Net cash provided by operating activities		355	292				
Cash flows from investing activities:							
Additions to property and equipment		(97)	(78)				
Purchases of other investments		<u></u>	(3)				
Acquisition of business, net of cash acquired		(44)	6				
Investments in related parties and other equity investees		(1)	(5)				
Repayment from related party			2				
Net cash used in investing activities		(142)	(78)				
Cash flows from financing activities:							
Taxes paid from net share settlements for stock-based compensation		(29)	(20)				
Revolving credit facility, net		981	374				
Principal payments of long-term borrowings		(1)	(1)				
Common stock repurchased and retired		(206)	(522)				
Dividends paid		(1,073)	(61)				
Net cash used in financing activities		(328)	(230)				
Net decrease in cash, cash equivalents and restricted cash		(115)	(16)				
Cash, cash equivalents and restricted cash at beginning of period ⁽¹⁾		199	83				
Cash, cash equivalents and restricted cash at organism of period (1)	\$	84 \$	67				
Cash, cash equivalents and restricted easi at one of period.	Ψ	υ τ ψ	- 07				

SIRIUS XM HOLDINGS INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF CASH FLOWS - Continued (UNAUDITED)

	For the Three Months Ended March 31,							
(in millions)		2022	2021					
Supplemental Disclosure of Cash and Non-Cash Flow Information								
Cash paid during the period for:								
Interest, net of amounts capitalized	\$	199	\$	189				
Income taxes paid	\$	5	\$	2				
Non-cash investing and financing activities:								
Treasury stock not yet settled	\$	6	\$	6				
Accumulated other comprehensive income, net of tax	\$	8	\$	5				
Capital contribution pursuant to Tax Sharing Agreement	\$	13	\$	_				

(1) The following table reconciles cash, cash equivalents and restricted cash per the statement of cash flows to the balance sheet. The restricted cash balances are primarily due to letters of credit which have been issued to the landlords of leased office space. The terms of the letters of credit primarily extend beyond one year.

(in millions)	March 31, 2022	December 31, 2021	March 31, 2021	December 31, 2020
Cash and cash equivalents	\$ 76	\$ 191	\$ 59	\$ 71
Restricted cash included in Other long-term assets	8	8	8	12
Total cash, cash equivalents and restricted cash at end of period	\$ 84	\$ 199	\$ 67	\$ 83

(Dollars and shares in millions, except per share amounts)

(1) Business & Basis of Presentation

This Quarterly Report on Form 10-Q presents information for Sirius XM Holdings Inc. and its subsidiaries (collectively "Holdings"). The terms "Holdings," "we," "us," "our," and "our company" as used herein, and unless otherwise stated or indicated by context, refer to Sirius XM Holdings Inc. and its subsidiaries. "Sirius XM" refers to our wholly owned subsidiary Sirius XM Radio Inc. and its subsidiaries. "Pandora" refers to Sirius XM's wholly owned subsidiary Pandora Media, LLC and its subsidiaries. Holdings has no operations independent of Sirius XM and Pandora.

Rusiness

We operate two complementary audio entertainment businesses - Sirius XM and Pandora and Off-platform.

Sirius XM

Our Sirius XM business features music, sports, entertainment, comedy, talk, news, traffic and weather channels and other content, as well as podcasts and infotainment services, in the United States on a subscription fee basis. Sirius XM packages include live, curated and certain exclusive and on demand programming. The Sirius XM service is distributed through our two proprietary satellite radio systems and streamed via applications for mobile devices, home devices and other consumer electronic equipment. Satellite radios are primarily distributed through automakers, retailers and our website. Our Sirius XM service is also available through our in-car user interface, which we call "360L," that combines our satellite and streaming services into a single, cohesive in-vehicle entertainment experience.

The primary source of revenue from our Sirius XM business is subscription fees, with most of our customers subscribing to monthly, quarterly, semi-annual or annual plans. We also derive revenue from advertising on select non-music channels, which is sold under the SXM Media brand, direct sales of our satellite radios and accessories, and other ancillary services. As of March 31, 2022, our Sirius XM business had approximately 34.0 million subscribers.

In addition to our audio entertainment businesses, we provide connected vehicle services to several automakers. These services are designed to enhance the safety, security and driving experience of consumers. We also offer a suite of data services that includes graphical weather, fuel prices, sports schedules and scores and movie listings, a traffic information service that includes information as to road closings, traffic flow and incident data to consumers with compatible in-vehicle navigation systems, and real-time weather services in vehicles, boats and planes.

Sirius XM also holds a 70% equity interest and 33% voting interest in Sirius XM Canada Holdings Inc. ("Sirius XM Canada"). Sirius XM Canada's subscribers are not included in our subscriber count or subscriber-based operating metrics.

Pandora and Off-platform

Pandora operates a music and podcast streaming discovery platform, offering a personalized experience for each listener wherever and whenever they want to listen, whether through computer, tablets, mobile devices, vehicle speakers or connected devices. Pandora enables listeners to create personalized stations and playlists, discover new content, hear artist- and expert-curated playlists, podcasts and select Sirius XM content as well as search and play songs and albums on-demand. Pandora is available as (1) an ad-supported radio service, (2) a radio subscription service (Pandora Plus) and (3) an on-demand subscription service (Pandora Premium). As of March 31, 2022, Pandora had approximately 6.3 million subscribers.

The majority of revenue from Pandora is generated from advertising on our Pandora ad-supported radio service which is sold under the SXM Media brand. We also derive subscription revenue from our Pandora Plus and Pandora Premium subscribers.

We also sell advertising on other audio platforms and in widely distributed podcasts, which we consider to be off-platform services. We have an arrangement with SoundCloud Holdings, LLC ("SoundCloud") to be its exclusive ad sales representative in the US and certain European countries and are able to offer advertisers the ability to execute campaigns across the Pandora and SoundCloud listening platforms. We also have arrangements to serve as the ad sales representative for certain podcasts. In addition, through AdsWizz Inc., we provide a comprehensive digital audio and programmatic advertising

(Dollars and shares in millions, except per share amounts)

technology platform, which connects audio publishers and advertisers with a variety of ad insertion, campaign trafficking, yield optimization, programmatic buying, marketplace and podcast monetization solutions.

Liberty Media

As of March 31, 2022, Liberty Media Corporation ("Liberty Media") beneficially owned, directly and indirectly, approximately81% of the outstanding shares of our common stock. As a result, we are a "controlled company" for the purposes of the NASDAQ corporate governance requirements. Refer to Note 11 for more information regarding related parties.

Basis of Presentation

The accompanying unaudited consolidated financial statements of Holdings have been prepared in accordance with U.S. generally accepted accounting principles ("GAAP"). All significant intercompany transactions have been eliminated in consolidation. Certain numbers in our prior period consolidated financial statements and footnotes have been reclassified or consolidated to conform to our current period presentation.

In the opinion of our management, all normal recurring adjustments necessary for a fair presentation of our unaudited consolidated financial statements as of March 31, 2022 and for the three months ended March 31, 2022 and 2021 have been made.

Interim results are not necessarily indicative of the results that may be expected for a full year. This Quarterly Report on Form 10-Q should be read together with our Annual Report on Form 10-K for the year ended December 31, 2021, which was filed with the SEC on February 1, 2022.

Public companies are required to disclose certain information about their reportable operating segments. Operating segments are defined as significant components of an enterprise for which separate financial information is available and is evaluated on a regular basis by the chief operating decision maker in deciding how to allocate resources to an individual segment and in assessing performance of the segment. We have determined that we have two reportable segments as our chief operating decision maker, our Chief Executive Officer, assesses performance and allocates resources based on the financial results of these segments. Refer to Note 17 for information related to our segments.

We have evaluated events subsequent to the balance sheet date and prior to the filing of this Quarterly Report on Form 10-Q for the three months ended March 31, 2022 and have determined that no events have occurred that would require adjustment to our unaudited consolidated financial statements. For a discussion of subsequent events that do not require adjustment to our unaudited consolidated financial statements refer to Note 18.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the financial statements and footnotes. Estimates, by their nature, are based on judgment and available information. Actual results could differ materially from those estimates. Significant estimates inherent in the preparation of the accompanying unaudited consolidated financial statements include asset impairment, depreciable lives of our satellites, share-based payment expense and income taxes.

(2) Summary of Significant Accounting Policies

Fair Value Measurements

For assets and liabilities required to be reported at fair value, GAAP provides a hierarchy that prioritizes inputs to valuation techniques used to measure fair value into three broad levels. Level 1 inputs are based on unadjusted quoted prices in active markets for identical instruments. Level 2 inputs are inputs, other than quoted market prices included within Level 1, that are observable for the asset or liability, either directly or indirectly. Level 3 inputs are unobservable inputs for the asset or liability. As of March 31, 2022 and December 31, 2021, the carrying amounts of cash and cash equivalents, receivables and accounts payable approximated fair value due to the short-term nature of these instruments.

(Dollars and shares in millions, except per share amounts)

Our liabilities measured at fair value were as follows:

		March	31, 2022			December 31, 2021							
	Level 1	Level 2	Level 3	T	otal Fair Value	Level 1		Level 2	Level 3	To	tal Fair Value		
Liabilities:													
Debt (a)	_	\$ 9,581	_	\$	9,581	_	\$	9,052	_	\$	9,052		

(a) The fair value for non-publicly traded debt is based upon estimates from a market maker and brokerage firm. Refer to Note 12 for information related to the carrying value of our debt as of March 31, 2022 and December 31, 2021.

Accumulated Other Comprehensive Income (Loss)

Accumulated other comprehensive income of \$23 was primarily comprised of the cumulative foreign currency translation adjustments related to our investment in and loan to Sirius XM Canada (refer to Note 11 for additional information). During the three months ended March 31, 2022 and 2021, we recorded foreign currency translation adjustment income of \$8 and \$5, net of tax expense of \$3 and \$1, respectively.

Recently Adopted Accounting Policies

Accounting Standard Update ("ASU") 2020-06, Debt—Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging—Contracts in Entity's Own Equity (Subtopic 815-40). In August 2020, the Financial Accounting Standards Board ("FASB") issued ASU 2020-06 which removes the separation models for convertible debt with cash conversion or beneficial conversion features. ASU 2020-06 also requires the application of the if-converted method for calculating diluted earnings per share as the treasury stock method will no longer be permitted for convertible instruments. We adopted ASU 2020-06 as of January 1, 2022 using the modified retrospective approach and recorded a \$14 increase to the carrying value of Pandora's 1.75% Convertible Senior Notes due 2023 and a corresponding increase to our accumulated deficit. The adoption of ASU 2020-06 did not have a material impact on our diluted earnings per share.

(3) Acquisitions

On January 12, 2022, we completed an acquisition for total cash consideration of \$4. We recognized goodwill of \$29 and other definite-lived intangible assets of \$19.

On April 23, 2021, we completed an acquisition for total consideration of \$27 which included \$20 in cash, a \$3 deferred cash payment and \$4 in restricted stock units. We recognized goodwill of \$23 and other assets of \$5.

There were no acquisition related costs recognized for the three months ended March 31, 2022.

(4) Restructuring Costs

No restructuring costs were recognized during the three months ended March 31, 2022.

During the three months ended March 31, 2021, we evaluated our office space needs and, as a result of such analysis, surrendered certain office leases primarily in New York, New York and Oakland, California. We assessed the recoverability of the carrying value of the operating lease right of use assets related to these locations. Based on that assessment, the carrying values of the assets were not recoverable, and we recorded an impairment of \$18 to reduce the carrying value of the assets to their fair values. Additionally, we accrued expenses of \$6 for which we will not recognize any future economic benefits and wrote off leasehold improvements of \$1. The fair values of the assets were determined using a discounted cash flow model based on management's assumptions regarding the ability to sublease the locations and the remaining term of the leases. The total charge of \$25 was recorded to Impairment, restructuring and acquisition costs in our unaudited consolidated statements of comprehensive income for the three months ended March 31, 2021.

(5) Earnings per Share

Basic net income per common share is calculated by dividing the income available to common stockholders by the weighted average common shares outstanding during each reporting period. Diluted net income per common share adjusts the weighted average number of common shares outstanding for the potential dilution that could occur if common stock equivalents

(Dollars and shares in millions, except per share amounts)

(stock options, restricted stock units and convertible debt) were exercised or converted into common stock, calculated using the treasury stock methodWe had no participating securities during the three months ended March 31, 2022 and 2021.

Common stock equivalents of \$84 and \$97 for the three months ended March 31, 2022 and 2021, respectively, were excluded from the calculation of diluted net income per common share as the effect would have been anti-dilutive.

	Fo	For The Three Months Ended March 31,			
		2022		2021	
Numerator:					
Net Income available to common stockholders for basic net income per common share	\$	309	\$	219	
Effect of interest on assumed conversions of convertible notes, net of tax		2		2	
Net Income available to common stockholders for dilutive net income per common share	\$	311	\$	221	
Denominator:					
Weighted average common shares outstanding for basic net income per common share		3,948		4,137	
Weighted average impact of assumed convertible notes		31		30	
Weighted average impact of dilutive equity instruments		45		55	
Weighted average shares for diluted net income per common share		4,024		4,222	
Net income per common share:	-				
Basic	\$	0.08	\$	0.05	
Diluted	\$	0.08	\$	0.05	

(6) Receivables, net

Receivables, net, includes customer accounts receivable, receivables from distributors and other receivables. We do not have any customer receivables that individually represent more than ten percent of our receivables.

Customer accounts receivable, net, includes receivables from our subscribers and advertising customers, including advertising agencies and other customers, and is stated at amounts due, net of an allowance for doubtful accounts. Our allowance for doubtful accounts is based upon our assessment of various factors. We consider historical experience, the age of the receivable balances, current economic conditions, industry experience and other factors that may affect the counterparty's ability to pay. Bad debt expense is included in Customer service and billing expense in our unaudited consolidated statements of comprehensive income.

Receivables from distributors primarily include billed and unbilled amounts due from automakers for services included in the sale or lease price of vehicles, as well as billed amounts due from wholesale distributors of our satellite radios. Other receivables primarily include amounts due from manufacturers of our radios, modules and chipsets where we are entitled to subsidies and royalties based on the number of units produced. We have not established an allowance for doubtful accounts for our receivables from distributors or other receivables as we have historically not experienced any significant collection issues with automakers or other third parties and do not expect issues in the foreseeable future.

Receivables, net, consists of the following:

	March 31, 2022	D	ecember 31, 2021
Gross customer accounts receivable	\$ 552	\$	636
Allowance for doubtful accounts	(11)		(10)
Customer accounts receivable, net	\$ 541	\$	626
Receivables from distributors	73		62
Other receivables	36		34
Total receivables, net	\$ 650	\$	722

(Dollars and shares in millions, except per share amounts)

(7) Goodwill

Goodwill represents the excess of the purchase price over the estimated fair value of the net tangible and identifiable intangible assets acquired in business combinations. Our annual impairment assessment of our two reporting units is performed as of the fourth quarter of each year, and an assessment is performed at other times if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount. ASC 350, *Intangibles - Goodwill and Other*, states that an entity should perform its annual or interim goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount and recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value. ASC 350 also states that a reporting unit with a zero or negative carrying amount is not required to perform a qualitative assessment. Our Sirius XM reporting unit, which has an allocated goodwill balance of \$2,290, had a negative carrying amount as of March 31, 2022.

As of March 31, 2022, there were no indicators of impairment, and no impairment losses were recorded for goodwill during the three months ended March 31, 2022 and 2021. As of March 31, 2022, the cumulative balance of goodwill impairments recorded was \$5,722, of which \$4,766 was recognized during the year ended December 31, 2008 and is included in the carrying amount of the goodwill allocated to our Sirius XM reporting unit and \$956 was recognized during the year ended December 31, 2020 and is included in the carrying amount of the goodwill allocated to our Pandora and Off-platform reporting unit.

As of March 31, 2022, the carrying amount of goodwill for our Sirius XM and Pandora and Off-platform reporting units was \$2,290 and \$890, respectively. During the three months ended March 31, 2022, we recorded \$29 of goodwill related to an acquisition which was recorded to our Pandora and Off-platform reporting unit. Refer to Note 3 for information regarding the acquisition. As of December 31, 2021, the carrying amount of goodwill for our Sirius XM and Pandora and Off-platform reporting units was \$2,290 and \$861, respectively.

(8) Intangible Assets

Our intangible assets include the following:

		March 31, 2022			December 31, 2021			
	Weighted Average Useful Lives	Gross Carrying Accumulated Value Amortization		Net Carrying Value	Gross Carrying Value	Accumulated Amortization	Net Carrying Value	
Indefinite life intangible assets:								
FCC licenses	Indefinite	\$ 2,084	\$ —	\$ 2,084	\$ 2,084	\$ —	\$ 2,084	
Trademarks	Indefinite	250	_	250	250	_	250	
Definite life intangible assets:								
OEM relationships	15 years	220	(123)	97	220	(120)	100	
Licensing agreements	12 years	45	(45)	_	45	(45)	_	
Software and technology	7 years	31	(19)	12	31	(19)	12	
Due to Acquisitions recorded to Pandora and Off-platform Reporting Unit:								
Indefinite life intangible assets:								
Trademarks	Indefinite	311	_	311	311	_	311	
Definite life intangible assets:								
Customer relationships	8 years	442	(180)	262	441	(164)	277	
Software and technology	5 years	391	(241)	150	373	(221)	152	
Total intangible assets		\$ 3,774	\$ (608)	\$ 3,166	\$ 3,755	\$ (569)	\$ 3,186	

Indefinite Life Intangible Assets

We have identified our FCC licenses and XM and Pandora trademarks as indefinite life intangible assets after considering the expected use of the assets, the regulatory and economic environment within which they are used and the effects of obsolescence on their use.

(Dollars and shares in millions, except per share amounts)

We hold FCC licenses to operate our satellite digital audio radio service and provide ancillary services. Each of the FCC licenses authorizes us to use radio spectrum, a reusable resource that does not deplete or exhaust over time.

Our annual impairment assessment of our identifiable indefinite lived intangible assets is performed as of the fourth quarter of each year. An assessment is performed at other times if an event occurs or circumstances change that would more likely than not reduce the fair value of the asset below its carrying value. If the carrying value of the intangible assets exceeds its fair value, an impairment loss is recognized in an amount equal to that excess. As of March 31, 2022, there were no indicators of impairment, and no impairment loss was recognized for intangible assets with indefinite lives during the three months ended March 31, 2022 and 2021.

Definite Life Intangible Assets

Amortization expense for all definite life intangible assets was \$39 and \$38 for the three months ended March 31, 2022 and 2021, respectively. There were no retirements of definite lived intangible assets during the three months ended March 31, 2022 and 2021.

The expected amortization expense for each of the fiscal years 2022 through 2026 and for periods thereafter is as follows:

Years ending December 31,	Amou	nt
2022 (remaining)	\$	117
2023		144
2024		77
2025		72
2026		71
Thereafter		40
Total definite life intangible assets, net	\$	521

(9) Property and Equipment

Property and equipment, net, consists of the following:

	March 31, 2022 December 3		December 31, 2021	
Satellite system	\$	1,841	\$	1,841
Terrestrial repeater network		116		116
Leasehold improvements		109		109
Broadcast studio equipment		122		119
Capitalized software and hardware		1,585		1,591
Satellite telemetry, tracking and control facilities		68		67
Furniture, fixtures, equipment and other		90		92
Land		38		38
Building		82		81
Construction in progress		242		156
Total property and equipment		4,293		4,210
Accumulated depreciation		(2,835)		(2,760)
Property and equipment, net	\$	1,458	\$	1,450

(Dollars and shares in millions, except per share amounts)

Construction in progress consists of the following:

	Marc	March 31, 2022		31, 2021
Satellite system	\$	86	\$	64
Terrestrial repeater network		2		1
Capitalized software and hardware		139		78
Other		15		13
Construction in progress	\$	242	\$	156

Depreciation and amortization expense on property and equipment was \$96 and \$94 for the three months ended March 31, 2022 and 2021, respectively. Property and equipment with a cost of \$22 and a net book value of \$1 were retired during the three months ended March 31, 2022. We retired property and equipment of \$5 during the three months ended March 31, 2021.

We capitalize a portion of the interest on funds borrowed to finance the construction and launch of our satellites. Capitalized interest is recorded as part of the asset's cost and depreciated over the satellite's useful life. Capitalized interest costs were \$1 and \$3 for the three months ended March 31, 2022 and 2021, respectively, which related to the construction of our satellites. We also capitalize a portion of share-based compensation related to employee time for capitalized software projects. Capitalized share-based compensation costs were \$5 and \$4 for the three months ended March 31, 2022 and 2021, respectively.

Satellites

As of March 31, 2022, we operated a fleet of six satellites. Each satellite requires an FCC license, and prior to the expiration of each license, we are required to apply for a renewal of the FCC satellite license. The renewal and extension of our licenses is reasonably certain at minimal cost, which is expensed as incurred. The chart below provides certain information on our satellites as of March 31, 2022:

Satellite Description	Year Delivered	Estimated End of Depreciable Life	FCC License Expiration Year
SIRIUS FM-5	2009	2024	2025
SIRIUS FM-6	2013	2028	2022
XM-3	2005	2020	2026
XM-4	2006	2021	2022
XM-5	2010	2025	2026
SXM-8	2021	2036	2029

During the three months ended March 31, 2021, we recorded an impairment charge of \$20 to Impairment, restructuring and acquisition costs in our unaudited consolidated statements of comprehensive income related to the total loss of the SXM-7 satellite. We procured insurance for SXM-7 to cover the risks associated with the satellite's launch and first year of in-orbit operation. The aggregate coverage under the insurance policies with respect to SXM-7 was \$225, all of which was collected during the year ended December 31, 2021.

Our SXM-8 satellite was successfully launched into a geostationary orbit on June 6, 2021 and was placed into service on September 8, 2021 following the completion of in-orbit testing. Our SXM-8 satellite replaced our XM-3 satellite. During the three months ended March 31, 2022, we replaced our XM-4 satellite with our XM-5 satellite. Our XM-3 and our XM-4 satellites remain available as in-orbit spares.

(10) Leases

We have operating and finance leases for offices, terrestrial repeaters, data centers and certain equipment. Our leases have remaining lease terms of less than 1 year to 20 years, some of which may include options to extend the leases for up to 5 years, and some of which may include options to terminate the leases within 1 year. We elected the practical expedient to account for the lease and non-lease components as a single component. Additionally, we elected the practical expedient to not

(Dollars and shares in millions, except per share amounts)

recognize right-of-use assets or lease liabilities for short-term leases, which are those leases with a term of twelve months or less at the lease commencement date.

The components of lease expense were as follows:

	 For the Three Months Ended March 31,			
	2022	2021		
Operating lease cost	\$ 13	\$ 21		
Sublease income	(1)	(1)		
Total lease cost	\$ 12	\$ 20		

During the three months ended March 31, 2021, we ceased using certain leased locations and recorded an impairment charge of \$8 to write down the carrying value of the right-of-use assets for these locations to their estimated fair values. Refer to Note 4 for additional information.

(11) Related Party Transactions

In the normal course of business, we enter into transactions with related parties such as Sirius XM Canada and SoundCloud.

Liberty Media

As of March 31, 2022, Liberty Media beneficially owned, directly and indirectly, approximately81% of the outstanding shares of our common stock. Liberty Media has three of its executives and one of its directors on our board of directors. Gregory B. Maffei, the President and Chief Executive Officer of Liberty Media, is the Chairman of our board of directors.

On February 1, 2021, Holdings entered into a tax sharing agreement with Liberty Media governing the allocation of consolidated U.S. income tax liabilities and setting forth agreements with respect to other tax matters. The tax sharing agreement was negotiated and approved by a special committee of Holdings' board of directors, all of whom are independent of Liberty Media.

Under the Internal Revenue Code, two corporations may form a consolidated tax group, and file a consolidated federal income tax return, if one corporation owns stock representing at least 80% of the voting power and value of the outstanding capital stock of the other corporation. As of March 31, 2022, Liberty Media beneficially owned, directly and indirectly, approximately 81% of the outstanding shares of our common stock resulting in Holdings and Liberty Media becoming members of the same consolidated tax group. The tax sharing agreement governs certain matters related to the resulting consolidated federal income tax returns, as well as state and local returns filed on a consolidated or combined basis.

Sirius XM Canada

Sirius XM holds a 70% equity interest and 33% voting interest in Sirius XM Canada, a privately held corporation. We own 591 shares of preferred stock of Sirius XM Canada, which has a liquidation preference of one Canadian dollar per share.

Sirius XM Canada is accounted for as an equity method investment, and its results are not consolidated in our unaudited consolidated financial statements. Sirius XM Canada does not meet the requirements for consolidation as we do not have the ability to direct the most significant activities that impact Sirius XM Canada's economic performance.

On March 15, 2022, Sirius XM and Sirius XM Canada entered into an amended and restated services and distribution agreement. The amended and restated services and distribution agreement modified the existing Services Agreement and terminated the existing Advisory Agreement, each dated as of May 25, 2017, between Sirius XM and Sirius XM Canada. Pursuant to the amended and restated services and distribution agreement, the fee payable by Sirius XM Canada to Sirius XM was modified from a fixed percentage of revenue to a variable fee, based on a target operating profit for Sirius XM Canada. Such variable fee is expected to be evaluated annually based on comparable companies. In accordance with the amended and restated services and distribution agreement, the fee is payable on a monthly basis, in arrears, beginning January 1, 2022.

(Dollars and shares in millions, except per share amounts)

In May 2017, Sirius XM extended a loan to Sirius XM Canada in the principal amount of \$31. In connection with the execution of the amended and restated services and distribution agreement, Sirius XM forgave \$113 in principal amount of such loan to Sirius XM Canada, leaving an outstanding principal amount of \$\\$\$ on such loan. The principal amount that was forgiven by Sirius XM was considered satisfied and as contributed capital from Sirius XM.

Our related party long-term assets as of March 31, 2022 and December 31, 2021 included the carrying value of our investment balance in Sirius XM Canada of \$60 and \$334, respectively, and, as of March 31, 2022 and December 31, 2021, also included \$8 and \$120, respectively, for the long-term value of the outstanding loan to Sirius XM Canada.

Sirius XM Canada paid gross dividends to us of less than \$1 during each of the three months ended March 31, 2022 and 2021. Dividends are first recorded as a reduction to our investment balance in Sirius XM Canada to the extent a balance exists and then as Other (expense) income for any remaining portion.

We recorded revenue from Sirius XM Canada as Other revenue in our unaudited consolidated statements of comprehensive income of \$27 and \$25 for the three months ended March 31, 2022 and 2021, respectively.

SoundCloud

We have an investment in SoundCloud accounted for as an equity method investment which is recorded in Related party long-term assets in our unaudited consolidated balance sheets. Sirius XM has appointed two individuals to serve on SoundCloud's nine-member board of managers. Sirius XM's share of SoundCloud's net loss was \$1 and less than \$1 for the three months ended March 31, 2022 and 2021, respectively, which was recorded in Other (expense) income in our unaudited consolidated statements of comprehensive income.

In addition to our investment in SoundCloud, Pandora has an agreement with SoundCloud to be its exclusive ad sales representative in the US and certain European countries. Through this arrangement, Pandora offers advertisers the ability to execute campaigns across the Pandora and SoundCloud listening platforms. We recorded revenue share expense of \$13 for each of the three months ended March 31, 2022 and 2021. We also had related party liabilities of \$20 and \$24 as of March 31, 2022 and December 31, 2021, respectively, related to this agreement.

(Dollars and shares in millions, except per share amounts)

(12) Debt

Our debt as of March 31, 2022 and December 31, 2021 consisted of the following:

				Principal Amount at	Carrying value ^(a) at			
Issuer / Borrower	Issued	Debt	Maturity Date	Interest Payable	March 31, 2022	March 31, 2022	December 31, 2021	
Pandora (c) (d)	June 2018	1.75% Convertible Senior Notes	December 1, 2023	semi-annually on June 1 and December 1	\$ 193	\$ 193	\$ 177	
Sirius XM (b)	August 2021	3.125% Senior Notes	September 1, 2026	semi-annually on March 1 and September 1	1,000	990	990	
Sirius XM (b)	July 2017	5.00% Senior Notes	August 1, 2027	semi-annually on February 1 and August 1	1,500	1,491	1,491	
Sirius XM (b)	June 2021	4.00% Senior Notes	July 15, 2028	semi-annually on January 15 and July 15	2,000	1,980	1,979	
Sirius XM (b)	June 2019	5.500% Senior Notes	July 1, 2029	semi-annually on January 1 and July 1	1,250	1,239	1,239	
Sirius XM (b)	June 2020	4.125% Senior Notes	July 1, 2030	semi-annually on January 1 and July 1	1,500	1,486	1,485	
Sirius XM (b)	August 2021	3.875% Senior Notes	September 1, 2031	semi-annually on March 1 and September 1	1,500	1,484	1,484	
Sirius XM (e)	December 2012	Senior Secured Revolving Credit Facility (the "Credit Facility")	August 31, 2026	variable fee paid quarterly	981	981	_	
Total Debt						9,844	8,845	
Less: total curr	rent maturities					_	_	
Less: total defe	erred financing costs					12	13	
Total long-term de	ebt					\$ 9,832	\$ 8,832	

- (a) The carrying value of the obligations is net of any remaining unamortized original issue discount.
- (b) All material domestic subsidiaries, including Pandora and its subsidiaries, that guarantee the Credit Facility have guaranteed these notes.
- (c) Holdings has unconditionally guaranteed all of the payment obligations of Pandora under these notes.
- We acquired \$193 in principal amount of the 1.75% Convertible Senior Notes due 2023 as part of the acquisition of Pandora Media, Inc. in 2019. Prior to the adoption of ASU 2020-06, we allocated the principal amount of the 1.75% Convertible Senior Notes due 2023 between the liability and equity components. The value assigned to the debt components of the 1.75% Convertible Senior Notes due 2023 was the estimated fair value as of the issuance date of similar debt without the conversion feature. The difference between the fair value of the debt and this estimated fair value represented the value which was assigned to the equity component. The equity component was recorded to additional paid-in capital and was not remeasured as long as it continues to meet the conditions for equity classification. The excess of the principal amount of the Notes over the carrying amount of the liability component was recorded as a debt discount and was being amortized to interest expense using the effective interest method through the December 1, 2023 maturity date. On January 1, 2022, we adopted ASU 2020-06 which removes the separation model for convertible debt with cash conversion features and recorded a \$14 decrease to the debt discount and a corresponding increase to accumulated deficit. Refer to Note 2 for more information on the adoption of ASU 2020-06. The 1.75% Convertible Senior Notes due 2023 were not convertible into common stock and not redeemable as of March 31, 2022. As a result, we have classified the debt as Long-term within our unaudited consolidated balance sheets.
- (e) In August 2021, Sirius XM entered into an amendment to extend the maturity of the \$1,750 Credit Facility to August 31, 2026. Sirius XM's obligations under the Credit Facility are guaranteed by certain of its material domestic subsidiaries, including Pandora and its subsidiaries, and are secured by a lien on substantially all of Sirius XM's assets and the assets of its material domestic subsidiaries. Interest on borrowings is payable on a monthly basis and accrues at a rate based on LIBOR plus an applicable rate. Sirius XM is also required to pay a variable fee on the average daily unused portion of the Credit Facility which is payable on a quarterly basis. The variable rate for the unused portion of the Credit Facility

(Dollars and shares in millions, except per share amounts)

was 0.25% per annum as of March 31, 2022. All of Sirius XM's outstanding borrowings under the Credit Facility are classified as Long-term debt within our unaudited consolidated balance sheets due to the long-term maturity of this debt.

Covenants and Restrictions

Under the Credit Facility, Sirius XM, our wholly owned subsidiary, must comply with a debt maintenance covenant that it cannot exceed a total leverage ratio, calculated as consolidated total debt to consolidated operating cash flow, of 5.0 to 1.0. The Credit Facility generally requires compliance with certain covenants that restrict Sirius XM's ability to, among other things, (i) incur additional indebtedness, (ii) incur liens, (iii) pay dividends or make certain other restricted payments, investments or acquisitions, (iv) enter into certain transactions with affiliates, (v) merge or consolidate with another person, (vi) sell, assign, lease or otherwise dispose of all or substantially all of Sirius XM's assets, and (vii) make voluntary prepayments of certain debt, in each case subject to exceptions.

The indentures governing Sirius XM's notes restrict Sirius XM's non-guarantor subsidiaries' ability to create, assume, incur or guarantee additional indebtedness without such non-guarantor subsidiary guaranteeing each such series of notes on a pari passu basis. The indentures governing the notes also contain covenants that, among other things, limit Sirius XM's ability and the ability of its subsidiaries to create certain liens; enter into sale/leaseback transactions; and merge or consolidate.

Under Sirius XM's debt agreements, the following generally constitute an event of default: (i) a default in the payment of interest; (ii) a default in the payment of principal; (iii) failure to comply with covenants; (iv) failure to pay other indebtedness after final maturity or acceleration of other indebtedness exceeding a specified amount; (v) certain events of bankruptcy; (vi) a judgment for payment of money exceeding a specified aggregate amount; and (vii) voidance of subsidiary guarantees, subject to grace periods where applicable. If an event of default occurs and is continuing, our debt could become immediately due and payable.

The indenture governing the Pandora 2023 Notes (as defined below) contains covenants that limit Pandora's ability to merge or consolidate and provides for customary events of default, which include nonpayment of principal or interest, breach of covenants, payment defaults or acceleration of other indebtedness and certain events of bankruptcy.

At March 31, 2022 and December 31, 2021, we were in compliance with our debt covenants.

Pandora Convertible Notes

Pandora's 1.75% Convertible Senior Notes due 2023 (the "Pandora 2023 Notes") are unsecured, senior obligations of Pandora. Holdings has guaranteed the payment and performance obligations of Pandora under the Pandora 2023 Notes and the indenture governing the Pandora 2023 Notes.

The Pandora 2023 Notes will mature on December 1, 2023, unless earlier repurchased or redeemed by Pandora or converted in accordance with their terms. As of March 31, 2022, the conversion rate applicable to the Pandora 2023 Notes was 161.0187 shares of Holdings' common stock per one thousand principal amount of the Pandora 2023 Notes plus carryforward adjustments not yet effected pursuant to the terms of the indenture governing the Pandora 2023 Notes.

(13) Stockholders' Equity

Common Stock, par value \$0.001 per share

We are authorized to issue up to 9,000 shares of common stock. There were 3,940 and 3,968 shares of common stock issued and 3,940 and 3,967 shares of common stock outstanding on March 31, 2022 and December 31, 2021, respectively.

As of March 31, 2022, there were 243 shares of common stock reserved for issuance in connection with outstanding stock-based awards to members of our board of directors, employees and third parties.

(Dollars and shares in millions, except per share amounts)

Special Dividend

During the three months ended March 31, 2022, our board of directors declared and paid the following special cash dividend on our common stock:

Declaration Date	Dividend Per Share	Record Date	Total Amount	Payment Date
January 31, 2022	\$ 0.25	February 11, 2022	\$ 987	February 25, 2022

Quarterly Dividends

During the three months ended March 31, 2022, we also declared and paid the following dividend:

Declaration Date	Dividend Per Share	Record Date	Total Amount	Payment Date
January 26, 2022	\$ 0.0219615	February 11 2022	\$ 86	February 25, 2022

Stock Repurchase Program

As of March 31, 2022, our board of directors had approved for repurchase an aggregate of \$8,000 of our common stock. Our board of directors did not establish an end date for this stock repurchase program. Shares of common stock may be purchased from time to time on the open market, pursuant to pre-set trading plans meeting the requirements of Rule 10b5-1 under the Exchange Act, in privately negotiated transactions, including transactions with Liberty Media and its affiliates, or otherwise. As of March 31, 2022, our cumulative repurchases since December 2012 under our stock repurchase program totaled 3,591 shares for \$16,119, and \$1,881 remained available for future share repurchases under our stock repurchase program.

The following table summarizes our total share repurchase activity for the three months ended:

	March 31, 2022		March 31, 2021			
Share Repurchase Type	Shares		Amount	Shares		Amount
Open Market Repurchases (a)	32	\$	200	85	\$	516

(a) As of March 31, 2022, \$2 of common stock repurchases had not settled, nor been retired, and were recorded as Treasury stock within our unaudited consolidated balance sheets and unaudited consolidated statement of stockholders' equity (deficit).

Preferred Stock, par value \$0.001 per share

We are authorized to issue up to 50 shares of undesignated preferred stock with a liquidation preference of \$0.001 per share. There were no shares of preferred stock issued or outstanding as of March 31, 2022 and December 31, 2021.

(14) Benefit Plans

We recognized share-based payment expense of \$45 and \$51 for the three months ended March 31, 2022 and 2021, respectively.

2015 Long-Term Stock Incentive Plan

In May 2015, our stockholders approved the Sirius XM Holdings Inc. 2015 Long-Term Stock Incentive Plan (the "2015 Plan"). Employees, consultants and members of our board of directors are eligible to receive awards under the 2015 Plan. The 2015 Plan provides for the grant of stock options, restricted stock awards, restricted stock units and other stock-based awards that the Compensation Committee of our Board of Directors deems appropriate. Stock-based awards granted under the 2015 Plan are generally subject to a graded vesting requirement, which is generally three to four years from the grant date. Stock options generally expireten years from the date of grant. Restricted stock units include performance-based restricted stock units ("PRSUs"), the vesting of which are subject to the achievement of performance goals and the employee's continued employment and generally cliff vest on the third anniversary of the grant date. Each restricted stock unit entitles the holder to

(Dollars and shares in millions, except per share amounts)

receive one share of common stock upon vesting. As of March 31, 2022,124 shares of common stock were available for future grants under the 2015 Plan.

In February 2021, the Compensation Committee of our Board of Directors approved a modification to the design of our long-term equity compensation program for our senior management. The Compensation Committee intends to award equity-based compensation to our senior management in the form of: 25% stock options, which awards will vest in equal installments on the first three anniversaries of the date of grant; 25% restricted stock units, which awards will vest in equal installments on the firstthree anniversaries of the date of grant; 25% PRSUs, which will cliff vest on the third anniversary of the date of grant after a two-year performance period if the free cash flow target established by the Compensation Committee is achieved; and 25% PRSUs, which will cliff vest after a three-year performance period based on the performance of our common stock relative to the companies included in the S&P 500 Index. We refer to this performance measure as a relative "TSR" or "total stockholder return" metric. PRSUs based on the relative total stockholder return metric will only vest if our performance achieves at least the 25th percentile, with a target payout requiring performance at the 50th percentile. The settlement of PRSUs earned in respect of the applicable three-year performance period will be generally subject to the executive's continued employment with us through the date the total stockholder return performance is certified by the Compensation Committee.

Other Plans

We maintain six share-based benefit plans in addition to the 2015 Plan — the Sirius XM Radio Inc. 2009 Long-Term Stock Incentive Plan, the Amended and Restated Sirius Satellite Radio 2003 Long-Term Stock Incentive Plan, the 2014 Stock Incentive Plan of AdsWizz Inc., the Pandora Media, Inc. 2011 Equity Incentive Plan, the Pandora Media, Inc. 2004 Stock Plan and the TheSavageBeast.com, Inc. 2000 Stock Incentive Plan. Excluding dividend equivalent units granted as a result of a declared dividend, no further awards may be made under these plans.

The following table summarizes the weighted-average assumptions used to compute the fair value of options granted to employees, members of our board of directors and non-employees:

	For the Three Mon	ths Ended March 31,
	2022	2021
Risk-free interest rate	1.4%	0.6%
Expected life of options — years	3.60	6.10
Expected stock price volatility	32%	33%
Expected dividend yield	1.3%	1.0%

The following table summarizes stock option activity under our share-based plans for the three months ended March 31, 2022:

	Options	Weighted-Average Exercise Price Per Share (1)	Weighted-Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value	
Outstanding as of December 31, 2021	161	\$ 5.23			
Granted	9	\$ 6.44			
Exercised	(8)	\$ 4.60			
Forfeited, cancelled or expired	(1)	\$ 6.28			
Outstanding as of March 31, 2022	161	\$ 5.33	5.76	\$	210
Exercisable as of March 31, 2022	100	\$ 4.88	4.88	\$	176

(1) The weighted-average exercise price for options outstanding and exercisable as of December 31, 2021 and March 31, 2022 in the table above have been adjusted to reflect the reduction of \$0.25 to the exercise price related to the February 25, 2022 special cash dividend.

The weighted average grant date fair value per stock option granted during the three months ended March 31, 2022 was \$.50. The total intrinsic value of stock options exercised during the three months ended March 31, 2022 and 2021 was \$16 and \$85, respectively. During the three months ended March 31, 2022, the number of net settled shares issued as a result of stock option exercises was 1.

We recognized share-based payment expense associated with stock options of \$9 and \$11 for the three months ended March 31, 2022 and 2021, respectively.

(Dollars and shares in millions, except per share amounts)

The following table summarizes the restricted stock unit, including PRSU, activity under our share-based plans for the three months ended March 31, 2022:

	Shares	Fa	Grant Date iir Value Per Share
Nonvested as of December 31, 2021	80	\$	6.22
Granted	12	\$	6.93
Vested	(7)	\$	6.06
Forfeited	(2)	\$	6.31
Nonvested as of March 31, 2022	83	\$	6.31

The total intrinsic value of restricted stock units, including PRSUs, vesting during the three months ended March 31, 2022 and 2021 was \$6 and \$39, respectively. During the three months ended March 31, 2022, the number of net settled shares issued as a result of restricted stock units vesting totaled 4. During the three months ended March 31, 2022, we granted 5 PRSUs to certain employees. We believe it is probable that the performance target applicable to these PRSUs will be achieved.

In connection with the cash dividends paid during the three months ended March 31, 2022, we granted 4 restricted stock units, including PRSUs, in accordance with the terms of existing award agreements. These grants did not result in any additional incremental share-based payment expense being recognized during the three months ended March 31, 2022.

We recognized share-based payment expense associated with restricted stock units, including PRSUs, of \$36 and \$40 for the three months ended March 31, 2022 and 2021, respectively.

Total unrecognized compensation costs related to unvested share-based payment awards for stock options and restricted stock units, including PRSUs, granted to employees, members of our board of directors and third parties at March 31, 2022 and December 31, 2021 was \$463 and \$455, respectively. The total unrecognized compensation costs at March 31, 2022 are expected to be recognized over a weighted-average period of 2.4 years.

401(k) Savings Plans

Sirius XM Radio Inc. 401(k) Savings Plan

Sirius XM sponsors the Sirius XM Radio Inc. 401(k) Savings Plan (the "Sirius XM Plan") for eligible employees. The Sirius XM Plan allows eligible employees to voluntarily contribute from 1% to 50% of their pre-tax eligible earnings, subject to certain defined limits. We match50% of an employee's voluntary contributions per pay period on the first 6% of an employee's pre-tax salary up to a maximum of 3% of eligible compensation. We may also make additional discretionary matching, true-up matching and non-elective contributions to the Sirius XM Plan. Employer matching contributions under the Sirius XM Plan vest at a rate of 33.33% for each year of employment and are fully vested after three years of employment for all current and future contributions. Our cash employer matching contributions are not used to purchase shares of our common stock on the open market, unless the employee elects our common stock as their investment option for this contribution.

We recognized expenses of \$5 for each of the three months ended March 31, 2022 and 2021 in connection with the Sirius XM Plan.

Sirius XM Holdings Inc. Deferred Compensation Plan

The Sirius XM Holdings Inc. Deferred Compensation Plan (the "DCP") allows members of our board of directors and certain eligible employees to defer all or a portion of their base salary, cash incentive compensation and/or board of directors' cash compensation, as applicable. Pursuant to the terms of the DCP, we may elect to make additional contributions beyond amounts deferred by participants, but we are under no obligation to do so. We have established a grantor (or "rabbi") trust to facilitate the payment of our obligations under the DCP.

Contributions to the DCP, net of withdrawals, were \$— and \$3 for the three months ended March 31, 2022 and 2021, respectively. As of March 31, 2022 and December 31, 2020, the fair value of the investments held in the trust were \$53 and \$56, respectively, which is included in Other long-term assets in our unaudited consolidated balance sheets and classified as trading securities. Trading gains and losses associated with these investments are recorded in Other (expense) income within our unaudited consolidated statements of comprehensive income. The associated liability is recorded within Other long-term

(Dollars and shares in millions, except per share amounts)

liabilities in our unaudited consolidated balance sheets, and any increase or decrease in the liability is recorded in General and administrative expense within our unaudited consolidated statements of comprehensive income. We recorded (losses) gains on investments held in the trust of \$(3) and \$1 for the three months ended March 31, 2022 and 2021, respectively.

(15) Commitments and Contingencies

The following table summarizes our expected contractual cash commitments as of March 31, 2022:

	 2022	2023	2024	2025	2026	Thereafter	Total
Debt obligations	\$ _	\$ 193	\$ _	\$ _	\$ 1,981	\$ 7,750	\$ 9,924
Cash interest payments	209	402	398	398	391	979	2,777
Satellite and transmission	85	161	109	27	1	9	392
Programming and content	352	411	261	139	60	148	1,371
Sales and marketing	27	35	4	3	3	3	75
Satellite incentive payments	5	7	8	7	4	19	50
Operating lease obligations	49	66	51	48	45	96	355
Royalties, minimum guarantees and other	199	418	47	9	1	2	676
Total (1)	\$ 926	\$ 1,693	\$ 878	\$ 631	\$ 2,486	\$ 9,006	\$ 15,620

(1) The table does not include our reserve for uncertain tax positions, which at March 31, 2022 totaled \$33.

Debt obligations. Debt obligations include principal payments on outstanding debt and finance lease obligations.

Cash interest payments. Cash interest payments include interest due on outstanding debt and capital lease payments through maturity.

Satellite and transmission. We have entered into agreements with third parties to design, build and launchtwo new satellites, SXM-9 and SXM-10. We also have entered into agreements with third parties to operate and maintain satellite telemetry, tracking and control facilities and certain components of our terrestrial repeater networks.

Programming and content. We have entered into various programming and content agreements. Under the terms of these agreements, our obligations include fixed payments, advertising commitments and revenue sharing arrangements. In certain of these agreements, the future revenue sharing costs are dependent upon many factors and are difficult to estimate; therefore, they are not included in our minimum contractual cash commitments.

Sales and marketing. We have entered into various marketing, sponsorship and distribution agreements to promote our brands and are obligated to make payments to sponsors, retailers, automakers, radio manufacturers and other third parties under these agreements. Certain programming and content agreements also require us to purchase advertising on properties owned or controlled by the licensors.

Satellite incentive payments. Boeing Satellite Systems International, Inc., the manufacturer of certain of our in-orbit satellites, may be entitled to future in-orbit performance payments upon XM-4 meeting its fifteen-year design life. Boeing may also be entitled to up to \$10 of additional incentive payments if our XM-4 satellite continues to operate above baseline specifications during the five years beyond the satellite's fifteen-year design life.

Maxar Technologies (formerly Space Systems/Loral), the manufacturer of certain of our in-orbit satellites, may be entitled to future in-orbit performance payments upon XM-5, SIRIUS FM-6, and SXM-8 meeting their fifteen-year design life, which we expect to occur.

Operating lease obligations. We have entered into both cancelable and non-cancelable operating leases for office space, terrestrial repeaters, data centers and equipment. These leases provide for minimum lease payments, additional operating expense charges, leasehold improvements and rent escalations that have initial terms ranging from one to fifteen years, and certain leases have options to renew.

(Dollars and shares in millions, except per share amounts)

Royalties, Minimum Guarantees and Other. We have entered into music royalty arrangements that include fixed payments. Certain of our content agreements also contain minimum guarantees. During the three months ended March 31, 2022, we prepaid \$7 in content costs related to minimum guarantees. As of March 31, 2022, we had future fixed minimum guarantee commitments of \$328, of which \$11 will be paid in 2022 and the remainder will be paid thereafter. On a quarterly basis, we record the greater of the cumulative actual content costs incurred or the cumulative minimum guarantee based on forecasted usage for the minimum guarantee period. The minimum guarantee period is the period of time that the minimum guarantee relates to, as specified in each agreement, which may be annual or a longer period. The cumulative minimum guarantee, based on forecasted usage, considers factors such as listening hours, revenue, subscribers and other terms of each agreement that impact our expected attainment or recoupment of the minimum guarantees based on the relative attribution method.

Several of our content agreements also include provisions related to the royalty payments and structures of those agreements relative to other content licensing arrangements, which, if triggered, cause our payments under those agreements to escalate. In addition, record labels, publishers and performing rights organizations ("PROs") with whom we have entered into direct license agreements have the right to audit our content payments, and such audits often result in disputes over whether we have paid the proper content costs.

We have also entered into various agreements with third parties for general operating purposes. The cost of our common stock acquired in our capital return program but not paid for as of March 31, 2022 was also included in this category.

In addition to the minimum contractual cash commitments described above, we have entered into other variable cost arrangements. These future costs are dependent upon many factors and are difficult to anticipate; however, these costs may be substantial. We may enter into additional programming, distribution, marketing and other agreements that contain similar variable cost provisions. We do not have any other significant off-balance sheet financing arrangements that are reasonably likely to have a material effect on our financial condition, results of operations, liquidity, capital expenditures or capital resources.

Legal Proceedings

In the ordinary course of business, we are a defendant or party to various claims and lawsuits, including those discussed below.

We record a liability when we believe that it is both probable that a liability will be incurred, and the amount of loss can be reasonably estimated. We evaluate developments in legal matters that could affect the amount of liability that has been previously accrued and make adjustments as appropriate. Significant judgment is required to determine both probability and the estimated amount of a loss or potential loss. We may be unable to reasonably estimate the reasonably possible loss or range of loss for a particular legal contingency for various reasons, including, among others, because: (i) the damages sought are indeterminate; (ii) the proceedings are in the relative early stages; (iii) there is uncertainty as to the outcome of pending proceedings (including motions and appeals); (iv) there is uncertainty as to the likelihood of settlement and the outcome of any negotiations with respect thereto; (v) there remain significant factual issues to be determined or resolved; (vi) the relevant law is unsettled; or (vii) the proceedings involve novel or untested legal theories. In such instances, there may be considerable uncertainty regarding the ultimate resolution of such matters, including the likelihood or magnitude of a possible eventual loss, if any.

Pre-1972 Sound Recording Litigation. On October 2, 2014, Flo & Eddie Inc. filed a class action suit against Pandora in the federal district court for the Central District of California. The complaint alleges a violation of California Civil Code Section 980, unfair competition, misappropriation and conversion in connection with the public performance of sound recordings recorded prior to February 15, 1972 (which we refer to as, "pre-1972 recordings"). On December 19, 2014, Pandora filed a motion to strike the complaint pursuant to California's Anti-Strategic Lawsuit Against Public Participation ("Anti-SLAPP") statute, which following denial of Pandora's motion was appealed to the Ninth Circuit Court of Appeals. In March 2017, the Ninth Circuit requested certification to the California Supreme Court on the substantive legal questions. The California Supreme Court accepted certification. In May 2019, the California Supreme Court issued an order dismissing consideration of the certified questions on the basis that, following the enactment of the Orrin G. Hatch-Bob Goodlatte Music Modernization Act, Pub. L. No. 115-264, 132 Stat. 3676 (2018) (the "MMA"), resolution of the questions posed by the Ninth Circuit Court of Appeals was no longer "necessary to . . . settle an important question of law."

(Dollars and shares in millions, except per share amounts)

The MMA grants a potential federal preemption defense to the claims asserted in the aforementioned lawsuits. In July 2019, Pandora took steps to avail itself of this preemption defense, including making the required payments under the MMA for certain of its uses of pre-1972 recordings. Based on the federal preemption contained in the MMA (along with other considerations), Pandora asked the Ninth Circuit to order the dismissal of the Flo & Eddie, Inc. v. Pandora Media, Inc. case. On October 17, 2019, the Ninth Circuit Court of Appeals issued a memorandum disposition concluding that the question of whether the MMA preempts Flo and Eddie's claims challenging Pandora's performance of pre-1972 recordings "depends on various unanswered factual questions" and remanded the case to the District Court for further proceedings.

In October 2020, the District Court denied Pandora's renewed motion to dismiss the case under California's anti-SLAPP statute, finding the case no longer qualified for anti-SLAPP due to intervening changes in the law, and denied Pandora's renewed attempt to end the case. Alternatively, the District Court ruled that the preemption defense likely did not apply to Flo & Eddie's claims, in part because the District Court believed that the MMA did not apply retroactively. Pandora promptly appealed the District Court's decision to the Ninth Circuit, and moved to stay appellate briefing pending the appeal of a related case against Sirius XM. On January 13, 2021, the Ninth Circuit issued an order granting the stay of appellate proceedings pending the resolution of a related case against Sirius XM.

On August 23, 2021, the United States Court of Appeals for the Ninth Circuit issued an Opinion in a related case *Flo & Eddie Inc. v. Sirius XM Radio Inc.* The related case also concerned a class action suit brought by Flo & Eddie Inc. regarding the public performance of pre-1972 recordings under California law. Relying on California's copyright statute, Flo & Eddie argued that California law gave it the "exclusive ownership" of its pre-1972 songs, including the right of public performance. The Ninth Circuit reversed the District Court's grant of partial summary judgment to Flo & Eddie Inc. The Ninth Circuit held that the District Court in this related case erred in concluding that "exclusive ownership" under California's copyright statute included the right of public performance. The Ninth Circuit remanded the case for entry of judgment consistent with the terms of the parties' contingent settlement agreement, and on October 6, 2021, the parties to the related case stipulated to its dismissal with prejudice.

Following issuance of the Flo & Eddie Inc. v. Sirius XM Radio Inc. opinion, on September 3, 2021, the Ninth Circuit lifted the stay of appellate proceedings in Flo & Eddie, Inc. v. Pandora Media, LLC. The Flo & Eddie Inc. v. Sirius XM Radio Inc. decision is precedential in the Ninth Circuit, and therefore we believe substantially narrows the claims that Flo & Eddie may continue to assert against Pandora. We believe we have substantial defenses to the remaining claims asserted in this action, and we intend to defend this action vigorously.

Other Matters. In the ordinary course of business, we are a defendant in various other lawsuits and arbitration proceedings, including derivative actions; actions filed by subscribers, both on behalf of themselves and on a class action basis; former employees; parties to contracts or leases; and owners of patents, trademarks, copyrights or other intellectual property. None of these other matters, in our opinion, is likely to have a material adverse effect on our business, financial condition or results of operations.

(16) Income Taxes

We have historically filed a consolidated federal income tax return for all of our wholly owned subsidiaries, including Sirius XM and Pandora. On February 1, 2021, we entered into a tax sharing agreement with Liberty Media governing the allocation of consolidated U.S. income tax liabilities and setting forth agreements with respect to other tax matters. The tax sharing agreement contains provisions that we believe are customary for tax sharing agreements between members of a consolidated group. On November 3, 2021, Liberty Media informed us that it beneficially owned over 80% of the outstanding shares of our common stock; as a result of this, we will now be included in the consolidated tax return of Liberty Media beginning November 4, 2021. The tax sharing agreement and our inclusion in Liberty Media's consolidated tax group is not expected to have any material adverse effect on us. We have calculated the provision for income taxes by using a separate return method. Any payment made to Liberty Media, pursuant to the tax sharing agreement, shall be treated as a capital contribution or a distribution. For the three months ended March 31, 2022 and 2021, income tax (expense) benefit was \$(100) and \$62, respectively. In addition, we recorded \$13 as a capital contribution related to the tax sharing agreement with Liberty Media within Related party liabilities on our unaudited consolidated balance sheet as of March 31, 2022.

Our effective tax rate for the three months ended March 31, 2022 and 2021 was 24.4% and (39.5)%, respectively. The effective tax rate for the three months ended March 31, 2022 was primarily impacted by a benefit associated with the

(Dollars and shares in millions, except per share amounts)

recognition of excess tax benefits related to share-based compensation. The effective tax rate for the three months ended March 31, 2021 was primarily impacted by a \$95 benefit associated with a state tax audit settlement and the recognition of excess tax benefits related to share-based compensation. We estimate our effective tax rate for the year ending December 31, 2022 will be approximately 25%.

As of March 31, 2022 and December 31, 2021, we had a valuation allowance related to deferred tax assets of \$1 and \$83, respectively, that were not likely to be realized due to the timing of certain federal and state net operating loss limitations.

(17) Segments and Geographic Information

In accordance with FASB ASC Topic 280, Segment Reporting, we disaggregate our operations into two reportable segments: Sirius XM and Pandora and Off-platform. The financial results of these segments are utilized by the chief operating decision maker, who is our Chief Executive Officer, for evaluating segment performance and allocating resources. We report our segment information based on the "management" approach. The management approach designates the internal reporting used by management for making decisions and assessing performance as the source of our reportable segments. For additional information on our segments refer to Note 1.

Segment results include the revenues and cost of services which are directly attributable to each segment. There are no indirect revenues or costs incurred that are allocated to the segments. There are planned intersegment advertising campaigns which will be eliminated. We had less than \$1 of intersegment advertising revenue during each of the three months ended March 31, 2022 and 2021.

Segment revenue and gross profit were as follows during the period presented:

		For the Three Months Ended March 31, 2022							
	'	Sirius XM		Pandora and Off-platform		Total			
Revenue									
Subscriber revenue	\$	1,582	\$	131	\$	1,713			
Advertising revenue		47		336		383			
Equipment revenue		53		_		53			
Other revenue		37		<u> </u>		37			
Total revenue		1,719		467		2,186			
Cost of services (a)		(649)		(330)		(979)			
Segment gross profit	\$	1,070	\$	137	\$	1,207			

The reconciliation between reportable segment gross profit to consolidated income before income tax is as follows:

	For the Three Months Ended Mare 2022					
Segment Gross Profit	\$	1,207				
Subscriber acquisition costs		(90)				
Sales and marketing (a)		(259)				
Engineering, design and development (a)		(59)				
General and administrative (a)		(109)				
Depreciation and amortization		(135)				
Share-based payment expense		(45)				
Total other (expense) income		(101)				
Consolidated income before income taxes	\$	409				

(a) Share-based payment expense of \$10 related to cost of services, \$13 related to sales and marketing, \$8 related to engineering, design and development and \$14 related to general and administrative has been excluded.

(Dollars and shares in millions, except per share amounts)

For the Three Months Ended March 31, 2021

	 Sirius XM	Pandora and Off-platform	Total
nue			
ıbscriber revenue	\$ 1,4\$1	13\$0	1,611
lvertising revenue	42	312	354
juipment revenue	57	_	57
her revenue	36	_	36
revenue	1,616	442	2,058
of services (b)	(623)	(305)	(928)
ient gross profit	\$ 993	13\$7	1,130

The reconciliation between reportable segment gross profit to consolidated income before income tax is as follows:

	For the Three Months Ended March 31, 2021
Segment Gross Profit	\$ 1,130
Subscriber acquisition costs	(86)
Sales and marketing (b)	(202)
Engineering, design and development (b)	(54)
General and administrative (b)	(106)
Depreciation and amortization	(132)
Share-based payment expense	(51)
Impairment, restructuring and acquisition costs	(245)
Total other (expense) income	(97)
Consolidated income before income taxes	\$ 157

(b) Share-based payment expense of \$11 related to cost of services, \$15 related to sales and marketing, \$10 related to engineering, design and development and \$15 related to general and administrative has been excluded.

A measure of segment assets is not currently provided to the Chief Executive Officer and has therefore not been provided.

As of March 31, 2022, long-lived assets were predominantly located in the United States. No individual foreign country represented a material portion of our consolidated revenue during the three months ended March 31, 2022 and 2021.

(18) Subsequent Events

Capital Return Program

For the period from April 1, 2022 to April 26, 2022, we repurchased65 shares of our common stock on the open market for an aggregate purchase price of \$09, including fees and commissions.

On April 19, 2022, our board of directors declared a quarterly dividend on our common stock in the amount of \$0.0219615 per share of common stock payable on May 25, 2022 to stockholders of record as of the close of business on May 6, 2022.

SIRIUS XM HOLDINGS INC. AND SUBSIDIARIES NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued (UNAUDITED) (Dollars and shares in millions, except per share amounts)

Amendment to Credit Facility

On April 11, 2022, Sirius XM entered into an amendment to its existing Credit Facility to add a \$00 Incremental Term Loan which will mature on April 11, 2024. Interest on the Incremental Term Loan borrowing is based on the Adjusted Term Secured Overnight Financing Rate ("SOFR") plus an applicable rate.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

All amounts referenced in this Item 2 are in millions, except subscriber amounts are in thousands and per subscriber and per installation amounts are in ones, unless otherwise stated.

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our unaudited consolidated financial statements and related notes included elsewhere in this Quarterly Report on Form 10-Q and with our Annual Report on Form 10-K for the year ended December 31, 2021.

This Quarterly Report on Form 10-Q presents information for Sirius XM Holdings Inc. ("Holdings"). The terms "Holdings," "we," "us," "our," and "our company" as used herein, and unless otherwise stated or indicated by context, refer to Sirius XM Holdings Inc. and its subsidiaries. "Sirius XM" refers to our wholly owned subsidiary Sirius XM Radio Inc. and its subsidiaries. "Pandora" refers to Sirius XM's wholly owned subsidiary Pandora Media, LLC and its subsidiaries. Holdings has no operations independent of Sirius XM and Pandora.

Special Note Regarding Forward-Looking Statements

The following cautionary statements identify important factors that could cause our actual results to differ materially from those projected in forward-looking statements made in this Quarterly Report on Form 10-Q and in other reports and documents published by us from time to time. Any statements about our beliefs, plans, objectives, expectations, assumptions, future events or performance are not historical facts and may be forward-looking. These statements are often, but not always, made through the use of words or phrases such as "will likely result," "are expected to," "will continue," "is anticipated," "estimated," "intend," "plan," "projection" and "outlook." Any forward-looking statements are qualified in their entirety by reference to the factors discussed throught this Quarterly Report on Form 10-Q and in other reports and documents published by us from time to time, including the risk factors described under "Risk Factors" in Part I, Item 1A, of our Annual Report on Form 10-K for the year ended December 31, 2021 and "Management's Discussion and Analysis of Financial Condition and Results of Operations" herein and in Part II, Item 7, of our Annual Report on Form 10-K for the year ended December 31, 2021.

Among the significant factors that could cause our actual results to differ materially from those expressed in the forward-looking statements are:

- We have been, and may continue to be, adversely affected by certain supply chain issues
- We face substantial competition and that competition is likely to increase over time
- · If our efforts to attract and retain subscribers and listeners, or convert listeners into subscribers, are not successful, our business will be adversely affected
- · We engage in extensive marketing efforts and the continued effectiveness of those efforts is an important part of our business
- · We rely on third parties for the operation of our business, and the failure of third parties to perform could adversely affect our business
- · We may not realize the benefits of acquisitions or other strategic investments and initiatives
- The ongoing COVID-19 pandemic has introduced significant uncertainty to our business
- A substantial number of our Sirius XM service subscribers periodically cancel their subscriptions and we cannot predict how successful we will be at retaining customers
- · Our ability to profitably attract and retain subscribers to our Sirius XM service as our marketing efforts reach more price-sensitive consumers is uncertain
- Our business depends in part upon the auto industry
- · Failure of our satellites would significantly damage our business
- Our Sirius XM service may experience harmful interference from wireless operations
- · Our Pandora ad-supported business has suffered a substantial and consistent loss of monthly active users, which may adversely affect our Pandora service
- · Our failure to convince advertisers of the benefits of our Pandora and Off-platform ad-supported service could harm our business
- · If we are unable to maintain revenue growth from our advertising products our results of operations will be adversely affected
- · Changes to mobile operating systems and browsers may hinder our ability to sell advertising and market our services
- If we fail to accurately predict and play music, comedy or other content that our Pandora listeners enjoy, we may fail to retain existing and attract new listeners
- · Privacy and data security laws and regulations may hinder our ability to market our services, sell advertising and impose legal liabilities
- Consumer protection laws and our failure to comply with them could damage our business

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- Failure to comply with FCC requirements could damage our business
- If we fail to protect the security of personal information about our customers, we could be subject to costly government enforcement actions and private litigation and our reputation could suffer
- · Interruption or failure of our information technology and communications systems could impair the delivery of our service and harm our business
- The market for music rights is changing and is subject to significant uncertainties
- · Our Pandora services depend upon maintaining complex licenses with copyright owners, and these licenses contain onerous terms
- The rates we must pay for "mechanical rights" to use musical works on our Pandora service have increased substantially and these rates may adversely affect our business
- Failure to protect our intellectual property or actions by third parties to enforce their intellectual property rights could substantially harm our business and operating results
- Some of our services and technologies may use "open source" software, which may restrict how we use or distribute our services or require that we release the source code subject to those licenses
- · Rapid technological and industry changes and new entrants could adversely impact our services
- · We have a significant amount of indebtedness, and our debt contains certain covenants that restrict our operations
- We are a "controlled company" within the meaning of the NASDAQ listing rules and, as a result, qualify for, and rely on, exemptions from certain corporate governance requirements
- · While we currently pay a quarterly cash dividend to holders of our common stock, we may change our dividend policy at any time
- Our principal stockholder has significant influence, including over actions requiring stockholder approval, and its interests may differ from the interests of other holders of our common stock
- If we are unable to attract and retain qualified personnel, our business could be harmed
- · Our facilities could be damaged by natural catastrophes or terrorist activities
- · The unfavorable outcome of pending or future litigation could have an adverse impact on our operations and financial condition
- · We may be exposed to liabilities that other entertainment service providers would not customarily be subject to
- Our business and prospects depend on the strength of our brands.

Because the risk factors referred to above could cause actual results or outcomes to differ materially from those expressed in any forward-looking statements made by us or on our behalf, you should not place undue reliance on any of these forward-looking statements. In addition, any forward-looking statement speaks only as of the date on which it is made, and we undertake no obligation to update any forward-looking statement or statements to reflect events or circumstances after the date on which the statement is made, to reflect the occurrence of unanticipated events or otherwise, except as required by law. New factors emerge from time to time, and it is not possible for us to predict which will arise or to assess with any precision the impact of each factor on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements.

Executive Summary

We operate two complementary audio entertainment businesses - Sirius XM and Pandora and Off-platform.

Sirius XM

Our Sirius XM business features music, sports, entertainment, comedy, talk, news, traffic and weather channels and other content, as well as podcasts and infotainment services, in the United States on a subscription fee basis. Sirius XM's packages include live, curated and certain exclusive and on demand programming. The Sirius XM service is distributed through our two proprietary satellite radio systems and streamed via applications for mobile devices, home devices and other consumer electronic equipment. Satellite radios are primarily distributed through automakers, retailers and our website. Our Sirius XM service is also available through our in-car user interface, which we call "360L," that combines our satellite and streaming services into a single, cohesive in-vehicle entertainment experience.

The primary source of revenue from our Sirius XM business is subscription fees, with most of our customers subscribing to monthly, quarterly, semi-annual or annual plans. We also derive revenue from advertising on select non-music channels, which is sold under the SXM Media brand, direct sales of our satellite radios and accessories, and other ancillary services. As of March 31, 2022, our Sirius XM business had approximately 34.0 million subscribers.

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In addition to our audio entertainment businesses, we provide connected vehicle services to several automakers. These services are designed to enhance the safety, security and driving experience of consumers. We also offer a suite of data services that includes graphical weather, fuel prices, sports schedules and scores and movie listings, a traffic information service that includes information as to road closings, traffic flow and incident data to consumers with compatible in-vehicle navigation systems, and real-time weather services in vehicles, boats and planes.

Sirius XM also holds a 70% equity interest and 33% voting interest in Sirius XM Canada. Sirius XM Canada's subscribers are not included in our subscriber count or subscriber-based operating metrics.

Pandora and Off-platform

Pandora operates a music and podcast streaming discovery platform, offering a personalized experience for each listener wherever and whenever they want to listen, whether through computer, tablets, mobile devices, vehicle speakers or connected devices. Pandora enables listeners to create personalized stations and playlists, discover new content, hear artist- and expert-curated playlists, podcasts and select Sirius XM content as well as search and play songs and albums on-demand. Pandora is available as (1) an ad-supported radio service, (2) a radio subscription service (Pandora Plus) and (3) an on-demand subscription service (Pandora Premium). As of March 31, 2022, Pandora had approximately 6.3 million subscribers.

The majority of revenue from Pandora is generated from advertising on our Pandora ad-supported radio service which is sold under the SXM Media brand. We also derive subscription revenue from our Pandora Plus and Pandora Premium subscribers.

We also sell advertising on other audio platforms and in widely distributed podcasts, which we consider to be off-platform services. We have an arrangement with SoundCloud Holdings, LLC ("SoundCloud") to be its exclusive ad sales representative in the US and certain European countries and are able to offer advertisers the ability to execute campaigns across the Pandora and SoundCloud listening platforms. We also have arrangements to serve as the ad sales representative for certain podcasts. In addition, through AdsWizz Inc., we provide a comprehensive digital audio and programmatic advertising technology platform, which connects audio publishers and advertisers with a variety of ad insertion, campaign trafficking, yield optimization, programmatic buying, marketplace and podcast monetization solutions.

Liberty Media

As of March 31, 2022, Liberty Media beneficially owned, directly and indirectly, approximately 81% of the outstanding shares of our common stock. As a result, we are a "controlled company" for the purposes of the NASDAQ corporate governance requirements.

Results of Operations

Set forth below are our results of operations for the three months ended March 31, 2022 compared with the three months ended March 31, 2021. The results of operations are presented for each of our reporting segments for revenue and cost of services and on a consolidated basis for all other items.

Revenue Sirius XM: Subscriber revenue Advertising revenue Equipment revenue Other revenue Total Sirius XM revenue Pandora and Off-platform: Subscriber revenue Advertising revenue Advertising revenue Total Pandora and Off-platform revenue Total Pandora and Off-platform revenue Total Pandora and Off-platform revenue Total Pandora and Off-platform revenue Cost of services Sirius XM: Revenue share and royalties Programming and content Customer service and billing Transmission Cost of equipment Total Sirius XM cost of services Pandora and Off-platform: Revenue share and royalties Programming and content Customer service and billing Transmission Total Sirius XM cost of services Pandora and Off-platform: Customer service and billing Transmission Total Pandora and Off-platform cost of services Total Consolidated cost of services Subscriber acquisition costs Sales and marketing Engineering, design and development General and administrative	47 53 37 1,719 131 336 467 2,186 382 129 103 41	\$ 1,481 42 57 36 1,616 130 312 442 2,058 378 120 98		101 5 (4) 1 103 1 24 25 128	7 % 12 % (7)% 3 % 6 % 1 % 8 % 6 %
Sirius XM: Subscriber revenue Advertising revenue Equipment revenue Other revenue Total Sirius XM revenue Pandora and Off-platform: Subscriber revenue Advertising revenue Advertising revenue Total Pandora and Off-platform revenue Total consolidated revenue Cost of services Sirius XM: Revenue share and royalties Programming and content Customer service and billing Transmission Cost of equipment Total Sirius XM cost of services Pandora and Off-platform: Revenue share and royalties Programming and content Customer service and billing Transmission Total Pandora and Off-platform: Revenue share and royalties Programming and content Customer service and billing Transmission Total Pandora and Off-platform cost of services Total consolidated cost of services Subscriber acquisition costs Sales and marketing Engineering, design and development	47 53 37 1,719 131 336 467 2,186 382 129 103 41	42 57 36 1,616 130 312 442 2,058		5 (4) 1 103 1 1 24 25 128	12 % (7)% 3 % 6 % 1 % 8 % 6 %
Subscriber revenue Advertising revenue Equipment revenue Other revenue Total Sirius XM revenue Pandora and Off-platform: Subscriber revenue Advertising revenue Advertising revenue Total Pandora and Off-platform revenue Total Consolidated revenue Cost of services Sirius XM: Revenue share and royalties Programming and content Customer service and billing Transmission Cost of equipment Total Sirius XM cost of services Pandora and Off-platform: Revenue share and royalties Programming and content Total Sirius XM cost of services Pandora and Off-platform: Total Sirius X m cost of services Programming and content Customer service and billing Transmission Total Pandora and Off-platform cost of services Total consolidated cost of services Subscriber acquisition costs Sales and marketing Engineering, design and development	47 53 37 1,719 131 336 467 2,186 382 129 103 41	42 57 36 1,616 130 312 442 2,058		5 (4) 1 103 1 1 24 25 128	12 % (7)% 3 % 6 % 1 % 8 % 6 %
Advertising revenue Equipment revenue Other revenue Total Sirius XM revenue Pandora and Off-platform: Subscriber revenue Advertising revenue Total Pandora and Off-platform revenue Total consolidated revenue Cost of services Sirius XM: Revenue share and royalties Programming and content Customer service and billing Transmission Cost of equipment Total Sirius XM cost of services Pandora and Off-platform: Revenue share and royalties Programming and content Customer service and billing Transmission Cost of equipment Total Sirius XM cost of services Pandora and Off-platform: Revenue share and royalties Programming and content Customer service and billing Transmission Total Pandora and Off-platform cost of services Total consolidated cost of services Subscriber acquisition costs Sales and marketing Engineering, design and development	47 53 37 1,719 131 336 467 2,186 382 129 103 41	42 57 36 1,616 130 312 442 2,058		5 (4) 1 103 1 1 24 25 128	12 % (7)% 3 % 6 % 1 % 8 % 6 %
Equipment revenue Other revenue Total Sirius XM revenue Pandora and Off-platform: Subscriber revenue Advertising revenue Total Pandora and Off-platform revenue Total consolidated revenue Cost of services Sirius XM: Revenue share and royalties Programming and content Customer service and billing Transmission Cost of equipment Total Sirius XM cost of services Pandora and Off-platform: Revenue share and royalties Programming and content Customer service of services Pandora and Off-platform: Total Sirius XM cost of services Total consolidated cost of services Total Pandora and Off-platform cost of services Total consolidated cost of services Subscriber acquisition costs Sales and marketing Engineering, design and development	53 37 1,719 131 336 467 2,186 382 129 103 41	57 36 1,616 130 312 442 2,058		(4) 1 103 1 24 25 128	(7)% 3 % 6 % 1 % 8 % 6 %
Other revenue Total Sirius XM revenue Pandora and Off-platform: Subscriber revenue Advertising revenue Total Pandora and Off-platform revenue Total consolidated revenue Cost of services Sirius XM: Revenue share and royalties Programming and content Customer service and billing Transmission Cost of equipment Total Sirius XM cost of services Pandora and Off-platform: Revenue share and royalties Programming and content Customer service of services Total Sirius XM cost of services Pandora and Off-platform: Revenue share and royalties Programming and content Customer service and billing Transmission Total Pandora and Off-platform cost of services Total consolidated cost of services Subscriber acquisition costs Sales and marketing Engineering, design and development	37 1,719 131 336 467 2,186 382 129 103 41	36 1,616 130 312 442 2,058 378 120		1 103 1 24 25 128	3 % 6 % 1 % 8 % 6 % 6 %
Total Sirius XM revenue Pandora and Off-platform: Subscriber revenue Advertising revenue Total Pandora and Off-platform revenue Total consolidated revenue Cost of services Sirius XM: Revenue share and royalties Programming and content Customer service and billing Transmission Cost of equipment Total Sirius XM cost of services Pandora and Off-platform: Revenue share and royalties Programming and content Customer service and billing Transmission Total Pandora and Off-platform: Revenue share and royalties Programming and content Customer service and billing Transmission Total Pandora and Off-platform cost of services Total consolidated cost of services Subscriber acquisition costs Sales and marketing Engineering, design and development	1,719 131 336 467 2,186 382 129 103 41	1,616 130 312 442 2,058 378 120		103 1 24 25 128	6 % 1 % 8 % 6 % 1 %
Pandora and Off-platform: Subscriber revenue Advertising revenue Total Pandora and Off-platform revenue Total consolidated revenue Cost of services Sirius XM: Revenue share and royalties Programming and content Customer service and billing Transmission Cost of equipment Total Sirius XM cost of services Pandora and Off-platform: Revenue share and royalties Programming and content Customer service and billing Transmission Total Pandora and Off-platform cost of services Total Pandora and Off-platform cost of services Total consolidated cost of services Subscriber acquisition costs Sales and marketing Engineering, design and development	131 336 467 2,186 382 129 103 41	130 312 442 2,058 378 120		1 24 25 128	1 % 8 % 6 %
Subscriber revenue Advertising revenue Total Pandora and Off-platform revenue Total consolidated revenue Cost of services Sirius XM: Revenue share and royalties Programming and content Customer service and billing Transmission Cost of equipment Total Sirius XM cost of services Pandora and Off-platform: Revenue share and royalties Programming and content Customer service and billing Transmission Total Pandora and Off-platform cost of services Total Consolidated cost of services Subscriber acquisition costs Sales and marketing Engineering, design and development	336 467 2,186 382 129 103 41	312 442 2,058 378 120		24 25 128 4 9	8 % 6 % 6 %
Advertising revenue Total Pandora and Off-platform revenue Total consolidated revenue Cost of services Sirius XM: Revenue share and royalties Programming and content Customer service and billing Transmission Cost of equipment Total Sirius XM cost of services Pandora and Off-platform: Revenue share and royalties Programming and content Customer service and billing Transmission Total Pandora and Off-platform cost of services Total Pandora and Off-platform cost of services Total consolidated cost of services Subscriber acquisition costs Sales and marketing Engineering, design and development	336 467 2,186 382 129 103 41	312 442 2,058 378 120		24 25 128 4 9	8 % 6 % 6 %
Total Pandora and Off-platform revenue Total consolidated revenue Cost of services Sirius XM: Revenue share and royalties Programming and content Customer service and billing Transmission Cost of equipment Total Sirius XM cost of services Pandora and Off-platform: Revenue share and royalties Programming and content Customer service and billing Transmission Total Pandora and Off-platform cost of services Total consolidated cost of services Total consolidated cost of services Subscriber acquisition costs Sales and marketing Engineering, design and development	382 129 103 41	378 120		25 128 4 9	6 % 6 %
Total consolidated revenue Cost of services Sirius XM: Revenue share and royalties Programming and content Customer service and billing Transmission Cost of equipment Total Sirius XM cost of services Pandora and Off-platform: Revenue share and royalties Programming and content Customer service and billing Transmission Total Pandora and Off-platform cost of services Total consolidated cost of services Subscriber acquisition costs Sales and marketing Engineering, design and development	382 129 103 41	2,058 378 120		128 4 9	6 % 1 %
Cost of services Sirius XM: Revenue share and royalties Programming and content Customer service and billing Transmission Cost of equipment Total Sirius XM cost of services Pandora and Off-platform: Revenue share and royalties Programming and content Customer service and billing Transmission Total Pandora and Off-platform cost of services Total consolidated cost of services Subscriber acquisition costs Sales and marketing Engineering, design and development	382 129 103 41	378 120		4 9	1 %
Sirius XM: Revenue share and royalties Programming and content Customer service and billing Transmission Cost of equipment Total Sirius XM cost of services Pandora and Off-platform: Revenue share and royalties Programming and content Customer service and billing Transmission Total Pandora and Off-platform cost of services Total consolidated cost of services Subscriber acquisition costs Sales and marketing Engineering, design and development	129 103 41	120		9	
Revenue share and royalties Programming and content Customer service and billing Transmission Cost of equipment Total Sirius XM cost of services Pandora and Off-platform: Revenue share and royalties Programming and content Customer service and billing Transmission Total Pandora and Off-platform cost of services Total consolidated cost of services Subscriber acquisition costs Sales and marketing Engineering, design and development	129 103 41	120		9	
Programming and content Customer service and billing Transmission Cost of equipment Total Sirius XM cost of services Pandora and Off-platform: Revenue share and royalties Programming and content Customer service and billing Transmission Total Pandora and Off-platform cost of services Total consolidated cost of services Subscriber acquisition costs Sales and marketing Engineering, design and development	129 103 41	120		9	
Customer service and billing Transmission Cost of equipment Total Sirius XM cost of services Pandora and Off-platform: Revenue share and royalties Programming and content Customer service and billing Transmission Total Pandora and Off-platform cost of services Total consolidated cost of services Subscriber acquisition costs Sales and marketing Engineering, design and development	103 41				Q 0/2
Transmission Cost of equipment Total Sirius XM cost of services Pandora and Off-platform: Revenue share and royalties Programming and content Customer service and billing Transmission Total Pandora and Off-platform cost of services Total consolidated cost of services Subscriber acquisition costs Sales and marketing Engineering, design and development	41	98			0 /0
Cost of equipment Total Sirius XM cost of services Pandora and Off-platform: Revenue share and royalties Programming and content Customer service and billing Transmission Total Pandora and Off-platform cost of services Total consolidated cost of services Subscriber acquisition costs Sales and marketing Engineering, design and development				5	5 %
Total Sirius XM cost of services Pandora and Off-platform: Revenue share and royalties Programming and content Customer service and billing Transmission Total Pandora and Off-platform cost of services Total consolidated cost of services Subscriber acquisition costs Sales and marketing Engineering, design and development		33		8	24 %
Pandora and Off-platform: Revenue share and royalties Programming and content Customer service and billing Transmission Total Pandora and Off-platform cost of services Total consolidated cost of services Subscriber acquisition costs Sales and marketing Engineering, design and development	3	4		(1)	(25)%
Revenue share and royalties Programming and content Customer service and billing Transmission Total Pandora and Off-platform cost of services Total consolidated cost of services Subscriber acquisition costs Sales and marketing Engineering, design and development	658	633		25	4 %
Programming and content Customer service and billing Transmission Total Pandora and Off-platform cost of services Total consolidated cost of services Subscriber acquisition costs Sales and marketing Engineering, design and development					
Customer service and billing Transmission Total Pandora and Off-platform cost of services Total consolidated cost of services Subscriber acquisition costs Sales and marketing Engineering, design and development	288	262		26	10 %
Transmission Total Pandora and Off-platform cost of services Total consolidated cost of services Subscriber acquisition costs Sales and marketing Engineering, design and development	11	10		1	10 %
Total Pandora and Off-platform cost of services Total consolidated cost of services Subscriber acquisition costs Sales and marketing Engineering, design and development	22	19		3	16 %
Total consolidated cost of services Subscriber acquisition costs Sales and marketing Engineering, design and development	10	15		(5)	(33)%
Subscriber acquisition costs Sales and marketing Engineering, design and development	331	306	_	25	8 %
Sales and marketing Engineering, design and development	989	939		50	5 %
Engineering, design and development	90	86		4	5 %
<u> </u>	272	217		55	25 %
General and administrative	67	64		3	5 %
	123	121		2	2 %
Depreciation and amortization	135	132		3	2 %
Impairment, restructuring and acquisition costs		245		(245)	(100)%
Total operating expenses	1,676	1,804	_	(128)	(7)%
Income from operations	510	254		256	101 %
Other (expense) income:					
Interest expense	(103)	(100)	(3)	(3)%
Other income	2	3		(1)	(33)%
Total other (expense) income	(101)	(97)	(4)	(4)%
Income before income taxes	409	157		252	161 %
Income tax (expense) benefit		62		(162)	(261)%
Net income \$	(100)	\$ 219	\$	90	41 %

Sirius XM Revenue

Sirius XM Subscriber Revenue includes fees charged for self-pay and paid promotional subscriptions, U.S. Music Royalty Fees and other ancillary fees.

For the three months ended March 31, 2022 and 2021, subscriber revenue was \$1,582 and \$1,481, respectively, an increase of 7%, or \$101. The increase was primarily driven by a 9% increase in ARPU as a result of higher self-pay revenue and U.S. Music Royalty Fees, partially offset by lower revenue generated from automakers offering paid promotional subscriptions.

We expect subscriber revenues to increase based on increases in the average price and growth in our self-pay subscriber base.

Sirius XM Advertising Revenue includes the sale of advertising on Sirius XM's non-music channels.

For the three months ended March 31, 2022 and 2021, advertising revenue was \$47 and \$42, respectively, an increase of 12%, or \$5. The increase was due to a greater number of spots sold and aired primarily on sports and news channels.

We expect our Sirius XM advertising revenue to grow as we improve co-selling and monetization opportunities through SXM Media.

Sirius XM Equipment Revenue includes revenue and royalties from the sale of satellite radios, components and accessories.

For the three months ended March 31, 2022 and 2021, equipment revenue was \$53 and \$57, respectively, a decrease of 7%, or \$4. The decrease was primarily driven by lower OEM royalties due to supplier cost increases related to the semiconductor supply shortages and lower sales of components and accessories, partially offset by higher chipset volume.

We expect equipment revenue to remain relatively flat.

Sirius XM Other Revenue includes service and advisory revenue from Sirius XM Canada, revenue from our connected vehicle services, and ancillary revenues.

For the three months ended March 31, 2022 and 2021, other revenue was \$37 and \$36, respectively, an increase of 3%, or \$1. The increase was primarily driven by higher revenue generated by Sirius XM Canada.

We expect other revenue to remain relatively flat.

Pandora and Off-platform Revenue

Pandora and Off-platform Subscriber Revenue includes fees charged for Pandora Plus, Pandora Premium and Stitcher subscriptions.

For the three months ended March 31, 2022 and 2021, Pandora and Off-platform subscriber revenue was \$131 and \$130, respectively, an increase of 1%, or \$1. The increase was primarily driven by an increase in the mix of Premium plans compared to Plus plans.

We expect Pandora and Off-platform subscriber revenues to remain relatively flat.

Pandora and Off-platform Advertising Revenue is generated primarily from audio, display and video advertising from on-platform and off-platform advertising.

For the three months ended March 31, 2022 and 2021, Pandora and Off-platform advertising revenue was \$336 and \$312, respectively, an increase of 8%, or \$24. The increase was primarily due to growth in our AdsWizz platform as well as higher podcast revenue from increased downloads.

We expect Pandora and Off-platform advertising revenue to increase as our off-platform and podcast revenue grows.

Total Consolidated Revenue

Total Consolidated Revenue for the three months ended March 31, 2022 and 2021 was \$2,186 and \$2,058, respectively, an increase of 6%, or \$128.

Sirius XM Cost of Services

Sirius XM Cost of Services includes revenue share and royalties, programming and content, customer service and billing, and transmission expenses.

Sirius XM Revenue Share and Royalties include royalties for transmitting content, including streaming royalties, as well as automaker, content provider and advertising revenue share.

For the three months ended March 31, 2022 and 2021, revenue share and royalties were \$382 and \$378, respectively, an increase of 1%, or \$4, but decreased as a percentage of total Sirius XM revenue. The increase was driven by overall greater revenues subject to revenue share.

We expect our Sirius XM revenue share and royalty costs to increase as our revenues grow.

Sirius XM Programming and Content includes costs to acquire, create, promote and produce content. We have entered into various agreements with third parties for music and non-music programming that require us to pay license fees and other amounts.

For the three months ended March 31, 2022 and 2021, programming and content expenses were \$129 and \$120, respectively, an increase of 8%, or \$9, and increased as a percentage of total Sirius XM revenue. The increase was driven by higher content licensing costs.

We expect our Sirius XM programming and content expenses to increase as we offer additional programming and renew or replace expiring agreements.

Sirius XM Customer Service and Billing includes costs associated with the operation and management of internal and third-party customer service centers, and our subscriber management systems as well as billing and collection costs, bad debt expense, and transaction fees.

For the three months ended March 31, 2022 and 2021, customer service and billing expenses were \$103 and \$98, respectively, an increase of 5%, or \$5, but decreased as a percentage of total Sirius XM revenue. The increase was driven by higher transaction costs and bad debt expense resulting from a higher average self-pay subscriber base.

We expect our Sirius XM customer service and billing expenses to increase as our subscriber base grows.

Sirius XM Transmission consists of costs associated with the operation and maintenance of our terrestrial repeater networks; satellites; satellite telemetry, tracking and control systems; satellite uplink facilities; studios; and delivery of our Internet and 360L streaming and connected vehicle services.

For the three months ended March 31, 2022 and 2021, transmission expenses were \$41 and \$33, respectively, an increase of 24%, or \$8, and increased as a percentage of total Sirius XM revenue. The increase was primarily driven by higher wireless costs associated with consumers using our 360L platform and our connected vehicle services as well higher data center costs.

We expect our Sirius XM transmission expenses to increase as costs associated with consumers using our 360L platform rise and investments in internet streaming grow.

Sirius XM Cost of Equipment includes costs from the sale of satellite radios, components and accessories and provisions for inventory allowance attributable to products purchased for resale in our direct to consumer distribution channels.

For the three months ended March 31, 2022 and 2021, cost of equipment was \$3 and \$4, respectively, a decrease of 25% or \$1, and decreased as a percentage of total Sirius XM revenue. The decrease was driven by lower component and accessories sales.

We expect our Sirius XM cost of equipment to fluctuate with the sales of our satellite radios.

Pandora and Off-platform Cost of Services

Pandora and Off-platform Cost of Services includes revenue share and royalties, programming and content, customer service and billing, and transmission expenses.

Pandora and Off-platform Revenue Share and Royalties includes licensing fees paid for streaming music or other content costs related to podcasts as well as revenue share paid to third party ad servers. We make payments to third party ad servers for the period the advertising impressions are delivered or click-through actions occur, and accordingly, we record this as a cost of service in the related period.

For the three months ended March 31, 2022 and 2021, revenue share and royalties were \$288 and \$262, respectively, an increase of 10%, or \$26, and increased as a percentage of total Pandora and Off-platform revenue. The increase was primarily due to costs related to the acquisition of rights to certain podcasts.

We expect our Pandora and Off-platform revenue share to increase as streaming revenue increases and our royalty costs to increase due to higher podcast costs.

Pandora and Off-platform Programming and Content includes costs to produce live listener events and promote content.

For the three months ended March 31, 2022 and 2021, programming and content expenses were \$11 and \$10, respectively, an increase of 10%, or \$1, and increased as a percentage of total Pandora and Off-platform revenue. The increase was primarily attributable to higher personnel-related costs.

We expect our Pandora and Off-platform programming and content costs to increase as we offer additional programming and produce live listener events and promotions.

Pandora and Off-platform Customer Service and Billing includes transaction fees on subscription purchases through mobile app stores and bad debt expense.

For the three months ended March 31, 2022 and 2021, customer service and billing expenses were \$22 and \$19, respectively, an increase of 16% or \$3, and increased as a percentage of total Pandora and Off-platform revenue. The increase was primarily driven by higher bad debt expense.

We expect our Pandora and Off-platform customer service and billing costs to remain relatively flat.

Pandora and Off-platform Transmission includes costs associated with content streaming, maintaining our streaming radio and on-demand subscription services and creating and serving advertisements through third-party ad servers.

For the three months ended March 31, 2022 and 2021, transmission expenses were \$10 and \$15, respectively, a decrease of 33%, or \$5, and decreased as a percentage of total Pandora and Off-platform revenue. The decrease was driven by lower data center costs due to consolidation of facilities and lower streaming costs resulting from a decline in listener hours.

We expect our Pandora and Off-platform transmission costs to fluctuate primarily as a result of changes in listener hours.

Operating Costs

Subscriber Acquisition Costs are costs associated with our satellite radio service and include hardware subsidies paid to radio manufacturers, distributors and automakers; subsidies paid for chipsets and certain other components used in manufacturing radios; device royalties for certain radios and chipsets; product warranty obligations; and freight. The majority of subscriber acquisition costs are incurred and expensed in advance of acquiring a subscriber. Subscriber acquisition costs do not include advertising costs, marketing, loyalty payments to distributors and dealers of satellite radios or revenue share payments to automakers and retailers of satellite radios.

For the three months ended March 31, 2022 and 2021, subscriber acquisition costs were \$90 and \$86, respectively, an increase of 5%, or \$4, but decreased as a percentage of total revenue. The increase was driven by higher OEM installations.

We expect subscriber acquisition costs to fluctuate with OEM installations. We intend to continue to offer subsidies and other incentives to induce OEMs to include our technology in their vehicles.

Sales and Marketing includes costs for marketing, advertising, media and production, including promotional events and sponsorships; cooperative and artist marketing; and personnel related costs including salaries, commissions, and sales support. Marketing costs include expenses related to direct mail, outbound telemarketing, email communications, social media, television and digital performance media, and third party promotional offers.

For the three months ended March 31, 2022 and 2021, sales and marketing expenses were \$272 and \$217, respectively, an increase of 25%, or \$55, and increased as a percentage of total revenue. The increase was primarily due to additional investments in advertising and marketing to support our brands, digital marketing expenditures as well as higher personnel-related costs.

We anticipate that sales and marketing expenses will increase with growth in our free trial subscriber base, as we expand programs to retain our existing subscribers, win back former subscribers, and attract new subscribers and listeners, and as we grow advertising revenue.

Engineering, Design and Development consists primarily of compensation and related costs to develop chipsets and new products and services, including streaming and connected vehicle services, research and development for broadcast information systems and the design and development costs to incorporate Sirius XM radios into new vehicles manufactured by automakers.

For the three months ended March 31, 2022 and 2021, engineering, design and development expenses were \$67 and \$64, respectively, an increase of 5%, or \$3, but decreased as a percentage of total revenue. The increase was driven by higher cloud hosting costs.

We expect engineering, design and development expenses to increase in future periods as we continue to develop our infrastructure, products and services.

General and Administrative primarily consists of compensation and related costs for personnel and facilities, and include costs related to our finance, legal, human resources and information technologies departments.

For the three months ended March 31, 2022 and 2021, general and administrative expenses were \$123 and \$121, respectively, an increase of 2%, or \$2, but decreased as a percentage of total revenue. The increase was driven by higher legal and consulting costs, partially offset by lower personnel-related costs.

We expect our general and administrative expenses to remain relatively flat.

Depreciation and Amortization represents the recognition in earnings of the cost of assets used in operations, including our satellite constellations, property, equipment and intangible assets, over their estimated service lives.

For the three months ended March 31, 2022 and 2021, depreciation and amortization expense was \$135 and \$132, respectively. The increase was primarily driven by developed software being placed in service.

Impairment, Restructuring and Acquisition Costs represents impairment charges, net of insurance recoveries, associated with the carrying amount of an asset exceeding the asset's fair value, restructuring expenses associated with the abandonment of certain leased office spaces and acquisition costs.

For the three months ended March 31, 2022, there were no impairment, restructuring and acquisition costs. For the three months ended March 31, 2021, impairment, restructuring and acquisition costs were \$245. During the three months ended March 31, 2021, we recorded an impairment charge of \$220 to write down the value of our SXM-7 satellite after it experienced failures of certain payload units during in-orbit testing and restructuring costs of \$25 resulting from the termination of leased office space.

Other (Expense) Income

Interest Expense includes interest on outstanding debt.

For the three months ended March 31, 2022 and 2021, interest expense was \$103 and \$100, respectively. The increase was primarily driven by a higher average outstanding debt balance as well as a higher average drawn balance of the Credit Facility, partially offset by lower interest rates.

Other Income primarily includes realized and unrealized gains and losses from our Deferred Compensation Plan and other investments, interest and dividend income, our share of the income or loss from equity investments in Sirius XM Canada and SoundCloud, and transaction costs related to non-operating investments.

For the three months ended March 31, 2022 and 2021, other income was \$2 and \$3, respectively. For the three months ended March 31, 2022 and 2021, we recorded our share of Sirius XM Canada's net income and interest earned on our loan to Sirius XM Canada, which was partially offset by trading losses associated with the investments held for our Deferred Compensation Plan.

Income Taxes

Income Tax Expense includes the change in our deferred tax assets, current federal and state tax expenses, and foreign withholding taxes.

For the three months ended March 31, 2022 and 2021, income tax (expense) benefit was \$(100) and \$62, respectively.

Our effective tax rate for the three months ended March 31, 2022 and 2021 was 24.4% and (39.5)%, respectively. The effective tax rate for the three months ended March 31, 2022 was primarily impacted by a benefit associated with the recognition of excess tax benefits related to share-based compensation. The effective tax rate for the three months ended March 31, 2021 was primarily impacted by a \$95 benefit associated with a state tax audit settlement and the recognition of excess tax benefits related to share-based compensation. We estimate our effective tax rate for the year ending December 31, 2022 will be approximately 25%.

Key Financial and Operating Performance Metrics

In this section, we present certain financial performance measures, some of which are presented as Non-GAAP items, which include free cash flow and adjusted EBITDA. We also present certain operating performance measures. Our adjusted EBITDA excludes the impact of share-based payment expense. Additionally, when applicable, our adjusted EBITDA metric excludes the effect of significant items that do not relate to the on-going performance of our business. We use these Non-GAAP financial and operating performance measures to manage our business, to set operational goals and as a basis for determining performance-based compensation for our employees. See the accompanying Glossary for more details and for the reconciliation to the most directly comparable GAAP measure (where applicable).

We believe these Non-GAAP financial and operating performance measures provide useful information to investors regarding our financial condition and results of operations. We believe these Non-GAAP financial and operating performance measures may be useful to investors in evaluating our core trends because they provide a more direct view of our underlying costs. We believe investors may use our adjusted EBITDA to estimate our current enterprise value and to make investment decisions. We believe free cash flow provides useful supplemental information to investors regarding our cash available for future subscriber acquisitions and capital expenditures, to repurchase or retire debt, to acquire other companies and our ability to return capital to stockholders. By providing these Non-GAAP financial and operating performance measures, together with the reconciliations to the most directly comparable GAAP measure (where applicable), we believe we are enhancing investors' understanding of our business and our results of operations.

Our Non-GAAP financial measures should be viewed in addition to, and not as an alternative for or superior to, our reported results prepared in accordance with GAAP. In addition, our Non-GAAP financial measures may not be comparable to similarly-titled measures by other companies. Please refer to the Glossary for a further discussion of such Non-GAAP financial and operating performance measures and reconciliations to the most directly comparable GAAP measure (where applicable). Subscribers and subscription related revenues and expenses associated with our connected vehicle services and Sirius XM Canada are not included in Sirius XM's subscriber count or subscriber-based operating metrics.

Set forth below are our subscriber balances as of March 31, 2022 compared to March 31, 2021.

	As of March 31,		2022 vs 20	21 Change
(subscribers in thousands)	2022	2021	Amount	%
Sirius XM				
Self-pay subscribers	32,014	31,013	1,001	3 %
Paid promotional subscribers	1,940	3,486	(1,546)	(44)%
Ending subscribers	33,954	34,499	(545)	(2)%
Sirius XM Canada subscribers	2,523	2,600	(77)	(3)%
Pandora and Off-platform				
Monthly active users - all services	50,554	55,870	(5,316)	(10)%
Self-pay subscribers	6,328	6,392	(64)	(1)%
Paid promotional subscribers	_	64	(64)	(100)%
Ending subscribers	6,328	6,456	(128)	(2)%

The following table contains our Non-GAAP financial and operating performance measures which are based on our adjusted results of operations for the three months ended March 31, 2022 and 2021.

	For the Three Months Ended March 31,		2022 vs 2021 Change		
(subscribers in thousands)	 2022		2021	 Amount	%
Sirius XM					
Self-pay subscribers	(25)		126	(151)	(120)%
Paid promotional subscribers	(54)		(341)	287	84 %
Net additions	 (79)		(215)	136	63 %
Weighted average number of subscribers	33,890		34,462	(572)	(2)%
Average self-pay monthly churn	1.6 %		1.6 %	— %	%
ARPU (1)	\$ 15.53	\$	14.30	\$ 1.23	9 %
SAC, per installation	\$ 12.73	\$	10.90	\$ 1.83	17 %
Pandora and Off-platform					
Self-pay subscribers	4		113	(109)	(96)%
Paid promotional subscribers	(69)		2	(71)	(3,550)%
Net additions	 (65)		115	(180)	(157)%
Weighted average number of subscribers	6,356		6,385	(29)	%
Ad supported listener hours (in billions)	2.68		2.87	(0.19)	(7)%
Advertising revenue per thousand listener hours (RPM)	\$ 89.77	\$	85.69	\$ 4.08	5 %
Total Company					
Adjusted EBITDA	\$ 690	\$	682	\$ 8	1 %
Free cash flow	\$ 258	\$	211	\$ 47	22 %

⁽¹⁾ ARPU for Sirius XM excludes subscriber revenue from our connected vehicle services of \$49 and \$45 for the three months ended March 31, 2022 and 2021, respectively.

Sirius XM

Subscribers. At March 31, 2022, Sirius XM had approximately 33,954 subscribers, a decrease of 545, from the approximately 34,499 subscribers as of March 31, 2021. The decrease was due to the decline in paid promotional subscribers generated by automakers driven by a shift to shorter paid trials and unpaid trials, partially offset by the growth in our self-pay subscriber base.

For the three months ended March 31, 2022 and 2021, net subscriber additions were (79) and (215), respectively. The decrease in self-pay net additions was driven by lower vehicle conversion rates and lower new vehicle sales, partially

offset by an increase in digital subscribers as well as lower vehicle related and voluntary churn. Paid promotional net additions increased due to a larger impact of the semiconductor supply shortage in the first quarter of 2021 as well as a shift to free trials at a certain automaker.

Sirius XM Canada Subscribers. At March 31, 2022, Sirius XM Canada had approximately 2,523 subscribers, a decrease of 77, or 3%, from the approximately 2,600 Sirius XM Canada subscribers as of March 31, 2021.

Average Self-pay Monthly Churn is derived by dividing the monthly average of self-pay deactivations for the period by the average number of self-pay subscribers for the period. (See accompanying Glossary for more details.)

For each of the three months ended March 31, 2022 and 2021, our average self-pay monthly churn rate was 1.6% and 1.6%, respectively.

ARPU is derived from total earned Sirius XM subscriber revenue (excluding revenue derived from our connected vehicle services) and net advertising revenue, divided by the number of months in the period, divided by the daily weighted average number of subscribers for the period. (See the accompanying Glossary for more details.)

For the three months ended March 31, 2022 and 2021, subscriber ARPU - Sirius XM was \$15.53 and \$14.30, respectively. The increase was driven by increases in certain subscription rates and advertising revenue, partially offset by the impact of the mix of promotional plans.

SAC, Per Installation, is derived from subscriber acquisition costs and margins from the sale of radios, components and accessories (excluding connected vehicle services), divided by the number of satellite radio installations in new vehicles and shipments of aftermarket radios for the period. (See the accompanying Glossary for more details.)

For the three months ended March 31, 2022 and 2021, SAC, per installation, was \$12.73 and \$10.90, respectively. The increase was driven by higher OEM hardware subsidy rates combined with a change in the mix of OEMs.

Pandora and Off-platform

Monthly Active Users. At March 31, 2022, Pandora had approximately 50,554 monthly active users, a decrease of 5,316 monthly active users, or 10%, from the 55,870 monthly active users as of March 31, 2021. The decrease in monthly active users was driven by churn and a decline in the number of new users.

Subscribers. At March 31, 2022, Pandora had approximately 6,328 subscribers, a decrease of 128, or 2%, from the approximately 6,456 subscribers as of March 31, 2021.

For the three months ended March 31, 2022 and 2021, net subscriber additions were (65) and 115, respectively. The decrease was driven by a decline in trial starts.

Ad supported listener hours are a key indicator of our Pandora business and the engagement of our Pandora listeners. We include ad supported listener hours related to Pandora's non-music content offerings in the definition of listener hours.

For the three months ended March 31, 2022 and 2021, ad supported listener hours were 2,685 and 2,866, respectively. The decrease in ad supported listener hours was primarily driven by the decline in monthly active users.

RPM is a key indicator of our ability to monetize advertising inventory created by our listener hours on the Pandora services. Ad RPM is calculated by dividing advertising revenue by the number of thousands of listener hours of our Pandora advertising-based service.

For the three months ended March 31, 2022 and 2021, RPM was \$89.77 and \$85.69, respectively. The increase was the result of ad product mix and pricing increases in advertising implemented by Pandora.

Total Company

Adjusted EBITDA. Adjusted EBITDA is defined as net income before interest expense, income tax expense and depreciation and amortization. Adjusted EBITDA excludes the impact of other expense (income), loss on extinguishment of debt, other non-cash charges such as share-based payment expense, legal settlements and reserves, and impairment, restructuring and acquisition costs (if applicable). (See the accompanying Glossary for a reconciliation to GAAP and for more details.)

For the three months ended March 31, 2022 and 2021, adjusted EBITDA was \$690 and \$682, respectively, an increase of 1%, or \$8. The increase was driven by higher subscriber and advertising revenue, partially offset by higher sales and marketing, revenue share and royalties, and personnel-related costs.

Free Cash Flow includes cash provided by operations, net of additions to property and equipment, and restricted and other investment activity. (See the accompanying Glossary for a reconciliation to GAAP and for more details.)

For the three months ended March 31, 2022 and 2021, free cash flow was \$258 and \$211, respectively, an increase of \$47, or 22%. The increase was primarily driven by higher receipts from customers, partially offset by higher satellite capitalized expenditures.

Liquidity and Capital Resources

The following table presents a summary of our cash flow activity for the three months ended March 31, 2022 compared with the three months ended March 31, 2021.

	For the Three Months Ended March 31,					
		2022		2021		2022 vs 2021
Net cash provided by operating activities	\$	355	\$	292	\$	63
Net cash used in investing activities		(142)		(78)		(64)
Net cash used in financing activities		(328)		(230)		(98)
Net decrease in cash, cash equivalents and restricted cash		(115)	·	(16)		(99)
Cash, cash equivalents and restricted cash at beginning of period		199		83		116
Cash, cash equivalents and restricted cash at end of period	\$	84	\$	67	\$	17

Cash Flows Provided by Operating Activities

Cash flows provided by operating activities increased by \$63 to \$355 for the three months ended March 31, 2022 from \$292 for the three months ended March 31, 2021.

Our largest source of cash provided by operating activities is cash generated by subscription and subscription-related revenues. We also generate cash from the sale of advertising through our Pandora business, advertising on certain non-music channels on Sirius XM and the sale of satellite radios, components and accessories. Our primary uses of cash from operating activities include revenue share and royalty payments to distributors, programming and content providers, and payments to radio manufacturers, distributors and automakers. In addition, uses of cash from operating activities include payments to vendors to service, maintain and acquire listeners and subscribers, general corporate expenditures, and compensation and related costs.

Cash Flows Used in Investing Activities

Cash flows used in investing activities in the three months ended March 31, 2022 were primarily due to spending for capitalized software and hardware, to construct a replacement satellite, and an acquisition for total cash consideration of \$44. Cash flows used in investing activities in the three months ended March 31, 2021 were primarily due to spending for capitalized software and hardware and to construct a replacement satellite. We spent \$65 and \$61 on capitalized software and hardware as well as \$24 and \$5 to construct replacement satellites during the three months ended March 31, 2022 and 2021, respectively.

Cash Flows Used in Financing Activities

Cash flows used in financing activities consists of the issuance and repayment of long-term debt, the purchase of common stock under our share repurchase program, the payment of cash dividends and taxes paid in lieu of shares issued for stock-based compensation. Proceeds from long-term debt have been used to fund our operations, construct and launch new satellites, fund acquisitions, invest in other infrastructure improvements and purchase shares of our common stock.

Cash flows used in financing activities in the three months ended March 31, 2022 were primarily due to the payment of cash dividends of \$1,073, the purchase and retirement of shares of our common stock under our repurchase program for \$206, and payment of \$29 for taxes in lieu of shares issued for share-based compensation, partially offset by net borrowings under our Credit Facility of \$981. Cash flows used in financing activities in the three months ended March 31, 2021 were primarily due to the purchase and retirement of shares of our common stock under our repurchase program for \$522, the payment of cash

dividends of \$61, and payment of \$20 for taxes in lieu of shares issued for share-based compensation, partially offset by net cash provided by borrowings under our Credit Facility of \$374.

Future Liquidity and Capital Resource Requirements

Based upon our current business plans, we expect to fund operating expenses, capital expenditures, including the construction of replacement satellites, working capital requirements, interest payments, taxes and scheduled maturities of our debt with existing cash, cash flow from operations and borrowings under our Credit Facility. As of March 31, 2022, \$981 was outstanding under our Credit Facility and \$769 was available for future borrowing under our Credit Facility. We believe that we have sufficient cash and cash equivalents, as well as debt capacity, to cover our estimated short-term and long-term funding needs, including amounts to construct, launch and insure replacement satellites, as well as fund future stock repurchases, future dividend payments and to pursue strategic opportunities.

Our ability to meet our debt and other obligations depends on our future operating performance and on economic, financial, competitive and other factors.

We regularly evaluate our business plans and strategy. These evaluations often result in changes to our business plans and strategy, some of which may be material and significantly change our cash requirements. These changes in our business plans or strategy may include: the acquisition of unique or compelling programming; the development and introduction of new features or services; significant new or enhanced distribution arrangements; investments in infrastructure, such as satellites, equipment or radio spectrum; and acquisitions and investments, including acquisitions and investments that are not directly related to our existing business.

We may from time to time purchase our outstanding debt through open market purchases, privately negotiated transactions or otherwise. Purchases or retirement of debt, if any, will depend on prevailing market conditions, liquidity requirements, contractual restrictions and other factors. The amounts involved may be material.

Capital Return Program

As of March 31, 2022, our board of directors had authorized for repurchase an aggregate of \$18,000 of our common stock. As of March 31, 2022, our cumulative repurchases since December 2012 under our stock repurchase program totaled 3,591 shares for \$16,119, and \$1,881 remained available for additional repurchases under our existing stock repurchase program authorization.

Shares of common stock may be purchased from time to time on the open market and in privately negotiated transactions, including in accelerated stock repurchase transactions and transactions with Liberty Media and its affiliates. We intend to fund the additional repurchases through a combination of cash on hand, cash generated by operations and future borrowings. The size and timing of any purchases will be based on a number of factors, including price and business and market conditions.

On April 19, 2022, our board of directors declared a quarterly dividend in the amount of \$0.0219615 per share of common stock payable on May 25, 2022 to stockholders of record as of the close of business on May 6, 2022. Our board of directors expects to declare regular quarterly dividends, in an aggregate annual amount of \$0.087846 per share of common stock.

Debt Covenants

The indentures governing Sirius XM's senior notes and Pandora's convertible notes and the agreement governing the Sirius XM Credit Facility include restrictive covenants. As of March 31, 2022, we were in compliance with such covenants. For a discussion of our "Debt Covenants," refer to Note 12 to our unaudited consolidated financial statements in this Quarterly Report on Form 10-Q.

Off-Balance Sheet Arrangements

We do not have any significant off-balance sheet arrangements other than those disclosed in Note 15 to our unaudited consolidated financial statements in this Quarterly Report on Form 10-Q that are reasonably likely to have a material effect on our financial condition, results of operations, liquidity, capital expenditures or capital resources.

Contractual Cash Commitments

For a discussion of our "Contractual Cash Commitments," refer to Note 15 to our unaudited consolidated financial statements in this Quarterly Report on Form 10-Q.

Related Party Transactions

For a discussion of "Related Party Transactions," refer to Note 11 to our unaudited consolidated financial statements in this Quarterly Report on Form 10-Q.

Critical Accounting Policies and Estimates

For a discussion of our "Critical Accounting Policies and Estimates," refer to "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Annual Report on Form 10-K for the year ended December 31, 2021. There have been no material changes to our critical accounting policies and estimates since December 31, 2021.

Glossary

Monthly active users - the number of distinct registered users on the Pandora services, including subscribers, which have consumed content within the trailing 30 days to the end of the final calendar month of the period. The number of monthly active users on the Pandora services may overstate the number of unique individuals who actively use our Pandora service, as one individual may use multiple accounts. To become a registered user on the Pandora services, a person must sign-up using an email address or access our service using a device with a unique identifier, which we use to create an account for our service.

Average self-pay monthly churn - for satellite-enabled subscriptions, the Sirius XM monthly average of self-pay deactivations for the period divided by the average number of self-pay subscribers for the period.

Adjusted EBITDA is defined as net income before interest expense, income tax expense and depreciation and amortization. Adjusted EBITDA is a Non-GAAP financial measure that excludes or adjusts for the impact of other expense (income), loss on extinguishment of debt, other non-cash charges such as share-based payment expense, legal settlements and reserves, and impairment restructuring and acquisition costs (if applicable). We believe adjusted EBITDA is a useful measure of the underlying trend of our operating performance, which provides useful information about our business apart from the costs associated with our capital structure and purchase price accounting. We believe investors find this Non-GAAP financial measure useful when analyzing our past operating performance with our current performance and comparing our operating performance to the performance of other communications, entertainment and media companies. We believe investors use adjusted EBITDA to estimate our current enterprise value and to make investment decisions. As a result of large capital investments in our satellite radio system, our results of operations reflect significant charges for depreciation expense. We believe the exclusion of share-based payment expense is useful as it is not directly related to the operational conditions of our business. We also believe the exclusion of the legal settlements and reserves, impairment, restructuring and acquisition related costs, and loss on extinguishment of debt, to the extent they occur during the period, is useful as they are significant expenses not incurred as part of our normal operations for the period.

Adjusted EBITDA has certain limitations in that it does not take into account the impact to our consolidated statements of comprehensive income of certain expenses, including share-based payment expense. We endeavor to compensate for the limitations of the Non-GAAP measure presented by also providing the comparable GAAP measure with equal or greater prominence and descriptions of the reconciling items, including quantifying such items, to derive the Non-GAAP measure. Investors that wish to compare and evaluate our operating results after giving effect for these costs, should refer to net income as disclosed in our unaudited consolidated statements of comprehensive income. Since adjusted EBITDA is a Non-GAAP financial performance measure, our calculation of adjusted EBITDA may be susceptible to varying calculations; may not be comparable to other similarly titled measures of other companies; and should not be considered in isolation, as a substitute for, or superior to measures of financial performance prepared in accordance with GAAP. The reconciliation of net income to the adjusted EBITDA is calculated as follows:

	For the Three Months Ended March 31,		
	2022	2021	
Net income:	\$ 309	\$	219
Add back items excluded from Adjusted EBITDA:			
Impairment, restructuring and acquisition costs	_		245
Share-based payment expense (1)	45		51
Depreciation and amortization	135		132
Interest expense	103		100
Other income	(2)		(3)
Income tax expense (benefit)	100		(62)
Adjusted EBITDA	\$ 690	\$	682

(1) Allocation of share-based payment expense:

	For the Three Months Ended March 31,			
	2022		2021	
Programming and content	\$	8 \$	8	
Customer service and billing		1	2	
Transmission		1	1	
Sales and marketing		13	15	
Engineering, design and development		8	10	
General and administrative		14	15	
Total share-based payment expense	\$	15 \$	51	

Free cash flow - is derived from cash flow provided by operating activities plus insurance recoveries on our satellites, net of additions to property and equipment and purchases of other investments. Free cash flow is a metric that our management and board of directors use to evaluate the cash generated by our operations, net of capital expenditures and other investment activity. In a capital intensive business, with significant investments in satellites, we look at our operating cash flow, net of these investing cash outflows, to determine cash available for future subscriber acquisition and capital expenditures, to repurchase or retire debt, to acquire other companies and to evaluate our ability to return capital to stockholders. We exclude from free cash flow certain items that do not relate to the on-going performance of our business, such as cash flows related to acquisitions, strategic and short-term investments, and net loan activity with related parties and other equity investees. We believe free cash flow is an indicator of the long-term financial stability of our business. Free cash flow, which is reconciled to "Net cash provided by operating activities," is a Non-GAAP financial measure. This measure can be calculated by deducting amounts under the captions "Additions to property and equipment" and deducting or adding Restricted and other investment activity from "Net cash provided by operating activities" from the unaudited consolidated statements of cash flows. Free cash flow should be used in conjunction with other GAAP financial performance measures and may not be comparable to free cash flow measures presented by other companies. Free cash flow should be viewed as a supplemental measure rather than an alternative measure of cash flows from operating activities, as determined in accordance with GAAP. Free cash flow is limited and does not represent remaining cash flows available for discretionary expenditures due to the fact that the measure does not deduct the payments required for debt maturitie

	For the Three Months Ended March 31,		
	 2022		2021
Cash Flow information			
Net cash provided by operating activities	\$ 355	\$	292
Net cash used in investing activities	(142)		(78)
Net cash used in financing activities	(328)		(230)
Free Cash Flow			
Net cash provided by operating activities	355		292
Additions to property and equipment	(97)		(78)
Purchases of other investments	_		(3)
Free cash flow	\$ 258	\$	211

ARPU - Sirius XM ARPU is derived from total earned subscriber revenue (excluding revenue associated with our connected vehicle services) and advertising revenue, divided by the number of months in the period, divided by the daily weighted average number of subscribers for the period.

<u>Subscriber acquisition cost, per installation</u> - or SAC, per installation, is derived from subscriber acquisition costs less margins from the sale of radios and accessories (excluding connected vehicle services), divided by the number of satellite radio installations in new vehicles and shipments of aftermarket radios for the period. SAC, per installation, is calculated as follows:

	For the Three Months Ended March 31,		
	2022		2021
Subscriber acquisition costs, excluding connected vehicle services	\$ 90	\$	86
Less: margin from sales of radios and accessories, excluding connected vehicle services	 (50)		(53)
	\$ 40	\$	33
Installations	 3,125		3,068
SAC, per installation (a)	\$ 12.73	\$	10.90

(a) Amounts may not recalculate due to rounding.

Ad supported listener hours - is based on the total bytes served over our Pandora advertising supported platforms for each track that is requested and served from our Pandora servers, as measured by our internal analytics systems, whether or not a listener listens to the entire track. For non-music content such as podcasts, episodes are divided into

approximately track-length parts, which are treated as tracks. To the extent that third-party measurements of advertising hours are not calculated using a similar server-based approach, the third-party measurements may differ from our measurements.

RPM - is calculated by dividing advertising revenue, excluding AdsWizz and other off-platform revenue, by the number of thousands of listener hours on our Pandora advertising-based service.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISKS

As of March 31, 2022, we did not hold or issue any free-standing derivatives. We hold investments in money market funds and certificates of deposit. These securities are consistent with the objectives contained within our investment policy. The basic objectives of our investment policy are the preservation of capital, maintaining sufficient liquidity to meet operating requirements and maximizing yield.

Our debt includes fixed rate instruments and the fair market value of our debt is sensitive to changes in interest rates. Sirius XM's borrowings under the Credit Facility carry a variable interest rate based on London Inter-bank Offered Rate ("LIBOR") (except for the Incremental Term Loan which carries a variable interest rate based on the Secured Overnight Financing Rate ("SOFR") plus an applicable rate based on its debt to operating cash flow ratio. LIBOR is the subject of national, international and other regulatory guidance and proposals for reform. On July 27, 2017, the United Kingdom's Financial Conduct Authority ("FCA"), which regulates LIBOR, announced that it intends to phase out LIBOR. On March 5, 2021, the FCA announced that all LIBOR settings will either cease to be provided by any administrator or no longer be representative: (a) immediately after December 31, 2021, in the case of the one week and two month U.S. dollar settings; and (b) immediately after June 30, 2023, in the case of the remaining U.S. dollar settings. The United States Federal Reserve has also advised banks to cease entering into new contracts that use USD LIBOR as a reference rate. The Alternative Reference Rate Committee, a committee convened by the Federal Reserve that includes major market participants, has identified the SOFR, a new index calculated by short-term repurchase agreements, backed by Treasury securities, as its preferred alternative rate for LIBOR. At this time, it is not possible to predict how markets will respond to SOFR or other alternative reference rates as the transition away from the LIBOR benchmarks is anticipated in coming years. Accordingly, the outcome of these reforms is uncertain and any changes in the methods by which LIBOR is determined or regulatory activity related to LIBOR's phaseout could cause LIBOR to perform differently than in the past or cease to exist. The consequences of these developments cannot be entirely predicted, but could include an increase in the cost of our borrowings under the

ITEM 4. CONTROLS AND PROCEDURES

Controls and Procedures

We maintain a set of disclosure controls and procedures designed to ensure that information required to be disclosed in reports that we file or submit under the Exchange Act of 1934, is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms, and that such information is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosures. The design of any disclosure controls and procedures is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Any controls and procedures, no matter how well designed and operated, can provide only reasonable, not absolute, assurance of achieving the desired control objectives.

As of March 31, 2022, an evaluation was performed under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures (as that term is defined in Rule 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934). Based on that evaluation, our management, including our Chief Executive Officer and our Chief Financial Officer, concluded that our disclosure controls and procedures were effective as of March 31, 2022.

Changes in Internal Control Over Financial Reporting

There has been no change in our internal control over financial reporting (as that term is defined in Rule 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934) during the quarter ended March 31, 2022 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II — OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

For a discussion of our "Legal Proceedings," refer to Note 15 to our unaudited consolidated financial statements in this Quarterly Report on Form 10-Q.

ITEM 1A. RISK FACTORS

The following risk factor amends and restates the Risk Factor titled 'We have been, and may continue to be, adversely affected by supply chain issues as a result of the global semiconductor supply shortage' contained in our Annual Report on Form 10-K for the year ended December 31, 2021, which was filed with the Securities and Exchange Commission on February 1, 2022.

We have been, and may continue to be, adversely affected by certain supply chain issues.

The issues associated with the global supply chain for parts and components is having wide-ranging effects across multiple industries, including direct and indirect effects on our business

Automakers are experiencing, and may continue to experience, delays in securing certain components that are essential to the production of new vehicles for a variety of reasons, including due to the global semiconductor supply shortage and the war in Ukraine. All of these affected automakers manufacture and sell vehicles that include our satellite radios. For example, some automobile plants in North America and elsewhere have at times halted or reduced vehicle production due to the shortage of certain components used in the production of their vehicles. As a result, these supply chain shortage has had, and may continue to have, an impact on new vehicle production and deliveries, which in turn may affect our subscriber acquisition efforts.

We also have experienced, and may continue to experience, delays in securing certain application specific integrated circuits (which are commonly referred to as "chipsets") that are essential components of our satellite radios. In addition, the war in Ukraine could affect the supply of certain components that we rely on in connection with our business and operations, such as certain subsystems that are planned to be integrated as part of SXM-10, one of the satellites that is currently under construction for our system, and software.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

As of March 31, 2022, our board of directors had approved for repurchase an aggregate of \$18.0 billion of our common stock. Our board of directors did not establish an end date for this stock repurchase program. Shares of common stock may be purchased from time to time on the open market, pursuant to pre-set trading plans meeting the requirements of Rule 10b5-1 under the Exchange Act, in privately negotiated transactions, including transactions with Liberty Media and its affiliates, or otherwise. As of March 31, 2022, our cumulative repurchases since December 2012 under our stock repurchase program totaled 3.6 billion shares for \$16.1 billion, and \$1.9 billion remained available under our existing \$18.0 billion stock repurchase program. The size and timing of these purchases will be based on a number of factors, including price and business and market conditions.

The following table provides information about our purchases of equity securities registered pursuant to Section 12 of the Exchange Act, as amended, during the quarter ended March 31, 2022:

Annrovimate Dollar Value

Period	Total Number of Shares Purchased	Average Price Paid Per Share (a)	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	of Shares that May Yet Be Purchased Under the Plans or Programs (a)
January 1, 2022 - January 31, 2022	19,562,909	\$ 6.17	19,562,909	\$ 1,959,608,778
February 1, 2022 - February 28, 2022	7,139,694	\$ 6.42	7,139,694	\$ 1,913,745,184
March 1, 2022 - March 31, 2022	5,269,594	\$ 6.31	5,269,594	\$ 1,880,515,561
Total	31,972,197	\$ 6.25	31,972,197	

(a) These amounts include fees and commissions associated with the shares repurchased.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

Not applicable.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

See Exhibit Index attached hereto, which is incorporated herein by reference.

EXHIBIT INDEX

Exhibit	Description
31.1	Certificate of Jennifer C. Witz, Chief Executive Officer and Director, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (filed herewith).
31.2	Certificate of Sean S. Sullivan, Executive Vice President and Chief Financial Officer, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (filed herewith).
32.1	Certificate of Jennifer C. Witz, Chief Executive Officer and Director, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (filed herewith).
32.2	Certificate of Sean S. Sullivan, Executive Vice President and Chief Financial Officer, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (filed herewith).
101.1	The following financial information from our Quarterly Report on Form 10-Q for the quarter ended March 31, 2022 formatted in Inline eXtensible Business Reporting Language (Inline XBRL): (i) Consolidated Statements of Comprehensive Income (Unaudited) for the three months ended March 31, 2022 and 2021; (ii) Consolidated Balance Sheets as of March 31, 2022 (Unaudited) and December 31, 2021; (iii) Consolidated Statements of Stockholders' Equity (Deficit) for the three months ended March 31, 2022 and 2021 (Unaudited); (iv) Consolidated Statements of Cash Flows (Unaudited) for the three months ended March 31, 2022 and 2021; and (v) Notes to Consolidated Financial Statements (Unaudited).
104	The cover page from the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2022, formatted in Inline XBRL.

The agreements and other documents filed as exhibits to this report are not intended to provide factual information or other disclosure other than with respect to the terms of the agreements or other documents themselves, and you should not rely on them other than for that purpose. In particular, any representations and warranties made by us in these agreements or other documents were made solely within the specific context of the relevant agreement or document as of the date they were made and may not describe the actual state of affairs for any other purpose or at any other time.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized on this 28th day of April 2022.

SIRIUS XM HOLDINGS INC.

By: /s/ Sean S. Sullivan

Sean S. Sullivan
Executive Vice President and Chief Financial Officer
(Principal Financial Officer and Authorized Officer)

CERTIFICATION OF CHIEF EXECUTIVE OFFICER

I, Jennifer C. Witz, certify that:

- 1. I have reviewed this Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2022 of Sirius XM Holdings Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

By: /s/ JENNIFER C. WITZ

Jennifer C. Witz Chief Executive Officer and Director (Principal Executive Officer)

CERTIFICATION OF CHIEF FINANCIAL OFFICER

I, Sean S. Sullivan, certify that:

- 1. I have reviewed this Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2022 of Sirius XM Holdings Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

By: /s/ SEAN S. SULLIVAN

Sean S. Sullivan Executive Vice President and Chief Financial Officer (Principal Financial Officer)

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Sirius XM Holdings Inc. (the "Company") on Form 10-Q for the quarterly period ended March 31, 2022 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Jennifer C. Witz, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

By: /s/ JENNIFER C. WITZ

Jennifer C. Witz Chief Executive Officer and Director (Principal Executive Officer)

April 28, 2022

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Sirius XM Holdings Inc. (the "Company") on Form 10-Q for the quarterly period ended March 31, 2022 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Sean S. Sullivan, Executive Vice President and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

By: /s/ SEAN S. SULLIVAN

Sean S. Sullivan Executive Vice President and Chief Financial Officer (Principal Financial Officer)

April 28, 2022

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.