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

FORM 10-K

☑ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

FOR THE FISCAL YEAR ENDED DECEMBER 31, 2023
OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

FOR THE TRANSITION PERIOD FROM __________ TO ________

COMMISSION FILE NUMBER 001-34295

SIRIUS XM HOLDINGS INC.

(Exact name of registrant as specified in its charter)

Delaware	**38-3916511**
(State or other jurisdiction of incorporation or organization)	*(I.R.S. Employer Identification No.)*

1221 Avenue of the Americas, 35th Floor, New York, NY
(Address of Principal Executive Offices)
10020
(Zip Code)

Registrant's telephone number, including area code: (212) 584-5100
Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of exchange on which registered
Common stock, $0.001 par value	**SIRI**	**The NASDAQ Stock Market LLC**

Securities registered pursuant to Section 12(g) of the Act: None.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☑ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. Yes ☐ No ☑

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days. Yes ☑ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☑ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer", "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.:

Large accelerated filer	☑	Accelerated filer	☐	Non-accelerated filer	☐
Smaller reporting company	☐	Emerging growth company	☐		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☑

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ☐

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b). ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☑

The aggregate market value of the registrant's common stock held by non-affiliates as of June 30, 2023 was $2,812,583,554. All executive officers and directors of the registrant have been deemed, solely for the purpose of the foregoing calculation, to be "affiliates" of the registrant.

The number of shares of the registrant's common stock outstanding as of January 30, 2024 was 3,842,461,994.

DOCUMENTS INCORPORATED BY REFERENCE

Information included in our definitive proxy statement for our 2024 annual meeting of stockholders is incorporated by reference into Items 10, 11, 12, 13 and 14 of Part III of this report.

SIRIUS XM HOLDINGS INC. AND SUBSIDIARIES
2023 FORM 10-K ANNUAL REPORT
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PART I

ITEM 1. *BUSINESS*

This Annual Report on Form 10-K presents information for Sirius XM Holdings Inc. ("Holdings"), a Delaware corporation. 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 other than Pandora. "Pandora" refers to Sirius XM's wholly owned subsidiary Pandora Media, LLC and its subsidiaries.

Sirius XM Holdings Inc.

Holdings was incorporated in the State of Delaware on May 21, 2013. Holdings has no operations independent of its wholly owned subsidiaries, Sirius XM and Pandora.

Relationship with Liberty Media

As of December 31, 2023, Liberty Media Corporation ("Liberty Media") beneficially owned, directly and indirectly, 83.4% of the outstanding shares of Holdings' common stock. Liberty Media owns interests in a range of media, communications and entertainment businesses.

Liberty Media Split-Off Transaction

On December 11, 2023, Holdings entered into definitive agreements whereby, subject to the terms thereof, Liberty Sirius XM Holdings Inc., a Delaware corporation and a wholly owned subsidiary of Liberty Media ("New Sirius"), would split-off from Liberty Media. The transactions would be effectuated by means of a redemptive split-off of New Sirius (the "Split-Off"), which will own all of the assets and liabilities attributed to Liberty Media's Series A Liberty SiriusXM common stock ("LSXMA"), Series B Liberty SiriusXM common stock ("LSXMB") and Series C Liberty SiriusXM common stock ("LSXMK", together with the LSXMB and LSXMA stock, the "Liberty SiriusXM Group"). Following the Split-Off, New Sirius will combine with Holdings through the merger of Radio Merger Sub, LLC, a Delaware limited liability company and a wholly owned subsidiary of New Sirius ("Merger Sub"), with Holdings, with Holdings becoming a wholly owned subsidiary of New Sirius (the "Merger" and, together with the Split-Off, the "Transactions"). As part of the Merger, New Sirius will be renamed "Sirius XM Holdings Inc."

To effect the Transactions, on December 11, 2023, Liberty Media entered into (i) a Reorganization Agreement (the "Reorganization Agreement") with Holdings and New Sirius, and (ii) an Agreement and Plan of Merger (the "Merger Agreement") with New Sirius, Holdings and Merger Sub.

In connection with the Merger Agreement and the Reorganization Agreement, on December 11, 2023, certain trusts related to Dr. John C. Malone (collectively, the "Malone Stockholders") entered into a voting agreement (the "Voting Agreement") with Liberty Media, Holdings and New Sirius, pursuant to which, among other things, the Malone Stockholders agreed, subject to the terms of the Voting Agreement, to vote their respective shares of Liberty Media's LSXMA and LSXMB in favor of the Split-Off.

The Transactions have been unanimously approved by Liberty Media's Board of Directors and a Special Committee of the Board of Directors of Holdings and by Holdings' Board of Directors. The Transactions are expected to be completed early in the third quarter of 2024, subject to approval by a majority of the aggregate voting power of the shares of Liberty SiriusXM common stock present, whether in-person or by proxy, at a stockholder meeting, the receipt by Liberty Media and New Sirius of tax opinions from their respective tax counsel, as well as the receipt of required regulatory approvals and the satisfaction of other customary closing conditions. A subsidiary of Liberty Media owning a majority of the outstanding shares of Holdings has delivered a written consent approving the Transactions on behalf of a majority of Holdings' stockholders. Following the Transactions, Liberty Media and New Sirius will operate independently, and neither is expected to have any ownership interest in the other. All of the executive officers of Holdings immediately prior to consummation of the Transactions will be the initial executive officers of New Sirius, and New Sirius will continue to operate under the SiriusXM name and brand.

The Reorganization Agreement, the Merger Agreement and the Voting Agreement are filed as exhibits to this Annual Report on Form 10-K.

Our Businesses

We operate two complementary audio entertainment businesses – our Sirius XM business and our Pandora and Off-platform business. We are the leading audio entertainment company in North America with a portfolio of audio businesses including our flagship subscription entertainment service, Sirius XM; the ad-supported and premium music streaming services of Pandora; a podcast network; an advertising sales group, SiriusXM Media; and a suite of advertising technology solutions. We believe we reach a combined monthly audience of approximately 150 million listeners.

Our vision is to shape the future of audio where everyone is effortlessly connected to the voices, stories and music they love. We continue to expand the range of choices for our listeners – both in terms of compelling content and the array of ways in which it can be consumed. There are approximately 160 million vehicles in operation with Sirius XM radios, and the proliferation of smart speakers and other connected devices, including our webplayer and the SiriusXM App, has increased the range of options consumers have for engaging with and consuming our content.

In 2023, we began an extensive project to update our digital infrastructure. That project involves the implementation of new systems and products that extend from our consumer-facing SiriusXM App to the systems underlying our billing, identity, commerce and customer management functions. We expect that these new systems, when fully implemented, will create a variety of opportunities to more efficiently use and better understand data regarding our customers, potential customers, and the manner in which individuals use and interact with our audio entertainment services. We also believe that our investments in this digital infrastructure will create efficiencies in our operations, help us serve our customers better, improve our consumer marketing efforts and allow consumers to discover more of our content and customize their listening experiences. This new digital infrastructure includes systems developed internally as well as platforms licensed from leading third party technology providers.

Our new SiriusXM App became available to consumers beginning on December 14, 2023. The new SiriusXM App includes a sleek new design that is easy to use and includes modernized client applications. The new SiriusXM App contains, among other things, improvements to our search and discovery functions, and improves the talk and sports programming and podcast experience for listeners. In addition, the SiriusXM App is built on our new digital infrastructure, including our new commerce platform, identity system, billing engine and improvements to our marketing technology capabilities.

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 premier content bundles 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. Radios are primarily distributed through automakers, retailers and our website. Our Sirius XM service is also available through our 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, direct sales of our radios and accessories, and other ancillary services. As of December 31, 2023, our Sirius XM business had approximately 33.9 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").

Pandora and Off-platform

Our Pandora service operates a music, comedy and podcast streaming platform, offering a personalized experience for each listener wherever and whenever they want to listen, whether through mobile devices, car speakers or connected devices. Pandora enables listeners to create personalized stations and playlists, discover new content, hear artist- and expert-curated playlists and podcasts 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 December 31, 2023, Pandora had approximately 6.0 million subscribers.

The majority of revenue from our Pandora service is generated from advertising on our Pandora ad-supported radio service. We also derive subscription revenue from our Pandora Plus and Pandora Premium subscribers.

Our Pandora and Off-platform business also sells advertising on other audio platforms and in widely distributed podcasts, which we consider to be off-platform services.

Podcasting

In 2023, an estimated 120 million Americans listened to a podcast at least monthly. In 2020, Sirius XM acquired Stitcher, a leader in the distribution of podcasts. We have agreements to serve as the ad sales representative for many podcasts, including the leading podcast networks such as Audiochuck, Crooked Media and NBC News.

Sirius XM subscribers can also listen to their favorite podcasts with streaming access via the SiriusXM App and online. Covering topics such as true crime, news, politics, music, comedy, sports and entertainment, Sirius XM's curated selection of podcasts comes from SiriusXM content edited into podcast format as well as from third parties.

We also offer a portal, “Simplecast Creator Connect,” for podcasters to share their podcasts with new audiences and gather data about their shows. Podcasts submitted through this portal are offered to subscribers of Pandora’s ad-supported service as an additional benefit.

Through our Simplecast business, we also offer a podcast management and analytics platform, allowing us to offer podcasters a solution for management, hosting, analytics and advertising sales.

SiriusXM Media

SiriusXM Media is an advertising sales group spanning our SiriusXM and Pandora audio entertainment services. SiriusXM Media also sells advertising on audio platforms and in podcasts unaffiliated with us and serves as the exclusive advertising representative for other third party platforms and podcasters, including such major entities as SoundCloud and NBCUniversal. SiriusXM Media has a reach of more than 150 million monthly listeners, and gives brands, creators, and publishers access to the largest digital audio advertising platform in North America.

SiriusXM Media offers advertisers the ability to execute campaigns in the United States across various platforms, including Pandora and SoundCloud. 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 monetization solutions.

Our Sirius XM Business

Programming

We offer a dynamic programming lineup of commercial-free music plus sports, entertainment, comedy, talk, and news, including:

- an extensive selection of music genres, ranging from rock, pop and hip-hop to country, dance, jazz, Latin and classical;
- live play-by-play sports from major leagues and colleges;
- a multitude of talk, entertainment and comedy channels for a variety of audiences;
- a wide range of national, international and financial news; and
- exclusive limited run channels.

We believe that our broad and diverse programming, including our lineup of exclusive content, is a significant differentiator from terrestrial radio and other audio entertainment providers. We make changes to our programming lineup from time to time as we strive to attract new subscribers and offer content which appeals to a broad range of audiences and to our existing subscribers. The channel lineups for our services are available at siriusxm.com.

Our Sirius XM business aims to be a platform for diverse perspectives and to facilitate dialogue on a broad set of issues. This is reflected across the content provided to listeners, which includes channels dedicated to diverse and historically underrepresented groups, as well as broader programming celebrating such events as Black History Month, Latinx and Hispanic

Heritage Month, LGBTQIA+ Pride Month, and Women's History Month. We continue to expand our offerings, including through programming that represents diverse viewpoints, historically underserved audiences and original content of a type not typically available to consumers.

Sirius XM Streaming Service

Our streaming service includes a variety of music and non-music channels, including channels and content that are not available on our satellite radio service, and podcasts. Consumers can access our streaming service on iOS and Android mobile devices, web browsers, and other internet connected devices.

Our streaming service currently features: the broad range of music, sports, talk, news and entertainment channels available on satellite radio; access to over 200 additional music channels; on-demand new and archive episodes of SiriusXM shows and specials, and video content, including video from The Howard Stern Show, encompassing in-studio performances, interviews and behind-the-scenes moments with artists, personalities and newsmakers.

Our Sirius XM service also includes a library of podcasts, some of which are exclusive to our service, and other on demand content.

Our streaming service is included as part of the vast majority of our satellite radio subscription plans, including the Music Showcase, Music and Entertainment, and Platinum plans. We also offer our streaming service in several standalone packages, which do not include a satellite radio subscription. These packages, which include the Streaming Music Showcase, Streaming Music and Entertainment, Streaming Platinum, and All Access (App only) plans are available to consumers at various prices and include a variety of content. Our Artist Stations feature, which allows subscribers to create their own customized ad-free music stations within the SiriusXM App and on capable 360L in-vehicle radios, is offered to consumers as part of our All Music Plan, All Access (App only), Streaming Platinum and Platinum plans.

We have agreements with makers of electric vehicles, such as Lucid and Rivian, to include the SiriusXM experience as part of their vehicles. We also have entered into agreements with third parties designed to increase the distribution and ease of use of our streaming service, including through connected devices. In addition, we have arrangements with various services and consumer electronics manufacturers to include the Sirius XM streaming functionality with their service and devices.

360L

Our advanced automotive platform, which we call "360L," combines our satellite and streaming services into a single, cohesive in-vehicle entertainment experience. We have agreements with many automakers to deploy our 360L interface in a variety of vehicles. In 2023, our 360L platform was included in approximately 129 vehicle models manufactured for sale in the United States. We expect that 360L will be included in a majority of vehicles that include Sirius XM functionality in the future.

360L allows us to take advantage of advanced in-dash infotainment systems. 360L is intended to leverage the ubiquitous signal coverage and low delivery costs of our satellite infrastructure with the two-way communication capability of a wireless streaming service to provide consumers seamless access to our content, including our live channels, on demand service, podcasts and personalized music services. The wireless streaming connection included in 360L enables enhanced search and recommendations functions, making discovery of our content in the vehicle easier. 360L also provides us data on how our subscribers use our service.

Distribution of Radios

New Vehicles

We distribute satellite radios through the sale and lease of new vehicles. We have agreements with major automakers to offer satellite radios in their vehicles. Satellite radios are available as a factory-installed feature in substantially all vehicle makes sold in the United States.

Most automakers include a trial subscription to our service in the sale or lease of their new vehicles. In certain cases, we receive subscription payments from automakers in advance of the activation of our service. We share with certain automakers a portion of the revenues we derive from subscribers using vehicles equipped to receive our service. We also reimburse various automakers for certain costs associated with the satellite radios installed in new vehicles, including in certain cases hardware costs, engineering expenses and promotional and advertising expenses.

Previously Owned Vehicles

We acquire subscribers through the sale and lease of previously owned vehicles with factory-installed satellite radios. We have entered into agreements with many automakers to include a subscription to our service in the sale or lease of vehicles which include satellite radios sold through their certified pre-owned programs. We also work directly with franchise and independent dealers on programs for non-certified used vehicles.

We have developed systems and methods to identify purchasers and lessees of previously owned vehicles which include satellite radios and have established marketing plans to promote our services to these potential subscribers.

Retail

We sell satellite radios directly to consumers through our website. Satellite radios are also marketed and distributed through national, regional and online retailers, such as Amazon.com.

Our Satellite Radio Systems

Our satellite radio systems are designed to provide clear reception in most areas of the continental United States despite variations in terrain, buildings and other obstructions. We continually monitor our infrastructure and regularly evaluate improvements in technology.

Our satellite radio systems have three principal components:

- satellites, terrestrial repeaters and other satellite facilities;
- studios; and
- radios.

Satellites, Terrestrial Repeaters and Other Satellite Facilities

Satellites. We provide our service through a fleet of orbiting geostationary satellites. Two of these satellites, FM-5 and FM-6, transmit our service on frequencies originally licensed by the Federal Communications Commission (the “FCC”) to Sirius, and two of these satellites, XM-5 and SXM-8, transmit our service on frequencies originally licensed by the FCC to XM. Our XM-3 satellite serves as a spare for the XM system.

On December 13, 2020, our SXM-7 satellite was successfully launched and in-orbit testing of SXM-7 began on January 4, 2021. During in-orbit testing of SXM-7, events occurred which caused failures of certain SXM-7 payload units. The evaluation of SXM-7 concluded that the satellite would not function as intended. SXM-7 remains in-orbit at its assigned orbital location, but is not being used to provide satellite radio service.

We have entered into agreements for the design, construction and launch of four additional satellites, SXM-9, SXM-10, SXM-11 and SXM-12. Construction of these satellites is underway, and those satellites are expected to be launched into geostationary orbits in 2024, 2025, 2026 and 2027, respectively.

Satellite Insurance. We have procured insurance for SXM-9, SXM-10, SXM-11 and SXM-12 to cover the risks associated with each satellite's launch and first year of in-orbit operation. We do not have insurance policies covering our other in-orbit satellites as we consider the premium costs to be uneconomical relative to the risk of satellite failure.

Terrestrial Repeaters. In some areas with high concentrations of tall buildings, such as urban centers, signals from our satellites may be blocked and reception of satellite signals can be adversely affected. In other areas with a high density of next generation wireless systems our service may experience interference. In many of these areas, we have deployed terrestrial repeaters to supplement and enhance our signal coverage and, in other areas, we may deploy additional repeaters to mitigate interference. We operate over 1,000 terrestrial repeaters across the United States as part of our systems.

Other Satellite Facilities. We control and communicate with our satellites from facilities in North America. Our satellites are monitored, tracked and controlled by a third party satellite operator.

Studios

Our programming originates from studios in New York City, Los Angeles, Miami, Nashville and Washington D.C. and, to a lesser extent, from smaller studios in a variety of venues across the country. Our corporate headquarters is in New York City. We provide equipment to artists and hosts to enable remote creation and transmission of programming.

Radios

We do not manufacture radios. We have authorized manufacturers and distributors to produce and distribute radios, and have licensed our technology to various electronics manufacturers to develop, manufacture and distribute radios under certain brands. We do manage various aspects of the production of satellite radios. To facilitate the sale of radios, we may subsidize a portion of the radio manufacturing costs to reduce the hardware price to consumers.

Connected Vehicle Services

We provide connected vehicle services to several automakers. Our connected vehicle services are designed to enhance the safety, security and driving experience for vehicle operators while providing marketing and operational benefits to automakers and their dealers. We offer a portfolio of location-based services through two-way wireless connectivity, including safety, security, convenience, maintenance and data services, remote vehicle diagnostics, and stolen or parked vehicle locator services. Subscribers to our connected vehicle services are not included in our subscriber count or subscriber-based operating metrics.

Other Services

Commercial Accounts. Our programming is available for commercial establishments. Our wholly owned subsidiary, Cloud Cover Media, Inc. ("Cloud Cover"), offers a music programming service for commercial establishments. Commercial subscription accounts are also available through Pandora for Business and SiriusXM for Business, each of which offers a licensed, commercial-free music service for offices, restaurants and other business establishments.

Satellite Television Service. Certain of our music channels are offered as part of select programming packages on the DISH Network satellite television service.

Travel Link. We offer Travel Link, a suite of data services that includes graphical weather, fuel prices, sports schedules and scores and movie listings.

Real-Time Traffic Services. We offer services that provide graphic information as to road closings, traffic flow and incident data to consumers with compatible in-vehicle navigation systems.

Real-Time Weather Services. We offer real-time weather services in vehicles, boats and planes.

Commercial subscribers to the Sirius XM and Pandora programming services are included in our subscriber counts, respectively. Commercial subscribers to the Cloud Cover music programming service are not included in our subscriber counts. Subscribers to the DISH Network satellite television service are not included in our subscriber counts and subscribers to our Travel Link, real-time traffic services and real-time weather services are not included in our subscriber counts, unless the applicable service is purchased by the subscriber separately and not as part of a radio subscription to our service.

Sirius XM Canada

Sirius XM holds a 70% equity interest and 33% voting interest in Sirius XM Canada, with the remainder of Sirius XM Canada's voting and equity interests held by two shareholders.

Sirius XM and Sirius XM Canada have entered into a services and distribution agreement pursuant to which Sirius XM Canada pays Sirius XM a variable fee evaluated annually based on comparable companies. In accordance with this services and distribution agreement, the fee is payable on a monthly basis. Sirius XM has also extended a loan to Sirius XM Canada. As of December 31, 2023, the principal amount outstanding on that loan was $8 million.

As of December 31, 2023, Sirius XM Canada had approximately 2.6 million subscribers. Sirius XM Canada's subscribers are not included in our subscriber count or subscriber-based operating metrics.

Our Pandora and Off-platform Business

Pandora Media, LLC, which owns and operates our Pandora and Off-Platform business, is a wholly owned subsidiary of Sirius XM.

Streaming Radio and On-Demand Music Services

Pandora offers a personalized audio entertainment platform for each listener. Users are able to create personalized stations and playlists and search and play songs and albums on-demand. The Pandora service utilizes content programming algorithms, data collected from listeners, and attributes of the music to predict user music preferences, play content suited to the tastes of each listener, and introduce each listener to music consistent with the consumer's preferences.

The Pandora service is available on iOS and Android mobile devices, web browsers, and other internet connected devices. The Pandora application is free to download and use. Our Pandora service is also available in vehicles in the United States with smartphone connectivity. Certain automakers now provide embedded streaming connectivity that supports and makes available the Pandora service in vehicles without the need for smartphone connectivity. In addition, our Pandora service is integrated into consumer electronic, voice-based devices and smart speakers.

The Pandora service 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). Local and national advertisers deliver targeted messages to our Pandora listeners on the ad-supported service.

Ad-Supported Radio Service

Pandora offers an ad-supported radio service which allows listeners to access our catalog of music, comedy, live streams and podcasts through personalized stations. This service is free across all platforms and generates stations specific to each listener. Each listener can personalize their experience by adding selected artists and songs to their stations.

Listeners of the ad-supported service are provided with the option to temporarily access on-demand listening, including certain features of the Pandora Premium service. We refer to this temporary access as “Premium Access”.

Subscription Radio Service (Pandora Plus)

Pandora offers Pandora Plus – an ad-free, subscription version of the radio service that includes options for replaying songs, skipping songs, offline listening, and higher quality audio on supported devices. Content provided to each listener of Pandora Plus is more tailored when the listener interacts with the platform. Premium Access is also available to Pandora Plus listeners.

On-Demand Subscription Service (Pandora Premium)

Pandora offers Pandora Premium – an on-demand subscription service that combines the radio features of Pandora Plus with an on-demand experience. The on-demand experience provides listeners with the ability to search, play and collect songs and albums, download content for offline listening, build playlists, listen to curated playlists and share playlists on social networks. Listeners can also create partial playlists that Pandora can complete based on the listener’s activity. Listeners through mobile devices have access to customized profiles which identify information specific to each listener such as recent favorites, playlists and thumbs.

Pandora Premium incorporates social networking features including a centralized stream where listeners can view the music that their social connections are experiencing and provide and receive recommendations for songs, albums and playlists. Pandora Premium also includes a “share” feature where consumers can share their stations, songs, albums, podcasts or playlists through social media, messaging applications and email.

SiriusXM Media

SiriusXM Media is an advertising sales group spanning our Sirius XM and Pandora audio entertainment services. SiriusXM Media also serves as the exclusive advertising representative for other third party platforms and podcasters, including such major entities as SoundCloud and NBCUniversal. SiriusXM Media has a reach of more than 150 million listeners, and gives brands, creators, and publishers access to the largest digital audio advertising platform in North America.

SiriusXM Media is the exclusive advertising sales representative for our Sirius XM and Pandora platforms. In addition to subscription fees, Sirius XM derives revenues from advertising on select non-music channels. Pandora's primary source of revenue is the sale of audio, display and video advertising for connected device platforms, including computers and mobile devices. Our Pandora and Off-platform business maintains a portfolio of proprietary advertising technologies which include order management, advertising serving and timing, native advertising formats, targeting and reporting. Pandora provides advertisers with the ability to target and connect with listeners based on various criteria including age, gender, geographic location and content preferences.

SiriusXM Podcast Network

We license original podcasts from their creators, and we also provide podcast advertising services that generate revenue from over 450 shows. We create and distribute original podcasts licensed from third parties through platforms such as the iPhone podcast App. We earn revenue by distributing advertising on certain owned and operated podcasts as well as those created by third parties, including placement based on an advertiser's desired target audience and from the sale of advertising on licensed podcasts.

AdsWizz

Through its AdsWizz subsidiary, our Pandora and Off-platform business is a leader in digital audio advertising technology. AdsWizz operates a digital audio advertising market with an end-to-end technology platform, including a digital audio software suite of solutions that connect audio publishers to the advertising community. AdsWizz offers a range of products – from dynamic ad insertion to advanced programmatic platforms to innovative new audio formats. AdsWizz's advertising technology also includes ad campaign monitoring tools and other audio advertising products, such as audio formats that enable consumers to trigger an action while listening to an ad as well as other personalization-based technology.

AdsWizz's technology is employed by Pandora and our Off-platform business in its ad-supported business as well as by third party customers. AdsWizz's third party customers include well-known music platforms, podcasts and broadcasting groups worldwide.

Simplecast

Pandora, through its Simplecast business, also offers a podcast management and analytics platform. Simplecast complements AdsWizz's advertising technology platform, allowing the company to offer podcasters a solution for management, hosting, analytics and advertising sales.

We also offer a portal, "Simplecast Creator Connect," for podcasters to share their podcasts with new audiences and gather data about their shows. Podcasts submitted through this portal are offered to subscribers of Pandora's ad-supported service as an additional benefit.

Artificial Intelligence

We have begun to employ a number of artificial intelligence algorithms and technology that are designed to improve aspects of our operations, including a customer's experience, and permit us to better understand and use our operating and financial data. We are aware of the potential risks associated with the use of AI technology, including the risks relating to data security and the laws, rules and regulations governing privacy. We believe that we have implemented systems to monitor for and prevent data access, including security incidents that result from the use of AI. However, AI technology is evolving and, due to its inherent complexity, we may be exposed to operational and legal risks associated with the use of AI technologies. See also Item 1A – Risk Factors – "We may use artificial intelligence in our business, and challenges with properly managing its use could result in reputational harm, competitive harm, and legal liability, and adversely affect our results of operations."

Competition

We face significant competition for listeners and advertisers in our Sirius XM business and our Pandora and Off-platform business, including from providers of radio and other audio services.

Competition for Subscribers and Listeners

Traditional AM/FM Radio

Our Sirius XM services and Pandora services compete with traditional AM/FM radio. Traditional AM/FM radio has a well-established demand for its services and offers free broadcasts paid for by commercial advertising rather than by subscription fees. Many radio stations offer information programming of a local nature, such as local news and sports. The availability of traditional free AM/FM radio may reduce the likelihood that customers would be willing to pay for our subscription services. Several traditional radio companies own large numbers of radio stations and other media properties, such as podcast networks.

Streaming and On-Demand Competitors

Streaming and on-demand services, including Amazon Prime, Apple Music, Spotify, TikTok and YouTube, compete with our Sirius XM and Pandora services. Major online providers make high fidelity digital streams available at no cost or, in some cases, for less than the cost of a satellite radio subscription. Certain of these services include advanced functionality, such as personalization and customization and allow the user to access large libraries of content. These services, in some instances, are also offered through devices sold by the service providers including Apple, Google and Amazon. These services compete with our services, at home, in vehicles, and wherever audio entertainment is consumed.

Advanced In-Dash Infotainment Systems

Nearly all automakers have deployed integrated multimedia systems in dashboards, including Apple CarPlay and Android Auto. These systems combine control of audio entertainment from a variety of sources, including AM/FM/HD radio broadcasts, satellite radio, streaming radio, smartphone applications and stored audio, with other advanced applications. Streaming radio and other data are typically connected to the system through an Internet-enabled smartphone or wireless modem installed in the vehicle, and the entire system may be controlled by touchscreen or voice recognition. These systems enhance the attractiveness of internet based competitors by making such applications more prominent, easier to access, and safer to use in vehicles.

Direct Broadcast Satellite and Cable Audio

A number of providers offer specialized audio services through either direct broadcast satellite or cable audio systems. These services are targeted to fixed locations, mostly in-home, but also include mobile entertainment. The radio service offered by direct broadcast satellite and cable audio is often included as part of a package of digital services with video service, and video customers generally do not pay an additional monthly charge for the audio service. In addition, other services offered by these providers, such as cable television, on-demand video streaming, and interactive video games compete with our services to the extent they utilize existing or potential users' and listeners' time that could otherwise be allocated to the use of our Sirius XM or Pandora services.

Other Digital Media Services

The audio entertainment marketplace continues to evolve rapidly, with a steady emergence of new media platforms that compete with both our Sirius XM and Pandora services now or that could compete with those services in the future.

Traffic Services

For our Sirius XM business, a number of providers compete with our traffic services, particularly smartphones offering GPS mapping with sophisticated data-based turn navigation.

Connected Vehicle Services

Our Sirius XM connected vehicle services business operates in a highly competitive environment and competes with several providers as well as with products being developed for vehicles by automakers and other third parties. OnStar, a division of General Motors, also offers connected vehicle services in GM vehicles. Wireless devices, such as mobile phones, are also competitors. We compete against other connected vehicle service providers for automaker arrangements on the basis of innovation, service quality and reliability, marketing and other customer relationship management services, technical capabilities and system customization, scope of service, industry experience, past performance and price.

Competition for Advertisers

Our competition for advertisers includes large scale online advertising platforms such as Amazon, Facebook and Google; traditional media companies such as television broadcasters and national print outlets; broadcast radio providers; podcast distributors and networks; and companies in the broadcast radio market. We compete against these providers for advertisers on the basis of several factors, including advertisers' overall budgets, perceived return on investment, effectiveness and relevance of our advertising platforms, the amount and scope of our data on listeners, price, delivery of large volumes or precise types of advertisements to targeted demographics, transactional capabilities and reporting capabilities.

The online advertising marketplace continues to evolve rapidly, particularly with the introduction of new digital advertising technologies and expanding capabilities of larger internet companies.

Government Regulation

General

We are subject to a number of foreign and domestic laws and regulations relating to consumer protection, information security and data protection. There are several States that require specific information security controls to protect certain types of information and specific notifications to consumers in the event of a security breach that compromises certain categories of personal information. Certain of our services are also subject to laws in the United States and abroad pertaining to privacy of user data and other information, including the California Consumer Privacy Act and the European General Data Protection Regulation. Our Privacy Policies and customer agreements describe our practices.

We believe we comply with all of our obligations under all applicable laws and regulations.

Our Sirius XM Business

As operators of a privately-owned satellite system, we are regulated by the FCC under the Communications Act of 1934, principally with respect to:

- the licensing of our satellite systems;
- preventing interference with or to other users of radio frequencies; and
- compliance with FCC rules established specifically for U.S. satellites and satellite radio services.

Any assignment or transfer of control of our FCC licenses must be approved by the FCC. The transaction described above under the heading "Liberty Media Split-Off Transaction" involves a transfer of our FCC licenses and must be approved by the FCC. On December 29, 2023 and January 2, 2024, Liberty Media and New Sirius filed applications with the FCC for those approvals. On January 26, 2024, the FCC began the process of releasing the applications for public comment.

The FCC's order approving our merger with XM Satellite Radio Holdings Inc. in July 2008 requires us to comply with certain voluntary commitments we made as part of the FCC merger proceeding. We believe we comply with those commitments.

In 1997, we were the winning bidders for FCC licenses to operate a satellite digital audio radio service and provide other ancillary services. Our FCC licenses for our FM-5 satellite expires in 2025, our FM-6 satellite license expires in 2030, our XM-3 satellite license expires in 2026, our XM-5 satellite license expires in 2026, and our SXM-8 satellite license expires in 2029. We anticipate that, absent significant misconduct on our part, the FCC will renew our licenses to permit operation of our satellites for their useful lives, and grant licenses for any replacement satellites.

In some areas, we have installed terrestrial repeaters to supplement our satellite signal coverage. The FCC has established rules governing terrestrial repeaters and has granted us a license through 2027 to operate our repeater network.

In certain cases, we obtain FCC certifications for satellite radios, including satellite radios that include FM modulators. We believe our radios that are in production comply with all applicable FCC rules.

We are required to obtain export licenses or other approvals from the United States government to export certain equipment, services and technical data related to our satellites and their operations. The transfer of such equipment, services and technical data outside the United States or to foreign persons is subject to strict export control and prior approval requirements from the United States government (including prohibitions on the sharing of certain satellite-related goods and services with China).

Changes in law or regulations relating to communications policy or to matters affecting our services could adversely affect our ability to retain our FCC licenses or the manner in which we operate.

Copyrights to Programming

In connection with our businesses, we must enter into royalty arrangements with two sets of rights holders: holders of musical compositions copyrights (that is, the music and lyrics) and holders of sound recordings copyrights (that is, the actual recording of a work). Our Sirius XM and Pandora services use both statutory and direct music licenses as part of their businesses. We license varying rights - such as performance and mechanical rights - for use in our Sirius XM and Pandora services based on the various radio and interactive services they offer. Set forth below is a brief overview of the music composition and sound recording licenses employed by our Sirius XM and Pandora services. These music licensing arrangements are complex and the description below is only a summary of these complicated licensing arrangements.

Musical Compositions: Performance Rights and Mechanical Rights

The holders of performance rights in musical compositions, generally songwriters and music publishers, are represented by performing rights organizations such as the American Society of Composers, Authors and Publishers (“ASCAP”), Broadcast Music, Inc. (“BMI”), SESAC, Inc. (“SESAC”) and Global Music Rights LLC (“GMR”). These organizations negotiate fees with copyright users, collect royalties and distribute them to the rights holders.

The holders of the mechanical rights in musical compositions, generally songwriters and music publishers, have traditionally licensed these rights through the statutory license set forth in Section 115 of the United States Copyright Act; however, mechanical rights can also be licensed directly.

The changing market for musical compositions may have an adverse effect on our Sirius XM and Pandora services, including increasing our costs and limiting the musical works available to us.

Sirius XM Service. We have arrangements with ASCAP, BMI, SESAC, and GMR to license the musical compositions we perform on our satellite radio and streaming services. Our Sirius XM business does not require a mechanical license.

Pandora Services. We have arrangements with ASCAP, BMI, SESAC, GMR and a variety of other copyright owners to license the musical compositions performance rights we use on our Pandora services. For our Pandora ad-supported radio service, certain copyright holders receive as a performance royalty their usage-based and ownership-based share of a royalty pool equal to 21.5% of the content acquisition costs that we pay for sound recordings on our ad-supported service and others receive a fixed fee.

Pandora must also license reproduction rights, which are also referred to as mechanical rights, to offer the interactive features of the Pandora services. For our Pandora subscription services, copyright holders receive payments for these rights at the rates determined in accordance with the statutory license set forth in Section 115 of the United States Copyright Act. For the five-year period commencing January 1, 2023 and ending December 31, 2027 Pandora agreed to pay the greater of 15.1% of revenues or 26.2% of record label payments in 2023, rising over the five-year period to 15.35% of revenues or 26.2% of record label payments by 2027.

Sound Recordings

Operators of a non-interactive satellite radio or streaming service are entitled to license sound recordings under the statutory license contained in Section 114 of the United States Copyright Act (the “statutory license”). Under the statutory license, we may negotiate royalty arrangements with the owners of sound recordings or, if negotiation is unsuccessful, the royalty rate is established by the Copyright Royalty Board (the “CRB”). Sound recording rights holders, typically large record companies, are primarily represented by SoundExchange, Inc. (“SoundExchange”), an organization which negotiates licenses, and collects and distributes royalties on behalf of record companies and performing artists.

Interactive streaming services, such as Pandora Plus and Pandora Premium, do not qualify for the statutory license and those services must negotiate direct license arrangements with the owners of copyrights in sound recordings.

Sirius XM Business. For the ten-year period commencing January 1, 2018 and ending on December 31, 2027, the CRB set the royalty rate payable by us under the statutory license covering the performance of sound recordings over our Sirius XM satellite radio service, and the making of ephemeral (server) copies in support of such performances, to be 15.5% of gross revenues, subject to exclusions and adjustments. The revenue subject to royalty includes subscription revenue from our U.S. satellite digital audio radio subscribers, and advertising revenue from channels other than those channels that make only incidental performances of sound recordings. The rates and terms permit us to reduce the payment due each month for those sound recordings that are separately licensed and sound recordings that are directly licensed from copyright owners and exclude from our revenue certain other items, such as royalties paid to us for intellectual property, sales and use taxes, bad debt expense and generally revenue attributable to areas of our business that do not involve the use of copyrighted sound recordings.

In 2023, we paid a per performance rate for the streaming of certain sound recordings of $0.0030 on our Sirius XM streaming service which increased from $0.0028 in 2022. In 2024, we expect to pay a per performance rate for the streaming of certain sound recordings of $0.0031 on our Sirius XM streaming service.

Pandora Services. For our Pandora services, we have entered into direct license agreements with major and independent music labels and distributors for a significant majority of the sound recordings that stream on the Pandora ad-supported service, Pandora Plus and Pandora Premium.

For sound recordings that we stream and for which we have not entered into a direct license agreement with the sound recording rights holders, the sound recordings are streamed pursuant to the statutory license, and applicable rates thereunder set by the CRB. Sound recordings subject to the statutory license can only be played through our radio services and not through services that are offered on-demand or offline or through any replay features. The royalty rates under many of those direct licenses, which cover a large majority of the sound recordings that we perform on Pandora, are indexed to the statutory rates established by the CRB.

Trademarks

Sirius XM Business

We have registered, and intend to maintain, the trademarks “Sirius”, “XM”, “SiriusXM” and “SXM” with the United States Patent and Trademark Office in connection with the services we offer. We are not aware of any material claims of infringement or other challenges to our right to use the “Sirius”, “XM”, “SiriusXM” or “SXM” trademarks in the United States. We also have registered, and intend to maintain, trademarks for the names of certain of our channels. We have also registered the trademarks “Sirius”, “XM” and “SiriusXM” in Canada. We have granted a license to use certain of our trademarks in Canada to Sirius XM Canada.

Pandora and Off-platform Business

We have registered, and intend to maintain, the trademarks “Pandora,” “Ampcast” and “Music Genome Project,” in addition to a number of other Pandora logos and marks, with the United States Patent and Trademark Office in connection with the services we offer. We also have registered the trademark “Pandora” in Australia, Canada, Chile, the European Union, India, Israel, Mexico, New Zealand, Switzerland, Taiwan and other countries, and the trademark “Music Genome Project” in Australia, Canada, China and New Zealand.

Human Capital Resources

Overview

As of December 31, 2023, we had 5,680 full-time and part-time employees whose skills span a wide range of highly specialized capabilities. Our core voluntary full-time employee turnover rate in 2023 was approximately 6.2%. We strive to maintain an inclusive culture where our differences are valued, respected and celebrated, and our diverse perspectives are united to drive and grow our businesses.

Who We Are

We employ a diverse workforce, composed of individuals with different identities, experiences, perspectives and priorities. Together, we represent different dimensions of diversity and we are committed to fostering an environment where all of our employees can thrive and reach their full potential.

We encourage our employees to voluntarily self-identify their gender, race, ethnicity, veteran and disability status. Understanding our employee demographics enables us to shape our talent strategy and invest time and resources in various initiatives. As of December 31, 2023, 42% of our employees identified as women and 40.2% identified as people of color (African American, Latinx, Asian, and Native American). At our executive leadership level (which we define as employees at the vice president and above level), 33.4% of our employees identified as women and 17% identified as people of color.

We are focused on increasing the representation of women and people of color at all levels of our organization. We do this by promoting SiriusXM as an employer of choice through a number of different efforts. In 2023, we attended professional conferences such as Grace Hopper and AfroTech, and sponsored events with organizations, including Sistas in Sales, in an effort to facilitate connections with diverse talent. We also engage with Historically Black Colleges and Universities and provide full-time entry-level job opportunities for their graduates through our Pathways program. Our hiring managers and recruiters are trained on inclusive hiring practices and eliminating unconscious biases in the hiring process.

Many of our employees are members of our employee resource groups, known as SiriusXM Communities, which were established for the purpose of supporting, nurturing, and empowering under-represented members of our workforce. We have been named to Worklife 50, NY Crain's Excellence in Diversity and Inclusion, Newsweek's America's Greatest Workplaces for Diversity in 2024, and for many years as a best place to work for LGBTQIA+ equality by the Human Rights Campaign's Corporate Equality Index.

We prioritize cultural awareness, celebrate diversity, and educate our workforce on our anti-harassment and discrimination policies. Our policies are designed to protect against discrimination based upon sex, gender, race, color, religion and religious creed, national origin, ancestry, physical or mental disability, genetic information, age, marital status, pregnancy, sexual orientation, gender identity, gender expression, sex stereotype, transgender, immigration status, military and protected veteran status, medical condition, or any basis prohibited under federal, state or local law. We also host mandatory Conscious Inclusion training and we offer our “Can We Talk?” program, both of which are designed to explore bias and its impact, increase cultural awareness, invite open dialogue, and promote inclusive behaviors in our workplace.

We also comply with the FCC’s Equal Employment Opportunity (“EEO”) rules, including making our EEO reports publicly available. We maintain our Code of Ethics which embodies our commitment to conduct business in accordance with applicable law and the highest ethical standards.

What We Believe

We believe that our employees do their best work when they feel connected, supported and empowered, and we are committed to making that happen with people-focused initiatives. Our core values, which define us as authentic, inclusive, curious and driven, are aligned with our vision. Together, these elements set the foundation for how we collaborate, and operate as individuals.

We believe that our success hinges on our ability to attract, retain, and develop top talent. Recognizing employees for outstanding accomplishments, rewarding them for positive performance, and inspiring them to reach new heights are strongly connected to retention. We are a results-driven organization and we believe that recognition and reward are key to generating a sense of pride and accountability. Through our engagement surveys and other communication channels, we have learned a tremendous amount about our workforce and this knowledge shaped the people-focused initiatives we prioritized in 2023. We believe that our culture is a long-term competitive advantage for us, fuels our ability to execute, and underpins our employee talent strategy.

How We Reward and Develop Our People

Our goal is to establish SiriusXM as a place where employees can build long-term careers and achieve their personal and professional aspirations. We offer a comprehensive total reward program designed to attract, motivate, and retain top talent. This program combines competitive compensation with benefits and well-being resources designed to meet the diverse needs of our workforce. Our compensation programs, which vary by employee level, include salary, incentive compensation opportunities, and equity-based compensation awards. In addition, our benefits programs are competitive for the markets in which we operate and may include healthcare and insurance benefits, paid time off, paid parental leave, fertility resources, advocacy resources, flexible work schedules, and employee assistance programs.

We have robust talent development offerings, including training opportunities, access to LinkedIn Learning which offers an extensive content library, a mentorship program, leadership development programs, and a performance feedback program. Our talent development programs include a comprehensive goal-setting process, a career path framework, skills and core competency assessments, and custom learning paths. Additionally, through mentoring programs, specialized management training and leadership coaching, we nurture the professional growth of our employees. We also sponsor external leadership training opportunities for employees from underrepresented backgrounds.

Succession planning is a priority for our leaders. The Compensation Committee of our Board of Directors oversees our management continuity planning process, and reviews and evaluates succession plans relating to our Chief Executive Officer and other executive officers.

How We Give Back

SiriusXM Cares is the name of our philanthropic effort to promote charitable giving. SiriusXM Cares has three focus areas for giving: Employee, Social Equity, and Corporate; and through these focus areas, we are able to give directly or bolster employee giving efforts.

Through our focus on the Employee, we invite employees to give to the causes most meaningful to them. We have a charitable matching program which offers employees a dollar for dollar match on their charitable contributions up to a specific threshold. In addition, full-time employees are eligible to receive five days of paid time off to volunteer with charitable organizations of their choice. During 2023, over 500 employees volunteered over 7,800 hours, and over 620 employees utilized our charitable matching program, benefiting more than 800 charitable organizations.

In alignment with our Social Equity and Corporate focus areas, SiriusXM Cares has contributed to a variety of organizations over the past three years. These organizations, which combat racial injustice, promote social equality, provide education, or facilitate hiring of underrepresented individuals, include The Apollo Theater, The Smithsonian Institute's National Museum of African American History and Culture, Save The Music, Huston-Tillotson University, Asian Americans Advancing Justice, South Asian Americans Leading Together, the Alliance for Women in Media, the Human Rights Campaign, TASH (an international advocacy association of people with disabilities, their family members, other advocates, and people who work in the disability field), the League of United Latin American Citizens, the Native American Rights Fund, The Warrior Alliance, the AutoNation Foundation, the St. Thomas Aquinas College Social Justice Center, United Jewish Appeal Federation of Jewish Philanthropies of NY, Inc., City of Hope, United States Holocaust Memorial Museum, The Last Mile, Girls Who Code, Paley Center for Media, Hunter College, Boys & Girls Club of Metro Queens, Boys & Girls Club of America, Fam Frequency Productions, Reaching Early Creatives, Volunteers of America- Greater New York, and Sounds of Saving.

Our Health, Safety and Well-Being

We are committed to providing a healthy and safe environment that allows employees to thrive professionally and personally. To support the well-being of our employees and their families we also offer resources focused on physical, mental, and emotional health.

Corporate Information and Available Information

Our executive offices are located at 1221 Avenue of the Americas, 35th floor, New York, New York 10020 and our telephone number is (212) 584-5100. Our internet address is www.siriusxm.com. Our annual, quarterly and current reports, and any amendments to those reports, filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), may be accessed free of charge through our website as soon as reasonably practicable after we have electronically filed or furnished such material with the SEC. The SEC maintains an Internet site (http://www.sec.gov) that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC. Siriusxm.com (including any other reference to such address in this Annual Report) is an inactive textual reference only, meaning that the information contained on or accessible from the website is not part of this Annual Report on Form 10-K and is not incorporated in this report by reference. We may use our website as a distribution channel of material company information. Financial and other important information regarding us is routinely posted on and accessible through our website at https://www.siriusxm.com. In addition, you may automatically receive email alerts and other information about us when you enroll your email address by visiting the "Email Alerts" section under the "Shareholder Services" heading at http://investor.siriusxm.com/investor-overview.

Information About Our Executive Officers

Certain information regarding our executive officers as of January 30, 2024 is provided below:

Name	Age	Position
Jennifer C. Witz	55	Chief Executive Officer
Scott A. Greenstein	64	President, Chief Content Officer
Thomas D. Barry	57	Executive Vice President and Chief Financial Officer
Patrick L. Donnelly	62	Executive Vice President, General Counsel and Secretary
Joseph Inzerillo	51	Chief Product and Technology Officer
Joseph A. Verbrugge	54	Chief Commercial Officer

Jennifer C. Witz has served as our Chief Executive Officer since January 1, 2021. From March 2019 through December 2020, she was our President, Sales, Marketing and Operations. From August 2017 until March 2019 she was our Executive Vice President, Chief Marketing Officer. Ms. Witz joined us in March 2002 and has served in a variety of senior financial and operating roles. Before joining Sirius XM, Ms. Witz was Vice President, Planning and Development, at Viacom Inc., a global media company, and prior to that she was Vice President, Finance and Corporate Development, at Metro-Goldwyn-Mayer, Inc., an entertainment company focused on the production and global distribution of film and television content. Ms. Witz began her career in the Investment Banking Department at Kidder, Peabody & Co Inc.

Scott A. Greenstein has served as our President, Chief Content Officer, since May 2004. Prior to May 2004, Mr. Greenstein was Chief Executive Officer of The Greenstein Group, a media and entertainment consulting firm. From 1999 until 2002, he was Chairman of USA Films, a motion picture production, marketing and distribution company. From 1997 until 1999, Mr. Greenstein was Co-President of October Films, a motion picture production, marketing and distribution company. Prior to joining October Films, Mr. Greenstein was Senior Vice President of Motion Pictures, Music, New Media and Publishing at Miramax Films, and held senior positions at Viacom Inc.

Thomas D. Barry has served as our Executive Vice President and Chief Financial Officer since April 2023 and also serves as our Chief Accounting Officer. From 2009 until 2023 he was our Senior Vice President and Controller. Prior to joining Sirius XM, Mr. Barry was the Vice President and Controller for Reader's Digest Inc., the owner of the American general-interest family magazine, from 2002 until 2009. Prior to Reader's Digest, he held finance leadership roles at Xerox Engineering Systems, a subsidiary of Xerox Corporation, the workplace technology company, and Avon Products Inc., the multinational cosmetics, skin care, fragrance and personal care company. Mr. Barry started his career at PricewaterhouseCoopers LLP, the international professional services brand of firms, and is a Certified Public Accountant.

Patrick L. Donnelly has served as our Executive Vice President, General Counsel and Secretary, since May 1998. From June 1997 to May 1998, he was Vice President and Deputy General Counsel of ITT Corporation, a hotel, gaming and entertainment company that was acquired by Starwood Hotels & Resorts Worldwide, Inc. in February 1998. From October 1995 to June 1997, he was assistant general counsel of ITT Corporation. Prior to October 1995, Mr. Donnelly was an attorney at the law firm of Simpson Thacher & Bartlett LLP.

Joseph Inzerillo has served as our Chief Product and Technology Officer since January 2022. Prior to that, Mr. Inzerillo was the Executive Vice President & Chief Technology Officer – Disney Streaming since 2017. Prior to that, Mr. Inzerillo held a variety of senior technology positions at Major League Baseball and its subsidiaries. From 2015 to 2017, Mr. Inzerillo served as Executive Vice President & Chief Technology Officer of BAMTech Media, a distributor of direct-to-consumer video and a provider of video streaming solutions. Mr. Inzerillo was the Chief Technology Officer of Major League Baseball Advanced Media, LP from 2014 through 2015, and the Senior Vice President of Multimedia Distribution of that entity from 2006 to 2014. During his tenure at Major League Baseball Advanced Media, LP, Mr. Inzerillo also served as Chief Technology Officer for Major League Baseball. Mr. Inzerillo started his career with the Chicago White Sox and was the Chief Technology Officer of the United Center, home of the Chicago Bulls and Chicago Blackhawks.

Joseph A. Verbrugge has served as our Chief Commercial Officer since June 2022 and has served in many senior positions during his 20-year career with us. Mr. Verbrugge served as our Executive Vice President, SXM Digital Subscriptions, from January 2022 until June 2022; as our Executive Vice President, Sales and Development, from October 2020 until January 2022; as our Executive Vice President, Division President, Connected Vehicle, from March 2019 until October 2020; as our Executive Vice President and General Manager, Emerging Business, from April 2017 until March 2019; and as our Executive Vice President, Sales and Development, from December 2015 until April 2017. From September 2004 through December 2015, Mr. Verbrugge served in various senior positions for us and XM Satellite Radio Holdings Inc. Mr. Verbrugge was a consultant with The Dealy Strategy Group LLC, a management consulting firm specializing in international satellite communications and information services companies, from 1999 until 2004. Mr. Verbrugge is a member of the board of directors of Stride, Inc., a provider of tech-enabled education solutions, and serves on its compensation committee.

ITEM 1A. *RISK FACTORS*

In addition to the other information in this Annual Report on Form 10-K, including the information under the caption Item 1. Business "Competition," the following risk factors should be considered carefully in evaluating us and our business. This Annual Report on Form 10-K contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Actual results and the timing of events could differ materially from those projected in forward-looking statements due to a number of factors, including those set forth below and elsewhere in this Annual Report on Form 10-K. See "Special Note About Forward-Looking Statements" following this Item 1A. Risk Factors.

Risks Relating to our Business and Operations

We face substantial competition and that competition is likely to increase over time.

We compete for the time and attention of our listeners with other content providers on the basis of a number of factors, including quality of experience, relevance, acceptance and perception of content quality, ease of use, price, accessibility, brand awareness, reputation and, in the case of our ad-supported Pandora service, perception of ad load, features and functionality. As consumer tastes and preferences change on the internet and with mobile and other connected products, including cars, in-home, and wearable devices, we will need to enhance and improve our existing services, introduce new services and features, and attempt to maintain our competitive position with additional technological advances and adaptable platforms. The Pandora App has not been significantly updated in several years. If we fail to keep pace with technological advances or fail to offer compelling product offerings and state-of-the-art delivery platforms to meet consumer demands, our ability to grow or maintain the reach of our services, attract and retain users, and attract listeners and subscribers across our services will be adversely affected. Our ability to attract and retain subscribers and listeners also depends on our success in creating and providing popular or unique programming. A summary of certain services that compete with us is contained in the section entitled "Item 1. Business - Competition" of this Annual Report on Form 10-K.

Our subscribers and listeners can obtain similar content for free through terrestrial radio stations, Spotify, YouTube and other internet services. We also compete for the time and attention of our listeners with providers of other in-home and mobile entertainment services, and we compete for advertising sales with large scale online advertising platforms, such as Amazon, Facebook and Google, and with traditional media outlets.

Our streaming services also compete for listeners on the basis of the presence and visibility of our apps, which are distributed via app stores operated by Apple and Google. We face significant competition for listeners from these companies, which also promote their own music and content. In addition, our competitors' streaming products may be pre-loaded or integrated into consumer electronics products or automobiles more broadly than our streaming products, creating a visibility advantage. If we are unable to compete successfully for listeners against other media providers, then our business may suffer. Additionally, the operator of an app store may reject our app or amend the terms of their license in a way that inhibits our ability to distribute our apps, negatively affects our business, or limits our ability to increase subscribers and listeners.

Competition could result in lower subscription, advertising or other revenue and an increase in our expenses and, consequently, lower our earnings and free cash flow. We cannot assure you we will be able to compete successfully with our existing or future competitors or that competition will not have an adverse impact on our operations and financial condition.

If our efforts to attract and retain subscribers and listeners, or convert listeners into subscribers, are not successful, our business will be adversely affected.

Our business will be adversely affected if we are unable to attract new subscribers and listeners and retain our current subscribers and listeners.

Our ability to increase the number of subscribers and listeners to our services, retain our subscribers and listeners or convert listeners into subscribers, is uncertain and subject to many factors, including:

- the price of our services;
- the ease of use of our services;
- the effectiveness of our marketing programs;

- with respect to our Sirius XM service, the sale or lease rate of new vehicles in the United States;
- the rate at which our self-pay subscribers to our Sirius XM service buy and sell new and used vehicles in the United States;
- our ability to convince owners and lessees of new and used vehicles that include satellite radios to purchase subscriptions to our Sirius XM service;
- the perceived value of our programming and the packages and services we offer;
- our ability to introduce features in a manner that is favorably received by consumers;
- our ability to keep up with rapidly evolving technology and features in audio entertainment;
- our ability to respond to evolving consumer tastes; and
- actions by our competitors, such as Spotify, Apple, Google, Amazon and other audio entertainment and information providers.

We engage in extensive marketing efforts and the continued effectiveness of those efforts is an important part of our business.

We engage in extensive marketing efforts across a broad range of media to attract and retain subscribers and listeners to our services. We employ a wide variety of communications tools as part of our marketing campaigns, including telemarketing efforts and email solicitations. The effectiveness of our marketing efforts is affected by a broad range of factors, including creative and execution factors. Our ability to reach consumers with radio and television advertising, performance and digital media, direct mail materials, email solicitations and telephone calls is an important part of our efforts and a significant factor in the effectiveness of our marketing. If we are unable to reach consumers through email solicitations or telemarketing, including as a result of “spam” and email filters, call blocking technologies, restriction in digital media on identifying users, such as limits on “cookies,” consumer privacy regulations or “do-not-call” or other marketing regulations, our marketing efforts will be adversely affected. A decline in the effectiveness of our marketing efforts could have an adverse impact on our operations and financial condition.

We rely on third parties for the operation of our business, and the failure of third parties to perform could adversely affect our business.

Our business depends, in part, on various third parties, including:

- creators and licensors of software that support our apps and services;
- programming providers, including agreements with owners of various copyrights in music, and on-air talent;
- manufacturers that build and distribute satellite radios;
- companies that manufacture and sell integrated circuits for satellite radios;
- vendors that operate our call centers;
- vendors that have designed or built, and vendors that support or operate, other important elements of our systems, including our satellites and the cloud-based systems we use;
- Apple, who distributes our apps through its App Store and who we rely on to collect fees and approve the terms of our consumer offers; and
- Google, who distributes our apps through its App Store and who we rely on to collect fees and approve the terms of our consumer offers, and who plays an important role in the fulfillment of the ads we sell on our Pandora platform.

If one or more of these third parties do not perform in a satisfactory or timely manner, including complying with our standards and practices relating to business integrity, personnel and cybersecurity, our business could be adversely affected.

The operation of our apps and service offerings could be impaired if errors occur in the third party software that supports our apps and services. It may be difficult for us to correct any defects in third party software because the development and maintenance of the software is not within our control. Our third party licensors may not continue to make their software available to us on acceptable terms, invest the appropriate levels of resources in their software to maintain and enhance its capabilities, or remain in business. Failure of these third party licensors could harm our streaming services.

In addition, a number of third parties on which we depend have experienced, and may in the future experience, financial difficulties or file for bankruptcy protection. Such third parties may not be able to perform their obligations to us in a timely manner, if at all, as a result of their financial condition or may be relieved of their obligations to us as part of seeking bankruptcy protection.

We are migrating our billing system and payment processing functions to a new service provider.

We are migrating our payment processing and related billing functions from a large multinational bank to a private company that offers online payment processing and commerce solutions for digital and internet businesses. Our new vendor is not a bank, bank holding company or affiliated with a large multinational bank. In addition, financial statements for our new payment processor are not publicly available and nationally recognized statistical rating organizations (such as Standard & Poor’s) have not issued ratings evaluating its creditworthiness and ability to pay.

We are subject to various risks associated with our new payment processor, including the risks of being an unsecured creditor, actions by credit card issuers (such as Visa, MasterCard and American Express) that could adversely affect its operations and payment processing functions, actions by government authorities that regulate financial transactions that may affect our new vendor's business, operations and financial condition, and general data privacy and cybersecurity risks associated with its systems and operations. Our new payment processor commingles our funds arising from credit and debit card transactions with other amounts owing to third parties and those commingled accounts are subject to the claims of third parties, it does not pay us interest on amounts it holds for our benefit, including funds held overnight, and it has broad rights to establish reserves and debit our bank accounts to pay itself fees and reimburse itself and customers in the event of disputes. In addition, we are subject to the general risk that it may not comply with its obligations relating to the settlement of transactions or the investment of our funds held on an intra-day and overnight basis. If our new payment processing and commerce solution does not function as provided in our agreement or access to these new systems are disrupted, our business could be adversely affected.

Failure to successfully monetize and generate revenues from podcasts and other non-music content could adversely affect our business, operating results, and financial condition.

Delivering podcasts and other non-music content involves risks and challenges, including increased competition and the need to develop new relationships with creators. We have entered into multi-year commitments for original podcast content that is produced by third parties. These agreements generally provide us the right to distribute the content and act as the exclusive agent for the sale of advertising in the podcasts. Payment terms for certain podcast content typically requires more upfront cash payments, including minimum guarantees to the owner or creator of the podcast, than other content licenses or arrangements.

Given the multiple-year duration and largely fixed-cost nature of such commitments, if the attractiveness of such podcast content to our listeners and subscribers do not meet our expectations, our margins could be adversely impacted. In addition, the advertising market for podcasts is still developing, including the advertising technology necessary to efficiently sell audio advertising within podcasts at scale. As a result, our ability to profitably monetize the available advertising opportunities in podcasts remains uncertain.

Growing our podcasting business may require additional changes to our business model and cost structure, modifications to our infrastructure, and could expose us to new regulatory, legal and reputational risks, including infringement liability. There is no guarantee that we will be able to generate sufficient revenue from podcasts to offset the costs of creating or acquiring this content. Our failure to successfully monetize and generate revenues from such content, including failure to obtain or retain rights to podcasts or other non-music content on acceptable terms, or at all, or to effectively manage the numerous risks and challenges associated with such expansion, could adversely affect our business, operating results, and financial condition.

We may not realize the benefits of acquisitions or other strategic investments and initiatives.

Our strategy has included and may include selective acquisitions, other strategic investments and initiatives to expand our business. The success of any acquisition depends upon effective integration, cultural assimilation and management of acquired businesses and assets into our operations, which is subject to risks and uncertainties, including realizing the growth potential, the anticipated synergies and cost savings, the ability to retain and attract personnel, the diversion of management’s attention for other business concerns, and undisclosed or potential legal liabilities of the acquired business or assets.

The integration process could distract our management, disrupt our ongoing business or result in inconsistencies in our services, standards, controls, procedures and policies, any of which could adversely affect our ability to maintain relationships with customers, vendors and employees or to achieve the anticipated benefits of the acquisition.

The impact of economic conditions may adversely affect our business, operating results, and financial condition.

Our success depends to a significant extent on discretionary consumer spending. Some of the factors that may influence consumer spending on entertainment include general economic conditions, the availability of discretionary income, consumer confidence, interest rates, inflationary pressure, and general uncertainty regarding the overall economic environment.

The demand for entertainment generally is sensitive to downturns in the economy and the corresponding impact on discretionary consumer spending. Any actual or perceived deterioration or weakness in general, regional or local economic conditions, as well as other adverse economic or market conditions, could reduce our subscribers' or potential subscribers' discretionary income. To the extent that overall economic conditions reduce spending on discretionary items, our ability to attract and retain subscribers could be hindered, which could reduce our subscription revenue and negatively impact our business.

Additionally, our financial performance is subject to economic conditions and their impact on levels of advertising spending. Expenditures by advertisers generally tend to reflect overall economic conditions, and reductions in spending by advertisers could have an adverse impact on our revenue and business. See "***Our Pandora business generates a significant portion of its revenues from advertising, and reduced spending by advertisers could harm our business***."

We may be adversely affected by the war in Ukraine.

The war in Ukraine, and any expansion of the war in Ukraine to surrounding areas, could adversely affect our business and operations. Our AdsWizz subsidiary is headquartered in Romania and we rely on other contractors in Eastern European countries, such as Poland. An expansion of the war in Ukraine to other countries, particularly Romania, could materially affect our ability to deliver advertisements on our Pandora services and for third parties.

Risks Relating to our Sirius XM 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.

As part of our business, we experience, and expect to experience in the future, subscriber turnover (i.e., churn). The number of subscribers to our Sirius XM service declined in 2023 and may further contract in the future. If we are unable to retain current subscribers at expected rates, or the costs of retaining subscribers are higher than expected, our financial performance and operating results could be adversely affected.

We cannot predict how successful we will be at retaining customers who purchase or lease vehicles that include a subscription to our Sirius XM service. A substantial percentage of our Sirius XM subscribers are on promotional pricing plans and our ability to retain these subscribers or migrate them to higher priced plans is uncertain. Our promotional pricing strategy is widely known, and this may interfere with our ability to collect our ordinary subscription prices. In addition, a substantial number of those subscribers periodically cancel their subscriptions when offered a subscription at a higher price.

Our ability to profitably attract and retain subscribers to our Sirius XM service is uncertain.

A number of factors may affect our ability to attract and retain subscribers to our Sirius XM service. The changing demographics of trialers to our service, such as the increase in "Millennial generation customers," may increase the number of subscribers accustomed to consuming entertainment through ad-supported products. These changing demographics may affect our ability to convert trial subscribers into self-paying subscribers. Similarly, our efforts to acquire subscribers purchasing or leasing used vehicles may attract price sensitive consumers. Consumers purchasing or leasing used vehicles may be more price sensitive than consumers purchasing or leasing new vehicles, convert from trial subscribers to self-paying subscribers at a lower rate, and cancel their subscriptions more frequently than consumers purchasing or leasing new vehicles. Some of our marketing efforts may also attract more price sensitive subscribers, and our efforts to increase the penetration of satellite radios in new, lower-priced vehicle lines may result in the growth of more economy-minded subscribers. Each of these factors may harm our revenue or require additional spending on marketing efforts to demonstrate the value of our Sirius XM service.

Our business depends in part upon the auto industry.

A substantial portion of the subscription growth for our satellite radio service has come from purchasers and lessees of new and used automobiles in the United States, and we expect this to be an important source of subscribers for our satellite radio service in the future.

We have agreements with major automakers to include satellite radios in new vehicles, although these agreements do not require automakers to install specific or minimum quantities of radios in any given period. Many of these agreements also require automakers to provide us data on sales of satellite radio enabled vehicles, including in many cases the consumer's name and address. Our business could be adversely affected if automakers do not continue to include our Sirius XM service in their products or provide us with such data.

Automotive production and sales are dependent on many factors, including labor relations matters, the availability of vehicle components, consumer credit, general economic conditions, consumer confidence and fuel costs. To the extent vehicle sales by automakers decline, or the penetration of factory-installed satellite radios in those vehicles is reduced, our satellite radio service may be adversely impacted.

Sales of used vehicles represent a significant source of new subscribers for our satellite radio service. We have agreements with auto dealers and companies operating in the used vehicle market to provide us with data on sales of used satellite radio enabled vehicles, including in many cases the consumer's name and address. The continuing availability of this data is important, and the loss of such data may harm our revenue and business.

Failure of our satellites would significantly damage our business.

The lives of the satellites required to operate our Sirius XM service vary depending on a number of factors, including:

- degradation and durability of solar panels;
- quality of construction;
- random failure of satellite components, which could result in significant damage to or loss of a satellite;
- amount of fuel the satellite consumes;
- the performance of third parties that manage the operation of our satellites; and
- damage or destruction as a result of electrostatic storms, terrorist attacks, collisions with other objects in space or other events, such as nuclear detonations, occurring in space.

In the ordinary course of operation, satellites experience failures of component parts and operational and performance anomalies. Components on several of our in-orbit satellites have failed, and from time to time we have experienced anomalies in the operation and performance of these satellites. These failures and anomalies are expected to continue in the ordinary course, and we cannot predict if any of these possible future events will have a material adverse effect on our operations or the life of our existing in-orbit satellites. In addition, we have entered into agreements for the construction and launch of four new satellites that are expected to be launched over the next four years, and material delays in the deployment of these satellites could be harmful to our business.

Our Sirius network of terrestrial repeaters communicates with a single third party satellite. Our XM network of terrestrial repeaters communicates with a single XM satellite. If the satellites communicating with the applicable repeater network fail unexpectedly, the services would be disrupted for several hours or longer.

Any material failure of our operating satellites could cause us to lose customers for our Sirius XM service and could materially harm our reputation and our operating results. We do not have insurance for our in-orbit satellites. Additional information regarding our fleet of satellites is contained in the section entitled "Item 1. Business - Satellites, Terrestrial Repeaters and Other Satellite Facilities" of this Annual Report on Form 10-K.

Our Sirius XM service may experience harmful interference from wireless operations.

The development of applications and services in spectrum adjacent to the frequencies licensed to us, as well as the combination of signals in other frequencies, may cause harmful interference to our satellite radio service in certain areas of the United States. Elimination of this interference may not be possible in all cases. In other cases, our efforts to reduce this interference may require extensive engineering efforts and additions to our terrestrial infrastructure. These mitigation efforts may be costly and take several years to implement and may not be entirely effective. In certain cases, we are dependent on the FCC to assist us in preventing harmful interference to our service.

Risks Relating to our Pandora and Off-platform Business

Our Pandora ad-supported service has suffered a substantial and consistent loss of monthly active users, which may adversely affect our Pandora and Off-platform business.

The number of monthly active users to our ad-supported Pandora service has declined consistently for several years, including in 2023, and is likely to further contract in the future.

The size of our ad-supported listener base is an important element of our Pandora service. The decline in our listener base has resulted in fewer listener hours and available advertising spots on our Pandora service, which ultimately may result in declines in our advertising revenue, and adversely affect our Pandora and Off-platform business. The contraction of our ad-supported listener base also decreases the size of demographic groups targeted by advertisers, which may hurt our ability to deliver advertising in a manner that maximizes advertisers' return on investment and compete with other streaming advertising platforms.

Our Pandora and Off-platform business generates a significant portion of its revenues from advertising, and reduced spending by advertisers could harm our business.

Our Pandora and Off-platform business currently generates a majority of its revenues from third parties advertising on the Pandora ad-supported service and other platforms. As is common in the audio entertainment industry, these advertisers do not have long-term advertising commitments with us and can terminate their contracts at any time.

Expenditures by advertisers tend to be cyclical, reflecting overall economic conditions and budgeting and buying patterns. Adverse macroeconomic conditions have affected, and may continue to affect, the demand for audio advertising, resulting in fluctuations in the amounts advertisers spend on advertising, which could harm our financial condition and operating results.

Our failure to convince advertisers of the benefits of our Pandora ad-supported service could harm our business.

Our ability to attract and retain advertisers, and ultimately to sell our advertising inventory, depends on a number of factors, including:

- the number of listener hours on the Pandora ad-supported service, particularly the number of listener hours attributable to high-value demographics;
- keeping pace with changes in technology and our competitors, some of which have significant influence over the distribution of our Pandora app;
- competing effectively for advertising with other dominant online services, such as Spotify, Google, Facebook and YouTube, as well as other marketing and media outlets;
- successfully competing for local radio advertising;
- demonstrating the ability of advertisements to reach targeted audiences, including the value of mobile digital advertising;
- ensuring that new ad formats and ad product offerings are attractive to advertisers and that inventory management decisions (such as changes to ad load, frequency, prominence and quality of ads that we serve listeners) do not have a negative impact on listener hours; and
- adapting to technologies designed to block the display of our ads.

Advertisers may leave us for competing alternatives at any time. Failure to demonstrate to advertisers the value of our Pandora service would result in reduced spending by, or loss of, advertisers, which would harm our revenue and business.

If we are unable to maintain revenue growth from our advertising products our results of operations will be adversely affected.

In order to effectively monetize listener hours, we must, among other things, penetrate local advertising markets and develop compelling ad product solutions.

The substantial majority of the total listening to our Pandora service occurs on mobile devices. We are engaged in efforts to continue to convince advertisers of the capabilities and value of mobile digital advertising and to direct an increasing portion of their advertising spend to our ad-supported Pandora service.

We are continuing to build our sales capability to penetrate local advertising markets, which places us in competition with terrestrial radio. We may not be able to capture an increasing share of local and audio advertising revenue, which may have an adverse impact on our future revenue.

Changes to mobile operating systems and browsers may hinder our ability to sell advertising and market our services.

We use shared common device identifiers that are universal in the advertising technology ecosystem, such as Apple's Identifier for Advertisers, a random device identifier assigned by Apple to a user's device. We use these common device identifiers for targeting, advertising effectiveness and measurement for the Pandora's advertising business and for Pandora's consumer marketing purposes. These common device identifiers enable us to match audiences, including with second- and third-party data providers and measurement vendors, and enhance Pandora's advertising targeting segments with additional data. In our programmatic advertising business, we use common identifiers for several important functions, such as targeting and bidding. We also use common device identifiers to evaluate the success of our Pandora brand consumer marketing campaigns.

Apple, as well as mobile operating system and browser providers, have implemented product features and plans that may adversely impact our ability to use these common identifiers and data collected in connection with these common identifiers in our Pandora business.

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.

A key differentiating factor between our Pandora service and other music content providers is our ability to predict music that our listeners will enjoy. The effectiveness of our personalized playlist generating system depends, in part, on our ability to gather and effectively analyze large amounts of listener data and feedback. We may not continue to be successful in enticing listeners to our Pandora service to give a thumbs-up or thumbs-down to enough songs to effectively predict and select new and existing songs. In addition, our ability to offer listeners songs that they have not previously heard and impart a sense of discovery depends on our ability to acquire and appropriately categorize additional tracks that will appeal to our listeners' diverse and changing tastes. Many of our competitors currently have larger music and content catalogs than we offer and they may be more effective in providing their listeners with an appealing listener experience.

We also provide comedy and podcast content on our Pandora service, and we try to predict what our listeners will enjoy using technology similar to the technology that we use to generate personalized playlists for music. The risks that apply to our ability to satisfy our listeners' musical tastes apply to comedy, podcasts and other content to an even greater extent, particularly since we do not yet have as large a data set on listener preferences for comedy, podcasts and other content, and have a smaller catalog of such content as compared to music.

Our ability to predict and select music, comedy, podcasts and other content that our listeners enjoy is important to the perceived value of our Pandora service to consumers and the failure to make accurate predictions would adversely affect our ability to attract and retain subscribers and listeners, increase listener hours and sell advertising.

Risks Relating to Laws and Governmental Regulations

Privacy and data security laws and regulations may hinder our ability to market our services, sell advertising and impose legal liabilities.

We receive a substantial amount of personal data on purchasers and lessees of new and used vehicles from third parties. We use this personal data to market our services. We collect and use demographic, service usage, purchase history and other information, including location information, from and about our listeners through the internet. Further, we and third parties use tracking technologies, including "cookies" and related technologies, to help us manage and track our listeners' interactions with our services and deliver relevant advertising.

Various federal and state laws and regulations, as well as the laws of foreign jurisdictions, govern the collection, use, retention, sharing and security of the personal data we receive. Privacy groups and government authorities have increasingly scrutinized the ways in which companies collect and share personal data, including linking personal identities and data associated with particular users or devices with data collected through the internet, and we expect such scrutiny to increase. Alleged violations of laws and regulations relating to privacy and personal data may expose us to potential liability, may require us to expend significant resources in responding to and defending such allegations and claims and could in the future result in negative publicity and a loss of confidence in us by our subscribers, listeners, advertisers and other third parties with whom we do business.

Privacy-related laws and regulations, such as the California Consumer Privacy Act and the European General Data Protection Regulation, are evolving and subject to potentially differing interpretations. Various federal and state legislative and regulatory bodies as well as foreign legislative and regulatory bodies may expand current or enact new laws regarding privacy and data security-related matters. New laws, amendments to or re-interpretations of existing laws and contractual obligations, as well as changes in our listeners' expectations and demands regarding privacy and data security, may limit our ability to collect and use consumer data. Restrictions on our ability to receive, collect and use consumer data could limit our ability to attract and retain subscribers and listeners to our services. In addition, restrictions on our ability to collect, access and process listener data, or to use or disclose listener data or profiles that we develop using such data, could limit our ability to market our content and services to our potential listeners and offer targeted advertising opportunities to our advertisers, each of which are important to our business. Increased regulation of personal data utilization practices and compliance administration could increase our costs of operation or otherwise adversely affect our business.

Consumer protection laws and our failure to comply with them could damage our business.

Federal and state consumer protection laws, rules and regulations cover nearly all aspects of our marketing efforts, including the content of our advertising, the terms of consumer offers and the manner in which we communicate with consumers. The State of New York has filed a suit against us relating to our subscription cancellation practices, and other governmental authorities have commenced investigations into our consumer practices, including the manner in which we allow consumers to cancel subscriptions to our services. The nature of our business requires us to expend significant resources to try to ensure that our marketing activities comply with consumer protection laws, including laws relating to telemarketing activities and privacy. These efforts may not be successful, and we may have to expend even greater resources in our compliance efforts.

Modifications to consumer protection laws, including laws regarding the pricing of our services and the manner in which consumers can cancel our services as well as decisions by courts and administrative agencies interpreting these laws, could have an adverse impact on our ability to attract and retain subscribers and listeners to our services. There can be no assurance that new laws or regulations will not be enacted or adopted, preexisting laws or regulations will not be more strictly enforced or that our operations will comply with all applicable laws, which could have an adverse impact on our operations and financial condition.

Failure to comply with FCC requirements could damage our business.

We hold FCC licenses and authorizations to operate commercial satellite radio services in the United States, including satellites, terrestrial repeaters and related authorizations. The FCC generally grants licenses and authorizations for a fixed term. Although we expect our licenses and authorizations to be renewed in the ordinary course upon their expiration, there can be no assurance that this will be the case. Any assignment or transfer of control of any of our FCC licenses or authorizations must be approved in advance by the FCC. The transactions described under the heading "Business - Liberty Media Split-Off Transaction" involve a transfer of our FCC licenses and must be approved by the FCC.

The operation of our satellite radio systems is subject to significant regulation by the FCC under authority granted through the Communications Act of 1934 and related federal law. We are required, among other things, to operate only within specified frequencies; to coordinate our satellite radio services with radio systems operating in the same range of frequencies in neighboring countries; and to coordinate our communications links to our satellites with other systems that operate in the same frequency band.

Noncompliance by us with these requirements or other conditions or with other applicable FCC rules and regulations could result in fines, additional license conditions, license revocation or other detrimental FCC actions. There is no guarantee that Congress will not modify the statutory framework governing our services, or that the FCC will not modify its rules and regulations in a manner that would have an adverse impact on our operations.

Environmental, social and governance expectations and related reporting obligations may expose us to potential liabilities, increased costs, reputational harm, and other adverse effects.

Many governments, regulators, investors, employees, customers and other stakeholders are focused on environmental, social and governance (or "ESG") considerations, including climate change and greenhouse gas emissions; human capital management, including diversity, equity and inclusion; cybersecurity; content moderation; and human and civil rights. Our reporting and disclosures in response to these expectations may require additional investments and reporting processes, introduce additional compliance risk, and depend in part on third-party performance or data that is outside our control. Related initiatives, and implementation of these initiatives, also involve risks and uncertainties, and we cannot guarantee that we will achieve any announced environmental, social and governance objectives. In addition, some stakeholders may disagree with our initiatives and objectives. Any failure, or perceived failure, to further our initiatives, adhere to public statements, comply with federal or state ESG laws and regulations, or meet evolving and varied stakeholder expectations and standards could result in legal and regulatory proceedings against us and adversely affect our business, reputation, financial condition, and operations results.

We may face lawsuits, incur liability or suffer reputational harm as a result of content published or made available through our services.

The nature of our business could expose us to claims or public criticism related to defamation, illegal content, misinformation, and content regulation. We could incur costs investigating and defending any such claims. In addition, some stakeholders may disagree with third-party content provided through our services, and negative public criticism of this content could damage our reputation and brands. If we incur material costs, liability, or negative consumer reaction as a result of these occurrences, our business, financial condition and operating results could be adversely impacted.

Risks Associated with Data and Cybersecurity and the Protection of Consumer Information

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.

The nature of our business involves the receipt and storage of personal information about our subscribers and listeners including credit and debit card information. We have a program in place to detect and respond to data security incidents. However, the techniques used to gain unauthorized access to data systems are constantly evolving and may not be detected for long periods of time. We may be unable to anticipate or prevent unauthorized access to data pertaining to our customers, including credit card and debit card information and other personally identifiable information. Our services, which are supported by our own systems and those of third-party vendors, could be subject to computer malware and attacks as well as to catastrophic events (such as fires, floods, hurricanes, or tornadoes), any of which could lead to system interruptions, delays, or shutdowns, causing loss of critical data or the unauthorized access to personally identifiable information.

If we fail to protect the security of personal information about our customers or if an actual or perceived breach of security occurs on our systems or a vendor's systems, we could be exposed to costly government enforcement actions and private litigation and our reputation could suffer. We may also be required to expend significant resources to address these problems, including notification under various data privacy regulations, and our reputation and operating results could suffer. In addition, our subscribers and listeners, as well as potential customers, could lose confidence in our ability to protect their personal information, which could cause them to discontinue the use of our services. This loss of confidence would also harm our efforts to attract and retain advertisers and to obtain personal information from third parties, and unauthorized access to our programming would potentially create additional royalty expense with no corresponding revenue. Such events could adversely affect our results of operations. The costs of maintaining adequate protection, including insurance protection, against such threats as they develop in the future (or as legal requirements related to data security increase) could be material.

In addition, hardware, software, or applications we develop or procure from third parties may contain defects in design or manufacture or other problems that could unexpectedly compromise information security. Unauthorized parties may also attempt to gain access to our systems or facilities, or those of third parties with whom we do business, through fraud, trickery, or other forms of deceiving our employees, contractors or other agents. We may not be able to effectively control the unauthorized actions of third parties who may have access to the data we collect.

To date, we are not aware that we have had a significant cyber-attack or breach that has had a material impact on our business or results of operations. We have implemented systems and processes intended to secure our information technology systems and prevent unauthorized access to or loss of sensitive, confidential and personal data, including through the use of encryption and authentication technologies. Additionally, we have increased our monitoring capabilities to enhance early detection and timely response to potential security anomalies.

The cyber security measures we have implemented, however, may not be sufficient to prevent all possible attacks and may be vulnerable to hacking, employee error, ransom attacks, malfeasance, system error, faulty password management or other irregularities. Further, the development and maintenance of these measures are costly and require ongoing monitoring and updating as technologies change and efforts to overcome security measures become increasingly sophisticated.

We use artificial intelligence in our business, and challenges with properly managing its use could result in reputational harm, competitive harm, and legal liability, and adversely affect our results of operations.

We incorporate artificial intelligence ("AI") solutions into our digital infrastructure, services, offerings and features, and these applications may become important in our operations over time. Our competitors or other third parties may incorporate

AI into their products more quickly or more successfully than us, which could impair our ability to compete effectively and adversely affect our results of operations. Additionally, if the content, analyses, search results or recommendations that AI applications assist in producing are, or are alleged to be, deficient, inaccurate, or biased, our business, reputation, financial condition, and results of operations could be adversely affected.

The use of AI applications may result in cybersecurity incidents that implicate the personal data of consumers. Any such cybersecurity incidents related to our use of AI applications could adversely affect our reputation and results of operations. AI also presents emerging ethical issues, such as the proper use of copyrighted material with AI applications, and if our use of AI becomes controversial, we may experience brand or reputational harm, competitive harm, or legal liability. The rapid evolution of AI, including potential government regulation of AI, will require significant resources to develop, test and maintain our platform, offerings, services, and features to help us implement AI ethically in order to minimize unintended, harmful impact.

Interruption or failure of our information technology and communications systems could impair the delivery of our service and harm our business.

We rely on our own systems and systems of third party vendors to enable subscribers and listeners to access our Pandora and Sirius XM services in a dependable and efficient manner. Any degradation in the quality, or any failure, of our systems could reduce our revenues, cause us to lose customers and damage our brands. Although we have implemented practices designed to maintain the availability of the information technology and service delivery systems we rely on and mitigate the harm of any unplanned interruptions, we cannot anticipate all eventualities. We occasionally experience unplanned outages or technical difficulties. We could also experience loss of data or processing capabilities, which could cause us to lose customers and could harm our reputation and operating results.

We rely on internal systems and external systems maintained by manufacturers, distributors and service providers to take, fulfill and handle customer service requests and host certain online activities. Any interruption or failure of our internal or external systems could prevent us from servicing customers or cause data to be unintentionally disclosed. Our services have experienced, and we expect them to continue to experience, periodic service interruptions and delays involving our own systems and those of our vendors.

Our data centers and our information technology and communications systems are vulnerable to damage or interruption from natural disasters, malicious attacks, fire, power loss, telecommunications failures, computer viruses or other attempts to harm our systems. The occurrence of any of these events could result in interruptions in our services and unauthorized access to, or alteration of, the content and data contained on our systems and that these third party vendors store and deliver on our behalf.

Damage or interruption to data centers and information technology and communications centers could expose us to data loss or manipulation, disruption of service, monetary and reputational damages, competitive disadvantage and significant increases in compliance costs and costs to improve the security and resiliency of our computer systems. The compromise of personal, confidential or proprietary information could also subject us to legal liability or regulatory action under evolving cybersecurity, data protection and privacy laws and regulations enacted by the U.S. federal and state governments or other foreign jurisdictions or by various regulatory organizations. As a result, our ability to conduct our business and our results of operations might be adversely affected.

Risks Associated with Certain Intellectual Property Rights

The market for music rights is changing and is subject to significant uncertainties.

We must maintain music programming royalty arrangements with, and pay license fees to, owners of rights in musical works in order to operate our services. Traditionally, BMI, ASCAP, SESAC and GMR have negotiated for these copyright users, collected royalties and distributed them to songwriters and music publishers. These traditional arrangements are changing. The fracturing of the traditional system for licensing rights in musical works may have significant consequences to our business, including increasing licensing costs and reducing the availability of certain pieces for use on our services.

Under the United States Copyright Act, we also must pay royalties to copyright owners of sound recordings for the performance of such sound recordings on our Sirius XM service. Those royalty rates may be established through negotiation or, if negotiation is unsuccessful, by the Copyright Royalty Board. Owners of copyrights in sound recordings have created SoundExchange, an organization which negotiates licenses and collects and distributes royalties on behalf of record companies and performing artists. SoundExchange is exempt by statute from certain U.S. antitrust laws and exercises significant market power in the licensing of sound recordings. Under the terms of the Copyright Royalty Board’s existing decision governing sound recording royalties for satellite radio, we are required to pay a royalty based on our gross revenues associated with our satellite radio service, subject to certain exclusions, of 15.5% per year through December 31, 2027.

Our Pandora services depend upon maintaining complex licenses with copyright owners, and these licenses contain onerous terms.

Pandora has direct license agreements with many sound recording copyright and musical work copyright owners. These agreements grant us the right to operate Pandora Premium, and add interactive features, such as replays, additional skips and offline play, to Pandora's ad-supported service and to Pandora Plus.

The economic terms of these direct licenses are onerous and, as a result, we may not be able to profitably operate the Pandora services. However, the economic terms of these direct licenses may be "market," given the rates paid by Pandora's competitors. Competition for Pandora's services are primarily offered by entities that provide music and entertainment services as a small part of a larger business, such as Apple, Google and Amazon. These competitors have the ability to bear these onerous economic provisions to a much greater extent than our Pandora business. We may not be able to negotiate or obtain lower royalty rates under these direct licenses.

These direct licenses are complex. We may not be in compliance with the terms of these licenses, which could result in the loss of some or all of these licenses and some or all of the rights they convey. Similarly, many of these licenses provide that if the licensor loses rights in a portion of the content licensed under the agreement, that content may be removed from the license going-forward.

If Pandora fails to maintain these direct licenses, or if rights to certain music were no longer available under these licenses, then we may have to remove the affected music from Pandora's services, or discontinue certain interactive features for such music, and it might become commercially impractical for us to operate Pandora Premium, Pandora Plus or certain features of our advertising supported service. Any of these occurrences could have an adverse effect on our business, financial condition and results of operations.

Several of these direct licenses also include provisions related to the terms of those agreements relative to other content licensing arrangements, which are commonly referred to as "most favored nation" clauses. These provisions have caused, and may in the future cause, our payments under those agreements to escalate substantially. In addition, SoundExchange, many record labels, music publishers and performing rights organizations have the right to audit our royalty payments, and these audits often result in disputes over whether we have paid the proper amounts. As a result of such audits, we could be required to pay additional amounts, audit fees and interest or penalties, and the amounts involved could adversely affect our business, financial condition and results of operations.

There is no guarantee that these direct licenses will be renewed in the future or that such licenses will be available on the economic terms associated with the current licenses. If we are unable to secure and maintain direct licenses for the rights to provide music on our Pandora services on terms similar to those under our current direct licenses, our content costs could rise and adversely affect our business, financial condition and results of operations.

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.

Development of our systems has depended upon the intellectual property that we have developed, as well as intellectual property licensed from third parties. If the intellectual property that we have developed or use is not adequately protected, others will be permitted to and may duplicate portions of our systems or services without liability. In addition, others may challenge, invalidate, render unenforceable or circumvent our intellectual property rights, patents or existing licenses or we may face significant legal costs in connection with defending and enforcing those intellectual property rights. Some of the know-how and technology we have developed, and plan to develop, is not now, nor will it be, covered by U.S. patents or trade secret protections. Trade secret protection and contractual agreements may not provide adequate protection if there is any unauthorized use or disclosure. The loss of necessary technologies could require us to substitute technologies of lower quality performance standards, at greater cost or on a delayed basis, which could harm us.

Other parties may have patents or pending patent applications, which will later mature into patents or inventions that may block or put limits on our ability to operate our system or license our technologies. We may have to resort to litigation to enforce our rights under license agreements or to determine the scope and validity of other parties' proprietary rights in the subject matter of those licenses. This may be expensive and we may not succeed in any such litigation.

Third parties may assert claims or bring suit against us for patent, trademark or copyright infringement, or for other infringement or misappropriation of intellectual property rights. Any such litigation could be costly, divert our efforts from our business, subject us to significant liabilities to third parties, require us to seek licenses from third parties, block our ability to operate our services or license our technology, or otherwise adversely affect our ability to successfully develop and market our services.

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.

We may incorporate in some products software licensed under "open source" licenses. Open source licenses often require that the source code be made available to the public and that any modifications or derivative works to the open source software continue to be licensed under open source licenses. Few courts have interpreted open source licenses, and the manner in which these licenses may be interpreted and enforced is therefore subject to uncertainty. In the event that portions of our proprietary technology are determined to be subject to an open source license, we may be required to publicly release portions of our source code, be forced to re-engineer all or a portion of our technologies, or otherwise be limited in the licensing of our technologies, each of which could adversely affect our ability to sustain and grow our business.

Rapid technological and industry changes and new entrants could adversely impact our services.

The audio entertainment industry is characterized by rapid technological change, frequent product and feature innovations, changes in customer requirements and expectations, evolving standards and new entrants offering products and services. If we are unable to keep pace with these changes, our business may not succeed. Products using new technologies could make our services less competitive in the marketplace.

Risks Related to our Capital and Ownership Structure

We have a significant amount of indebtedness, and our debt contains certain covenants that restrict our operations.

As of December 31, 2023, we had an aggregate principal amount of approximately $9.3 billion of indebtedness outstanding.

Our indebtedness increases our vulnerability to general adverse economic and industry conditions; requires us to dedicate a portion of our cash flow from operations to payments on indebtedness, reducing the availability of cash flow to fund capital expenditures, marketing and other general corporate activities; limits our ability to borrow additional funds; and may limit our flexibility in planning for, or reacting to, changes in our business and the audio entertainment industry.

In addition, our borrowings under our Senior Secured Revolving Credit Facility carry a variable interest rate based on the Secured Overnight Financing Rate ("SOFR"). We may, in the future, hedge against interest rate fluctuations by using hedging instruments such as swaps, caps, options, forwards, futures or other similar products. These instruments may be used to selectively manage risks, but there can be no assurance that we will be fully protected against material interest rate fluctuations.

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.

We are a "controlled company" for the purposes of the NASDAQ Stock Market listing rules. As such, we have elected not to comply with certain NASDAQ corporate governance requirements. Although a majority of our board of directors consists of independent directors, we do not have a compensation committee and nominating and corporate governance committee that consist entirely of independent directors. Accordingly, you may not have the same protections afforded to stockholders of companies that are subject to all of the corporate governance requirements of NASDAQ. Following the consummation of the Transactions, we will no longer be a "controlled company" for the purposes of the NASDAQ corporate governance requirements and will be unable to qualify for, and rely on, exemptions from certain NASDAQ corporate governance requirements. See "Business - Liberty Media Split-Off Transaction."

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.

As of December 31, 2023, Liberty Media beneficially owned 83.4% of Holdings' common stock and has the ability to influence our affairs, policies and operations. Three Liberty Media executives and one other member of the board of directors of Liberty Media are members of our board of directors. Our board of directors currently has thirteen members. Gregory B. Maffei, the President and Chief Executive Officer of Liberty Media, is the Chairman of Holdings' board of directors. Our board of directors is responsible for, among other things, the appointment of executive management, future issuances of common stock or other securities, the payment of dividends, if any, the incurrence of debt, and the approval of various transactions.

Liberty Media can also determine the outcome of all matters requiring general stockholder approval, including the election of the board of directors and changes to our certificate of incorporation or by-laws. Liberty Media can also cause or prevent a change of control of Holdings and could preclude any unsolicited acquisition of our company. The concentration of ownership could deprive our stockholders of an opportunity to receive a premium for their common stock as part of a sale of our company and might ultimately affect the market price of our common stock. In certain cases, the interests of Liberty Media may not be aligned with the interests of other stockholders of Holdings. Following the consummation of the Transactions, Liberty Media will no longer beneficially own Holdings' common stock. See "Business - Liberty Media Split-Off Transaction."

The Transactions may adversely affect our business and financial condition.

The Transactions and our efforts to consummate the Transactions have required, and may continue to require, our management to divert a disproportionate amount of attention away from their respective day-to-day activities and operations in order to devote time and effort to consummating the Transactions. The risks, and adverse effects, of such disruptions and diversions could be exacerbated by a delay in the completion of the Transactions. Any such disruptions or diversions could adversely affect our financial position or results of operations, regardless of whether the Transactions are completed. Moreover, the Transactions impose certain restrictive interim covenants on us during the pendency of the Transactions. These restrictions may prevent us from taking certain actions during the relevant period, including repurchasing our stock, making certain acquisitions or otherwise pursuing certain business opportunities that our board of directors may deem beneficial. Further, we have incurred, and expect to further incur, certain nonrecurring costs in connections with the Transactions, which may adversely affect our short-term operating results and cash flows. Although we expect that the realization of benefits related to the Transactions will offset such costs and expenses over time, we cannot assure that the net benefits will be achieved in the near term, or at all. Additionally, while we anticipate the realization of strategic and financial benefits to our stockholders as a result of the consummation of the Transactions, including the creation of stockholder value because, among other things, there will be a single class of "one share, one vote" common stock following the consummation of the Transactions, Holdings will no longer have a controlling stockholder, and the Transactions will result in more trading liquidity for our common stock and the potential for future eligibility for inclusion in stock market indexes, there can be no assurance that these benefits will be realized and to what exact impact will they have on stockholder value. See "Business - Liberty Media Split-Off Transaction."

While we currently pay a quarterly cash dividend to holders of our common stock, we may change our dividend policy at any time.

We currently pay a quarterly cash dividend to holders of our common stock, although we have no obligation to do so, and our dividend policy may change at any time without notice to our stockholders. The declaration and payment of dividends is at the discretion of our board of directors in accordance with applicable law after considering various factors, including our financial condition, operating results, current and anticipated cash needs, limitations imposed by our indebtedness, legal requirements and other factors that our board of directors deems relevant.

Other Operational Risks

If we are unable to attract and retain qualified personnel, our business could be harmed.

We believe that our success depends on our continued ability to attract and retain qualified management, sales, technical and other personnel. All of our employees, including our executive officers, are free to terminate their employment with us at any time, and their knowledge of our business may be difficult to replace.

Qualified individuals are in high demand, particularly in the media and technology industries and we may incur significant costs to attract and retain employees. If we are unable to attract and retain our key employees, we may not be able to achieve our objectives, and our business could be harmed.

Our facilities could be damaged by natural catastrophes or terrorist activities.

An earthquake, hurricane, tornado, flood, cyber-attack, terrorist attack, civil unrest or other catastrophic event could damage our data centers, studios, terrestrial repeater networks or satellite uplink facilities, interrupt our services and harm our business. We also have significant operations in the San Francisco Bay Area, a region known for seismic activity. Natural disasters and extreme weather conditions can be caused or exacerbated by climate change.

Any damage to the satellites that transmit to our terrestrial repeater networks would likely result in degradation of the affected service for some Sirius XM subscribers and could result in complete loss of Sirius XM satellite service in certain or all areas. Damage to our satellite uplink facilities could result in a complete loss of our Sirius XM satellite service until we could transfer operations to suitable back-up facilities.

The unfavorable outcome of pending or future litigation could have an adverse impact on our operations and financial condition.

We are parties to several legal proceedings arising out of various aspects of our business, including possible class actions arising out of our marketing practices and governmental actions and possible class actions and mass arbitrations arising from our pricing and cancellation practices. The outcome of these proceedings may not be favorable, and one or more unfavorable outcomes could have an adverse impact on our financial condition. See "Item 3. Legal Proceedings" of this Annual Report on Form 10-K for information on our material legal proceedings.

We may be exposed to liabilities that other entertainment service providers would not customarily be subject to.

We design, establish specifications, source or specify parts and components, and manage various aspects of the logistics of the production of satellite radios and our apps. As a result of these activities, we may be exposed to liabilities associated with the design, manufacture and distribution of radios and apps that the providers of an entertainment service would not customarily be subject to, such as liabilities for design defects, patent infringement and compliance with applicable laws, as well as the costs of returned product.

Our business and prospects depend on the strength of our brands.

Maintaining and enhancing our brands is an important part of our strategy to expand our base of subscribers, listeners and advertisers. Our brands may be impaired by a number of factors, including service outages, data privacy and security issues and exploitation of our trademarks by others without permission. Our ability to maintain and enhance our brands also depends in part on our ability to continue to develop and provide an innovative and high-quality entertainment experience, which we may not do successfully.

Special Note About Forward-Looking Statements

We have made various statements in this Annual Report on Form 10-K that may constitute “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements may also be made in our other reports filed with or furnished to the SEC, in our press releases and in other documents. In addition, from time to time, we, through our management, may make oral forward-looking statements. For example, these forward-looking statements may include, among other things, our statements about our outlook and our future results of operations and financial condition; share repurchase plans; the impact of economic and market conditions; and the impact of recent acquisitions. The words “will likely result,” “are expected to,” “will continue,” “is anticipated,” “estimated,” “believe,” “intend,” “plan,” “may,” “should,” “could,” “would,” “likely,” “projection,” “outlook” and similar expressions are intended to identify forward-looking statements. Forward-looking statements are subject to risks and uncertainties, including those identified above, which could cause actual results to differ materially from such statements. We caution you that the risk factors described above are not exclusive. There may also be other risks that we are unable to predict at this time that may cause actual results to differ materially from those in forward-looking statements. 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. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date on which they are made. We undertake no obligation to update publicly or revise any forward-looking statements, except as required by law.

ITEM 1B. ***UNRESOLVED STAFF COMMENTS***

None.

ITEM 1C. ***CYBERSECURITY***

Risk Management and Strategy

As part of our enterprise risk assessment function, which is led by our Senior Vice President and head of Internal Audit, we have implemented processes to assess, identify and manage the material risks facing the company, including from cyber threats. Our enterprise risk assessment function is part of our overall risk management processes. Our cybersecurity program is built upon internationally recognized frameworks, such as ISO 27001, and maps to standards published by The National Institute of Standards and Technology. We believe that our processes provide us with a comprehensive assessment of potential cyber threats. We conduct regular scans, penetration tests, and vulnerability assessments to identify any potential threats or vulnerabilities in our systems. Our processes to assess, identify and manage the material risks from cyber threats include the risks arising from threats associated with third party service providers, including cloud-based platforms.

We have developed a robust cyber crisis response plan which provides a documented framework for handling high severity security incidents and facilitates coordination across multiple parts of the company. Our incident response team constantly monitors threat intelligence feeds, handles vulnerability management and responds to incidents. In addition, we routinely perform simulations and drills at both a technical and management level.

Internally, we have a security awareness program which includes training that reinforces our information technology and security policies, standards and practices, and we require that our employees comply with these policies. The security awareness program offers training on how to identify potential cybersecurity risks and protect our resources and information. This training is mandatory for all employees on an annual basis, and it is supplemented by testing initiatives, including periodic phishing tests. We also provide specialized security training for certain employee roles, such as application developers. Finally, our privacy program requires all employees to take periodic awareness training on data privacy. This training includes information about confidentiality and security, as well as responding to unauthorized access to or use of information.

From time to time, we engage third-party service providers to enhance our risk mitigation efforts. For instance, we have routinely engaged an independent cybersecurity advisor to lead a cybersecurity crisis simulation exercise that has been used by our senior leaders to prepare for a possible cyber crisis. In addition, we have engaged: Novacoast, an international cybersecurity company specializing in IT services and software development, to augment our monitoring and detection efforts; Synopsys, Inc., a leader in electronic design automation, to perform our external penetration testing and vulnerability assessment; Recorded Future, one of the world's largest intelligence companies, and Mandiant, a recognized leader in cyber defense, threat intelligence and incident response services, to provide threat intelligence and analysis services; and Mandiant to augment our incident response ability and provide forensic services. We also purchase insurance to protect us against the risk of cybersecurity breaches. Our Senior Vice President and Treasurer is responsible for our insurance programs and reviews on a regular basis our cyber insurance policies and assesses whether we have appropriate coverage.

To date, risks from cybersecurity threats have not previously materially affected us, and we currently do not expect that the risks from cybersecurity threats are reasonably likely to materially affect us, including our business, strategy, results of operations or financial condition. That said, as discussed more fully under "Item 1A – Risk Factors", the sophistication of cyber threats continues to increase, and the preventative actions we take to reduce the risk of cyber incidents and protect our systems and information may be insufficient. Accordingly, no matter how well designed or implemented our controls are, we will not be able to anticipate all security breaches of these types, including security threats that may result from third parties improperly employing AI technologies, and we may not be able to implement effective preventive measures against such security breaches in a timely manner.

Governance

Role of the Board

The Audit Committee of the Board of Directors is responsible for the primary oversight of our information security programs, including relating to cybersecurity. The Audit Committee receives regular reports from our Chief Product and Technology Officer, Chief Information Security Officer and the Chief Information Officer on, among other things, our cyber risks and threats, the status of projects to strengthen our information security systems, assessments of our security program, and our views of the emerging threat landscape. Our Senior Vice President and head of Internal Audit reports directly to the Audit Committee and is responsible for reporting to the Committee on our company-wide enterprise risk assessment, and that assessment also includes an evaluation of cyber risks and threats. The Chair of the Audit Committee regularly reports to the Board on cybersecurity risks and other matters reviewed by the Committee. In addition, the Board receives separate presentations on cybersecurity risk from our Chief Product and Technology Officer. Furthermore, all Board members are invited to attend each Audit Committee meeting and have access to the materials for each Audit Committee meeting.

As a matter of process, the Audit Committee annually reviews, and recommends to the Board its approval of, our information security policy and information security program. Furthermore, on an annual basis, the Board reviews and discusses our technology strategy with our Chief Product and Technology Officer and approves our technology strategic plan.

Role of management

Our Chief Information Security Officer, together with our Chief Product and Technology Officer and Chief Information Officer, is responsible for the day-to-day management of our cybersecurity risks. We have established a Security Council, which includes our Chief Executive Officer, Chief Commercial Officer, Chief Product and Technology Officer, Chief Information Security Officer, Chief Information Officer, Chief Financial Officer, General Counsel and other senior officers, that meets on at least a quarterly basis to review cybersecurity and information security matters. The Security Council has primary management oversight responsibility for assessing and managing information security, fraud, vendor, data protection and privacy, and cybersecurity risks.

We have a security incident response framework in place. We use this incident response framework as part of the process we employ to keep our management and Board of Directors informed about and monitor the prevention, detection, mitigation, and remediation of cybersecurity incidents. The framework is a set of coordinated procedures and tasks that our incident response team, under the direction of the Chief Information Security Officer, executes with the goal of ensuring timely and accurate resolution of cybersecurity incidents. Our cybersecurity framework includes regular compliance assessments with our policies and standards and applicable state and federal statutes and regulations. In addition, we validate compliance with our internal data security controls through the use of security monitoring utilities and internal and external audits.

Our Chief Information Security Officer, Chief Product and Technology Officer and Chief Information Officer each have extensive experience in the information technology area. In particular, our Chief Information Security Officer has over twenty years of professional experience in the information security area, including as a result of his service as the director of security, a security architect and a software security engineer at companies such as Squarespace, Verizon Media (Oath), Tumblr, Bridgewater Associates and EMC; our Chief Product and Technology Officer has twenty eight years of professional experience in the information security area; and our Chief Information Officer has twenty three years of professional experience in the information security area.

ITEM 2. *PROPERTIES*

Below is a list of the principal properties that we own or lease:

Sirius XM

Location	Purpose	Own/Lease
New York, NY	Corporate headquarters, office facilities and studio/production facilities	Lease
Washington, DC	Office and studio/production facilities	Own
Miami Beach, FL	Office and studio/production facilities	Lease
Los Angeles, CA	Office and studio/production facilities	Lease
Nashville, TN	Studio/production facilities	Lease
Lawrenceville, NJ	Office and technical/engineering facilities	Lease
Deerfield Beach, FL	Office and technical/engineering facilities	Lease
Farmington Hills, MI	Office and technical/engineering facilities	Lease
Irving, TX	Office and engineering facilities/call center	Lease
Vernon, NJ	Technical/engineering facilities	Own
Ellenwood, GA	Technical/engineering facilities	Lease
Fredericksburg, VA	Warehouse and technical/engineering facilities	Lease
Ashburn, VA	Data center	Lease

We also lease other small facilities that we use as offices for our advertising sales personnel, studios and warehouse and maintenance space. These facilities are not material to our business or operations.

In addition, we lease or license space at approximately 530 locations for use in connection with the terrestrial repeater networks that support our satellite radio services. In general, these leases and licenses are for space on building rooftops and communications towers. None of these individual locations are material to our business or operations.

Pandora and Off-platform

Location	Purpose	Own/Lease
Oakland, CA	Office and technical/engineering facilities	Lease
New York, NY	Office, sales and studio/production facilities	Lease
Atlanta, GA	Office, sales and technical/engineering facilities	Lease
Santa Monica, CA	Office and sales facilities	Lease

We also lease other small facilities that we use as offices for our sales and office personnel. These facilities are not material to our business or operations.

ITEM 3. *LEGAL PROCEEDINGS*

For a discussion of our “Legal Proceedings,” refer to Note 16 in the notes to our audited consolidated financial statements in this Annual Report on Form 10-K.

ITEM 4. *MINE SAFETY DISCLOSURES*

Not applicable.

PART II

ITEM 5. *MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES*

Our common stock is traded on the NASDAQ Global Select Market under the symbol “SIRI.” On January 30, 2024, there were approximately 6,100 record holders of our common stock.

Issuer Purchases of Equity Securities

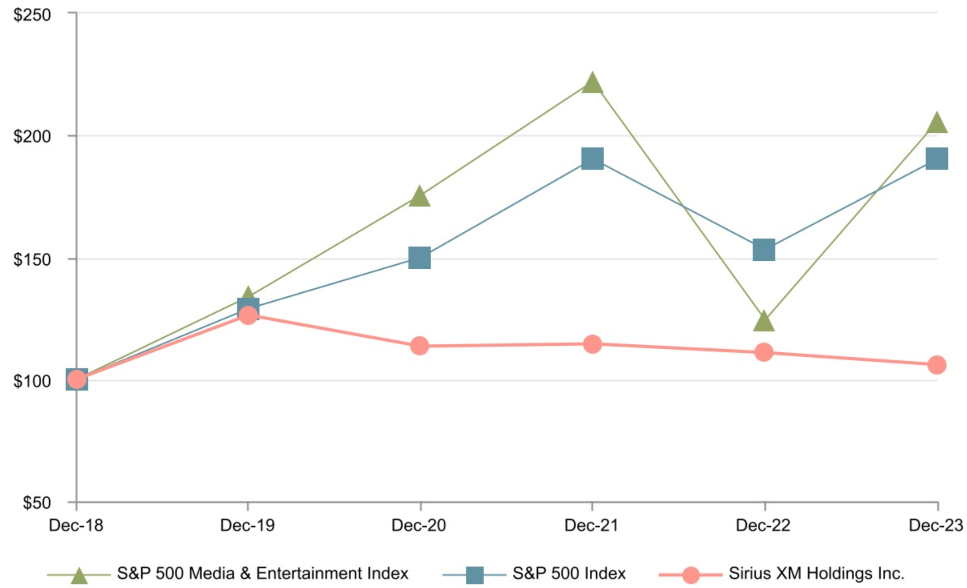
As of December 31, 2023, our board of directors had authorized us to repurchase an aggregate of $18.0 billion of our common stock and have not establish an end date for this stock repurchase program. Shares of common stock may be purchased from time to time on the open market, pursuant to pre-set trading 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 December 31, 2023, our cumulative repurchases since December 2012 under our stock repurchase program totaled 3.7 billion shares for approximately $16.8 billion, and approximately $1.2 billion remained available under our existing $18.0 billion stock repurchase program. The size and timing of our repurchases will be based on a number of factors, including price and business and market conditions.

There were no purchases of equity securities registered pursuant to Section 12 of the Exchange Act during the quarter ended December 31, 2023.

COMPARISON OF CUMULATIVE TOTAL RETURNS

Set forth below is a graph comparing the cumulative performance of our common stock with the Standard & Poor's Composite-500 Stock Index, or the S&P 500, and the S&P 500 Media & Entertainment Index, the published industry index we use, from December 31, 2018 to December 31, 2023. The graph assumes that $100 was invested on December 31, 2018 in each of our common stock, the S&P 500 and the S&P 500 Media & Entertainment Index.

In November 2016, we paid our first quarterly dividend. Our board of directors expects to declare regular quarterly dividends.



Stockholder Return Performance Table

	S&P 500 Index	S&P 500 Media & Entertainment Index	Sirius XM Holdings Inc.
December 31, 2018	$ 100.00	$ 100.00	$ 100.00
December 31, 2019	$ 128.88	$ 133.63	$ 126.36
December 31, 2020	$ 149.83	$ 175.28	$ 113.57
December 31, 2021	$ 190.13	$ 222.03	$ 114.34
December 31, 2022	$ 153.16	$ 124.20	$ 110.66
December 31, 2023	$ 190.27	$ 205.63	$ 106.01

Equity Compensation Plan Information

The following table provides information about our common stock that may be issued upon exercise of options, warrants and rights under our equity compensation plans. Information is as of December 31, 2023.

Plan Category *(shares in millions)*	Number of Securities to be Issued upon Exercise of Outstanding Options, Warrants and Rights[(1)]	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights[(2)]	Number of Securities Remaining Available for Future Issuance under Equity Compensation Plans
Equity compensation plans approved by security holders	211	$ 5.60	106
Equity compensation plans not approved by security holders	—	—	—
Total	211	$ 5.60	106

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(1) In addition to shares issuable upon exercise of stock options, amount also includes approximately 89 shares underlying restricted stock units, including performance-based restricted stock units ("PRSUs") and dividend equivalents thereon. The number of shares to be issued in respect of PRSUs and dividend equivalents thereon have been calculated based on the assumption that the maximum levels of performance applicable to the PRSUs will be achieved.

(2) The weighted-average exercise price of outstanding options, warrants and rights relates solely to stock options, which are the only currently outstanding exercisable security.

ITEM 6. *[RESERVED]*

ITEM 7. *MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS*

This Annual Report on Form 10-K contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Actual results and the timing of events could differ materially from those projected in forward-looking statements due to a number of factors, including those described under "Item 1A - Risk Factors" and elsewhere in this Annual Report on Form 10-K. See "Special Note About Forward-Looking Statements."

All amounts referenced in this Item 7 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 audited consolidated financial statements and related notes included elsewhere in this Annual Report on Form 10-K.

Executive Summary

We operate two complementary audio entertainment businesses - one of which we refer to as "SiriusXM" and the second of which we refer to as "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 SiriusXM Media brand, direct sales of our satellite radios and accessories, and other ancillary services. As of December 31, 2023, our Sirius XM business had approximately 33.9 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 and fuel prices, a traffic information service, and real-time weather services in boats and airplanes.

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

Our Pandora and Off-platform business operates a music, comedy and podcast streaming discovery platform, offering a personalized experience for each listener wherever and whenever they want to listen, whether through 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 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 December 31, 2023, Pandora had approximately 46.0 million monthly active users and 6.0 million subscribers.

The majority of revenue from Pandora is generated from advertising on our Pandora ad-supported radio service which is sold under the SiriusXM 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 offer advertisers the ability to execute campaigns across the Pandora and SoundCloud 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 December 31, 2023, Liberty Media beneficially owned, directly and indirectly, 83.4% 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.

On December 11, 2023, Holdings entered into definitive agreements whereby, subject to the terms thereof, Liberty Sirius XM Holdings Inc., a Delaware corporation and a wholly owned subsidiary of Liberty Media (“New Sirius”), would split-off from Liberty Media. The transactions would be effectuated by means of a redemptive split-off of New Sirius (the “Split-Off”), which will own all of the assets and liabilities attributed to Liberty Media’s Series A Liberty SiriusXM common stock (“LSXMA”), Series B Liberty SiriusXM common stock (“LSXMB”) and Series C Liberty SiriusXM common stock (“LSXMK”, together with the LSXMB and LSXMA stock, the “Liberty SiriusXM Group”). Following the Split-Off, New Sirius will combine with Holdings through the merger of Radio Merger Sub, LLC, a Delaware limited liability company and a wholly owned subsidiary of New Sirius (“Merger Sub”), with Holdings, with Holdings becoming a wholly owned subsidiary of New Sirius (the “Merger” and, together with the Split-Off, the “Transactions”). As part of the Merger, New Sirius will be renamed “Sirius XM Holdings Inc.”

To effect the Transactions, on December 11, 2023, Liberty Media entered into (i) a Reorganization Agreement (the “Reorganization Agreement”) with Holdings and New Sirius, and (ii) an Agreement and Plan of Merger (the “Merger Agreement”) with New Sirius, Holdings and Merger Sub.

In connection with the Merger Agreement and the Reorganization Agreement, on December 11, 2023, certain trusts related to Dr. John C. Malone (collectively, the “Malone Stockholders”) entered into a voting agreement (the “Voting Agreement”) with Liberty Media, Holdings and New Sirius, pursuant to which, among other things, the Malone Stockholders agreed, subject to the terms of the Voting Agreement, to vote their respective shares of Liberty Media’s LSXMA and LSXMB in favor of the Split-Off.

The Transactions have been unanimously approved by Liberty Media’s Board of Directors and a Special Committee of the Board of Directors of Holdings and by Holdings’ Board of Directors. The Transactions are expected to be completed early in the third quarter of 2024, subject to approval by a majority of the aggregate voting power of the shares of Liberty SiriusXM common stock present, whether in-person or by proxy, at a stockholder meeting, the receipt by Liberty Media and New Sirius of tax opinions from their respective tax counsel, as well as the receipt of required regulatory approvals and the satisfaction of other customary closing conditions. A subsidiary of Liberty Media owning a majority of the outstanding shares of Holdings has delivered a written consent approving the Transactions on behalf of a majority of Holdings’ stockholders. Following the Transactions, Liberty Media and New Sirius will operate independently, and neither is expected to have any ownership interest in the other. All of the executive officers of Holdings immediately prior to consummation of the Transactions will be the initial executive officers of New Sirius, and New Sirius will continue to operate under the SiriusXM name and brand.

The Reorganization Agreement, the Merger Agreement and the Voting Agreement are filed as exhibits to this Annual Report on Form 10-K.

Results of Operations

Set forth below are our results of operations for the year ended December 31, 2023 compared with the year ended December 31, 2022. Refer to our Form 10-K for the year ended December 31, 2022 filed with the SEC on February 2, 2023 for our results of operation for the year ended December 31, 2022 compared with the year ended December 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.

	For the Years Ended December 31,		2023 vs 2022 Change	
	2023	2022	Amount	%
Revenue				
Sirius XM:				
Subscriber revenue	$ 6,342	$ 6,370	$ (28)	— %
Advertising revenue	169	196	(27)	(14)%
Equipment revenue	193	189	4	2 %
Other revenue	136	150	(14)	(9)%
Total Sirius XM revenue	6,840	6,905	(65)	(1)%
Pandora and Off-platform:				
Subscriber revenue	524	522	2	— %
Advertising revenue	1,589	1,576	13	1 %
Total Pandora and Off-platform revenue	2,113	2,098	15	1 %
Total consolidated revenue	8,953	9,003	(50)	(1)%
Cost of services				
Sirius XM:				
Revenue share and royalties	1,603	1,552	51	3 %
Programming and content	549	546	3	1 %
Customer service and billing	393	415	(22)	(5)%
Transmission	171	158	13	8 %
Cost of equipment	14	13	1	8 %
Total Sirius XM cost of services	2,730	2,684	46	2 %
Pandora and Off-platform:				
Revenue share and royalties	1,292	1,250	42	3 %
Programming and content	69	58	11	19 %
Customer service and billing	83	82	1	1 %
Transmission	35	56	(21)	(38)%
Total Pandora and Off-platform cost of services	1,479	1,446	33	2 %
Total consolidated cost of services	4,209	4,130	79	2 %
Subscriber acquisition costs	359	352	7	2 %
Sales and marketing	931	1,075	(144)	(13)%
Engineering, design and development	322	285	37	13 %
General and administrative	550	525	25	5 %
Depreciation and amortization	554	536	18	3 %
Impairment, restructuring and acquisition costs	82	64	18	28 %
Total operating expenses	7,007	6,967	40	1 %
Income from operations	1,946	2,036	(90)	(4)%
Other (expense) income:				
Interest expense	(423)	(422)	1	— %
Other (expense) income	(5)	(9)	(4)	(44)%
Total other expense	(428)	(431)	(3)	(1)%
Income before income taxes	1,518	1,605	(87)	(5)%
Income tax expense	(260)	(392)	(132)	(34)%
Net income	$ 1,258	$ 1,213	$ 45	4 %

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 years ended December 31, 2023 and 2022, subscriber revenue was $6,342 and $6,370, respectively, a decrease of less than 1%, or $28. The decrease was primarily driven by a reduction in paid promotional revenue resulting from lower overall rates from automakers offering paid promotional subscriptions and lower revenue generated from our connected vehicle services, partially offset by an increase in self-pay revenue.

We expect subscriber revenues to decrease based on the mix of our subscriber base and a decline in the average price of our subscriptions.

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

For the years ended December 31, 2023 and 2022, advertising revenue was $169 and $196, respectively, a decrease of 14%, or $27. The decrease was due to a decline in the number of spots sold and aired, primarily on news and entertainment channels.

We expect our Sirius XM advertising revenue to grow as we improve monetization opportunities through SiriusXM Media, our advertising sales group.

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

For the years ended December 31, 2023 and 2022, equipment revenue was $193 and $189, respectively, an increase of 2%, or $4. The increase was driven by higher chipset production driven by an increase in OEM demand, partially offset by lower royalty rates.

We expect equipment revenue to decrease due to the transition to our next generation chipset at higher costs.

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

For the years ended December 31, 2023 and 2022, other revenue was $136 and $150, respectively, a decrease of 9%, or $14. The decrease was primarily driven by lower royalty revenue generated by Sirius XM Canada and our connected vehicle services.

We expect other revenue to decline as revenue generated by Sirius XM Canada and from our connected vehicle services decrease.

Pandora and Off-platform Revenue

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

For the years ended December 31, 2023 and 2022, Pandora and Off-platform subscriber revenue was $524 and $522, respectively, an increase of less than 1%, or $2. The increase was primarily driven by a rate increase on Pandora Plus, partially offset by a decline in the subscriber base.

We expect Pandora and Off-platform subscriber revenues to remain 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 years ended December 31, 2023 and 2022, Pandora and Off-platform advertising revenue was $1,589 and $1,576, respectively, an increase of 1%, or $13. The increase was primarily driven by higher podcasting revenue, partially offset by lower sell-through on the Pandora ad-supported service.

We expect Pandora and Off-platform advertising revenue to increase driven by growth in our Off-platform and podcast businesses.

Total Consolidated Revenue

Total Consolidated Revenue for the years ended December 31, 2023 and 2022, was $8,953 and $9,003, respectively, a decrease of 1%, or $50.

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 years ended December 31, 2023 and 2022, revenue share and royalties were $1,603 and $1,552, respectively, an increase of 3%, or $51, and increased as a percentage of total Sirius XM revenue. The increase was driven by higher web streaming royalty rates as well as the expiration of certain licenses covering pre-1972 sound recordings.

We expect our Sirius XM revenue share and royalty costs to remain relatively flat as higher royalty rates under the statutory webcasting license resulting from increases in the Consumer Price Index are anticipated to be offset by lower eligible subscription revenue.

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 years ended December 31, 2023 and 2022, programming and content expenses were $549 and $546, respectively, an increase of 1%, or $3, 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 remain flat as additional programming offerings are offset by 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 years ended December 31, 2023 and 2022, customer service and billing expenses were $393 and $415, respectively, a decrease of 5%, or $22, and decreased as a percentage of total Sirius XM revenue. The decrease was primarily driven by lower call center and personnel-related costs, partially offset by higher transaction costs.

We expect our Sirius XM customer service and billing expenses to decrease driven by lower call center costs as a result of efficiencies from our investment in our digital platform.

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 years ended December 31, 2023 and 2022, transmission expenses were $171 and $158, respectively, an increase of 8%, or $13, and increased as a percentage of total Sirius XM revenue. The increase was primarily driven by higher costs associated with our 360L platform and streaming.

We expect our Sirius XM transmission expenses to increase as costs associated with consumers using our 360L platform rise and investments in 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 years ended December 31, 2023 and 2022, cost of equipment was $14 and $13, respectively, an increase of 8%, or $1, and increased as a percentage of equipment revenue. The increase was driven by higher inventory write downs.

We expect our Sirius XM cost of equipment to decrease as aftermarket sales decline.

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 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 years ended December 31, 2023 and 2022, revenue share and royalties were $1,292 and $1,250, respectively, an increase of 3%, or $42, and increased as a percentage of total Pandora and Off-platform revenue. The increase was primarily due to higher podcast revenue share driven by growth in podcast advertising revenue as well as higher royalty expense due to costs related to an increase in certain web streaming royalty rates.

We expect our Pandora and Off-platform revenue share and royalties to increase based on a variety of music-related factors, including higher royalty rates under the statutory webcasting license, and additional costs associated with our podcast distribution agreements.

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

For the years ended December 31, 2023 and 2022, programming and content expenses were $69 and $58, respectively, an increase of 19%, or $11, and increased as a percentage of total Pandora revenue. The increase was primarily attributable to higher podcast license fees and live event costs, partially offset by lower personnel-related costs.

We expect our Pandora and Off-platform programming and content costs to remain flat as lower personnel-related costs are offset by additional programming and 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 years ended December 31, 2023 and 2022, customer service and billing expenses were $83 and $82, respectively, an increase of 1%, or $1, and increased as a percentage of total Pandora revenue. The increase was primarily driven by higher bad debt expense, partially offset by lower transaction fees.

We expect our Pandora and Off-platform customer service and billing costs to decrease with declines in the Pandora subscriber base.

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 years ended December 31, 2023 and 2022, transmission expenses were $35 and $56, respectively, a decrease of 38%, or $21, and decreased as a percentage of total Pandora revenue. The decrease was primarily driven by lower colocation and personnel-related costs as well as lower streaming costs resulting from a decline in listener hours.

We expect our Pandora and Off-platform transmission costs to increase as a result of an increase in Off-platform advertising driving higher data costs.

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 years ended December 31, 2023 and 2022, subscriber acquisition costs were $359 and $352, respectively, an increase of 2%, or $7, and increased as a percentage of total revenue. The increase was driven by higher hardware subsidies driven by installations, which grew due to increased production by automakers, partially offset by lower commission and hardware subsidy rates.

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 performance media.

For the years ended December 31, 2023 and 2022, sales and marketing expenses were $931 and $1,075, respectively, a decrease of 13%, or $144, and decreased as a percentage of total revenue. The decrease was primarily due to a decrease in streaming marketing and marketing to support our brands as well as lower personnel-related costs.

We anticipate that sales and marketing expenses will remain flat based on current levels of direct marketing, performance media, and brand marketing spend associated with acquiring and retaining listeners and subscribers.

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 years ended December 31, 2023 and 2022, engineering, design and development expenses were $322 and $285, respectively, an increase of 13%, or $37, and increased as a percentage of total revenue. The increase was driven primarily by higher cloud hosting and personnel-related costs.

We expect engineering, design and development expenses to decrease in future periods as we capitalize more investments 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 years ended December 31, 2023 and 2022, general and administrative expenses were $550 and $525, respectively, an increase of 5%, or $25, and increased as a percentage of total revenue. The increase was primarily driven by increased legal costs, including amounts associated with the settlement of certain litigation matters of $24 during the three months ended June 30, 2023, as well as higher personnel-related benefits attributed to our Deferred Compensation Plan.

We expect our general and administrative expenses to decrease driven by a decline in personnel-related and legal costs.

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 years ended December 31, 2023 and 2022, depreciation and amortization expense was $554 and $536, respectively, an increase of 3%, or $18, and increased as a percentage of total revenue. The increase was driven by the accelerated end of life of certain software as well as increases in capitalized software and hardware, partially offset by lower amortization expense related to our intangible assets.

Impairment, Restructuring and Acquisition Costs represents impairment charges, 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, acquisition costs and costs associated with the Transactions.

For the years ended December 31, 2023 and 2022, impairment, restructuring, and acquisition costs were $82 and $64, respectively. During 2023, we recorded a charge of $34 primarily related to severance and other related costs, costs associated with the Transactions of $16, impairments primarily related to terminated software projects of $15, vacated office space impairments of $12, accrued expenses of $3 for which we will not recognize any future economic benefit, and a cost-method investment impairment of $2. During 2022, we recorded an impairment of $43 associated with terminated software projects, $16 related to certain vacated office spaces, $5 in connection with furniture and equipment located at the impaired office spaces, and $6 related to personnel severance as well as acquisition related costs of $2; partially offset by $8 from the gain on the sale of real estate.

Other Income (Expense)

Interest Expense includes interest on outstanding debt.

For the years ended December 31, 2023 and 2022, interest expense was $423 and $422, respectively, an increase of less than 1%, or $1. The increase was primarily driven by higher rates driven by the Credit Facility and Incremental Term Loan, partially offset by a lower average outstanding debt balance.

Other (Expense) 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 years ended December 31, 2023 and 2022, other (expense) income was $(5) and $(9), respectively. Other expense for the year ended December 31, 2023, was primarily driven by losses associated with certain investments, partially offset by trading gains associated with the investments held for our Deferred Compensation Plan. Other expense for the year ended December 31, 2022, was primarily driven by 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 years ended December 31, 2023 and 2022, income tax expense was $260 and $392, respectively, and our effective tax rate was 17.1% and 24.4%, respectively.

Our effective tax rate of 17.1% for the year ended December 31, 2023 was primarily driven by federal and state income tax expense, partially offset by the benefits related to research and development and certain other credits, as well as a release in state valuation allowance. Our effective tax rate of 24.4% for the year ended December 31, 2022 was primarily impacted by federal and state income tax expense as well as changes in state valuation allowance, partially offset by a benefit related to research and development and certain other credits.

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. Subscribers to Cloud Cover are not included in Pandora's subscriber count.

Set forth below are our subscriber balances as of December 31, 2023 compared to December 31, 2022.

(subscribers in thousands)	As of December 31, 2023	2022	2023 vs 2022 Change Amount	%
Sirius XM				
Self-pay subscribers	31,942	32,387	(445)	(1)%
Paid promotional subscribers	1,933	1,918	15	1 %
Ending subscribers	33,875	34,305	(430)	(1)%
Sirius XM Canada subscribers	2,629	2,567	62	2 %
Pandora and Off-platform				
Monthly active users - all services	46,026	47,638	(1,612)	(3)%
Self-pay subscribers	6,008	6,215	(207)	(3)%
Paid promotional subscribers	—	—	—	nm
Ending subscribers	6,008	6,215	(207)	(3)%

nm - not meaningful

The following table contains our Non-GAAP financial and operating performance measures which are based on our adjusted results of operations for the years ended December 31, 2023 and 2022. Refer to our Form 10-K for the year ended December 31, 2022 filed with the SEC on February 2, 2023 for our Non GAAP financial and operating performance measures for the year ended December 31, 2022 compared with the year ended December 31, 2021.

(subscribers in thousands)	For the Years Ended December 31, 2023	2022	2023 vs 2022 Change Amount	%
Sirius XM				
Self-pay subscribers	(445)	348	(793)	nm
Paid promotional subscribers	15	(76)	91	nm
Net additions	(430)	272	(702)	nm
Weighted average number of subscribers	33,993	34,039	(46)	— %
Average self-pay monthly churn	1.6 %	1.5 %	0.1 %	7 %
ARPU [(1)]	$ 15.56	$ 15.63	$ (0.07)	— %
SAC, per installation	$ 13.18	$ 14.32	$ (1.14)	(8)%
Pandora and Off-platform				
Self-pay subscribers	(207)	(109)	(98)	(90)%
Paid promotional subscribers	—	(69)	69	nm
Net additions	(207)	(178)	(29)	(16)%
Weighted average number of subscribers	6,169	6,308	(139)	(2)%
Ad supported listener hours (in billions)	10.48	10.88	(0.40)	(4)%
Advertising revenue per thousand listener hours (RPM)	$ 99.39	$ 101.19	$ (1.80)	(2)%
Total Company				
Adjusted EBITDA	$ 2,790	$ 2,833	$ (43)	(2)%
Free cash flow	$ 1,203	$ 1,551	$ (348)	(22)%

nm - not meaningful

(1) ARPU for Sirius XM excludes subscriber revenue from our connected vehicle services of $161 and $182 for the years ended December 31, 2023 and 2022, respectively.

Sirius XM

Subscribers. At December 31, 2023, we had approximately 33,875 subscribers, a decrease of approximately 430 subscribers, or 1%, from the approximately 34,305 subscribers as of December 31, 2022. The decrease was due to a decrease in our self-pay subscriber base resulting from lower vehicle conversion rates and higher vehicle related churn.

For the years ended December 31, 2023 and 2022, net subscriber additions were (430) and 272, respectively, a decrease of 702. Self-pay net additions decreased as a result of lower new and used vehicle conversion rates, unfavorable vehicle related churn and lower streaming net additions, partially offset by lower non-pay churn and higher OEM volumes. Paid promotional net additions increased as a result of higher vehicle sales.

Sirius XM Canada Subscribers. At December 31, 2023, Sirius XM Canada had approximately 2,629 subscribers, an increase of 62, or 2%, from the approximately 2,567 Sirius XM Canada subscribers as of December 31, 2022.

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 the years ended December 31, 2023 and 2022, our average self-pay monthly churn rate was 1.6% and 1.5%, respectively. The increase was driven by higher vehicle related churn, partially offset by lower non-pay churn.

ARPU is derived from total earned 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 years ended December 31, 2023 and 2022, ARPU was $15.56 and $15.63, respectively. The decrease was driven by an increase in subscribers on promotional and streaming-only self-pay subscription plans, a reduction in rates associated with paid promotional plans from automakers as well as lower advertising revenue; partially offset by increases in certain subscription rates.

SAC, Per Installation, is derived from subscriber acquisition costs less 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 years ended December 31, 2023 and 2022, SAC, per installation, was $13.18 and $14.32, respectively. The decrease was driven by a change in the mix of OEMs.

Pandora and Off-platform

Monthly Active Users. At December 31, 2023, Pandora had approximately 46,026 monthly active users, a decrease of 1,612 monthly active users, or 3%, from the 47,638 monthly active users as of December 31, 2022. The decrease in monthly active users was driven by an increase in ad-supported listener churn and a decline in the number of new users.

Subscribers. At December 31, 2023, Pandora had approximately 6,008 subscribers, a decrease of 207, or 3%, from the approximately 6,215 subscribers as of December 31, 2022.

For the years ended December 31, 2023 and 2022, net subscriber additions were (207) and (178), respectively, a decrease of 16%, or 29. Net additions decreased as a result of decreases in trial starts and lower retention due to certain price increases.

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-radio content offerings in the definition of listener hours.

For the years ended December 31, 2023 and 2022, ad supported listener hours were 10.48 billion and 10.88 billion, respectively. The decrease in ad supported listener hours was primarily driven by the decline in monthly active users, partially offset by higher hours per active user.

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

For the years ended December 31, 2023 and 2022, RPM was $99.39 and $101.19, respectively. The decrease was a result of a decline in sell-through of advertising spots.

Total Company

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

For the years ended December 31, 2023 and 2022, adjusted EBITDA was $2,790 and $2,833, respectively, a decrease of 2%, or $43. The decrease was due to higher web royalty and podcast revenue share costs as well as lower overall revenue, partially offset by lower sales and marketing 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 years ended December 31, 2023 and 2022, free cash flow was $1,203 and $1,551, respectively, a decrease of $348, or 22%. The decrease was driven by higher capital expenditures driven by satellite construction and investments in our products and technology platform as well as higher cash taxes paid.

Liquidity and Capital Resources

The following table presents a summary of our cash flow activity for the year ended December 31, 2023 compared with the year ended December 31, 2022. Refer to our Form 10-K for the year ended December 31, 2022 filed with the SEC on February 2, 2023 for our cash flows for the year ended December 31, 2022 compared with the year ended December 31, 2021.

	For the Years Ended December 31,		
	2023	2022	2023 vs 2022
Net cash provided by operating activities	$ 1,850	$ 1,976	$ (126)
Net cash used in investing activities	(686)	(548)	(138)
Net cash used in financing activities	(1,005)	(1,562)	557
Net increase (decrease) in cash, cash equivalents and restricted cash	159	(134)	293
Cash, cash equivalents and restricted cash at beginning of period	65	199	(134)
Cash, cash equivalents and restricted cash at end of period	$ 224	$ 65	$ 159

Cash Flows Provided by Operating Activities

Cash flows provided by operating activities decreased by $126 to $1,850 for the year ended December 31, 2023 from $1,976 for the year ended December 31, 2022.

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 and Off-platform 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 year ended December 31, 2023 were primarily due to spending for capitalized software and hardware, the construction of satellites and acquisitions of tax-effective investments for total cash consideration of $39. Cash flows used in investing activities in the year ended December 31, 2022 were primarily due to spending for capitalized software and hardware, to construct satellites, and acquisitions for total cash consideration of $136. We spent $297 and $247 on capitalized software and hardware as well as $285 and $122 to construct satellites during the years ended December 31, 2023 and 2022, 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 year ended December 31, 2023 were primarily due to repayments under our Credit Facility of $1,750, the payment of cash dividends of $383, the repurchase of $193 in principal amount of Pandora's 1.75% Convertible Senior Notes due 2023, the purchase and retirement of shares of our common stock under our repurchase program for $274 and payment of $63 for taxes in lieu of shares issued for share-based compensation, partially offset by borrowings under our Credit Facility of $1,670. Cash flows used in financing activities in the year ended December 31, 2022 were primarily due to repayments under our Credit Facility of $2,220, the payment of cash dividends of $1,339, the purchase and retirement of shares of our common stock under our repurchase program for $647, and payment of $114 for taxes in lieu of shares issued for share-based compensation, partially offset by borrowings under our Credit Facility of $2,300 and an amendment to our Credit Facility to incorporate an Incremental Term Loan borrowing of $500 ($499 net of costs) which matures on April 11, 2024.

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 December 31, 2023, no amount was outstanding under our Credit Facility and $1,750 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.

As part of our ESG strategies, we have made, and expect to make, certain tax-efficient investments in clean energy technologies, including industrial carbon capture and storage. These investments will produce tax credits and related tax losses. Over the next seven years, we currently expect to generate more than $250 million in net-after tax cash benefit. The payments on these equity investments will be classified as investing activities from a cash flow perspective, while the tax credits and losses will benefit our federal cash taxes in operating activities.

Capital Return Program

As of December 31, 2023, our board of directors had authorized for repurchase an aggregate of $18,000 of our common stock. As of December 31, 2023, our cumulative repurchases since December 2012 under our stock repurchase program totaled 3,731 shares for $16,834, and $1,166 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 January 24, 2024, our board of directors declared a quarterly dividend on our common stock in the amount of $0.0266 per share of common stock payable on February 23, 2024 to stockholders of record as of the close of business on February 9, 2024.

Debt Covenants

The indentures governing Sirius XM's senior notes and the agreement governing the Sirius XM Credit Facility include restrictive covenants. As of December 31, 2023, we were in compliance with such covenants. For a discussion of our “Debt Covenants,” refer to Note 13 to our consolidated financial statements in Part II, Item 8, of this Annual Report on Form 10-K.

Off-Balance Sheet Arrangements

We do not have any significant off-balance sheet arrangements other than those disclosed in Note 16 to our consolidated financial statements in Part II, Item 8, of this Annual Report on Form 10-K 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 16 to our consolidated financial statements in Part II, Item 8, of this Annual Report on Form 10-K.

Related Party Transactions

For a discussion of “Related Party Transactions,” refer to Note 12 to our consolidated financial statements in Part II, Item 8, of this Annual Report on Form 10-K.

Critical Accounting Policies and Estimates

Our consolidated financial statements are prepared in accordance with GAAP, which requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the periods. Accounting estimates require the use of significant management assumptions and judgments as to future events, and the effect of those events cannot be predicted with certainty. The accounting estimates will change as new events occur, more experience is acquired and more information is obtained. We evaluate and update our assumptions and estimates on an ongoing basis and use outside experts to assist in that evaluation when we deem necessary. We have identified all significant accounting policies in Note 2 to our consolidated financial statements in Part II, Item 8, of this Annual Report on Form 10-K.

Non-Financial Instrument Valuations. Our non-financial instrument valuations are primarily comprised of our determination of the estimated fair value allocation of net tangible and identifiable intangible assets acquired in business combinations, our annual assessment of the recoverability of our goodwill and other nonamortizable intangibles, such as trademarks, and our evaluation of the recoverability of our other long-lived assets upon certain triggering events. If the carrying value of our long-lived assets exceeds their estimated fair value, we are required to write the carrying value down to fair value. Any such writedown is included in Impairment, restructuring and acquisition costs in our consolidated statement of operations. Judgment is required to estimate the fair value of our long-lived assets. We may use quoted market prices, prices for similar assets, present value techniques and other valuation techniques to prepare these estimates. We may need to make estimates of future cash flows and discount rates as well as other assumptions in order to implement these valuation techniques. Due to the degree of judgment involved in our estimation techniques, any value ultimately derived from our long-lived assets may differ from our estimate of fair value. As each of our operating segments has long-lived assets, this critical accounting policy affects the financial position and results of operations of each segment.

As of December 31, 2023, the intangible assets not subject to amortization for each of our consolidated reportable segments were as follows (amounts in millions):

	Goodwill	FCC Licenses	Trademarks	Total
Sirius XM	$ 2,290	$ 2,084	$ 250	$ 4,624
Pandora and Off-platform	959	—	312	1,271
Consolidated	$ 3,249	$ 2,084	$ 562	$ 5,895

We perform our annual assessment of the recoverability of our goodwill and other nonamortizable intangible assets in the fourth quarter each year, or more frequently if events and circumstances indicate impairment may have occurred. The accounting guidance permits entities to first assess qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount as a basis for determining whether it is necessary to perform the quantitative goodwill impairment test. The accounting guidance also allows entities the option to bypass the qualitative assessment for any reporting unit in any period and proceed directly to the quantitative impairment test. The entity may resume performing the qualitative assessment in any subsequent period. In evaluating goodwill on a qualitative basis, we review the business performance of each reporting unit and evaluate other relevant factors as identified in the relevant accounting guidance to determine whether it is more likely than not that an indicated impairment exists for any of our reporting units. We consider whether there are any negative macroeconomic conditions, industry specific conditions, market changes, increased competition, increased costs in doing business, management challenges, the legal environments and how these factors might impact company specific performance in future periods. As part of the analysis, we also consider fair value determinations for our reporting units that have been made at various points throughout the current and prior year for other purposes. If based on the qualitative analysis it is more likely than not that an impairment exists, we perform the quantitative impairment test.

Useful Life of Broadcast/Transmission System. Our satellite system includes the costs of our satellite construction, launch vehicles, launch insurance, capitalized interest, spare satellites, terrestrial repeater network and satellite uplink facilities. We monitor our satellites for impairment whenever events or changes in circumstances indicate that the carrying amount of the asset is not recoverable.

We operate two in-orbit Sirius satellites, FM-5 and FM-6, which launched in 2009 and 2013, respectively, and estimate they will operate effectively through the end of their depreciable lives in 2024 and 2028, respectively.

We currently operate three in-orbit XM satellites, XM-3, XM-5 and SXM-8. Our XM-3 satellite was launched in 2005 and is used as an in-orbit spare and reached the end of its depreciable life in 2020. Our XM-5 satellite was launched in 2010 and is expected to reach the end of its depreciable life in 2025. Our SXM-8 satellite was launched in 2021 and is expected to reach the end of its depreciable life in 2036. Our SXM-8 satellite replaced our XM-3 satellite. We have entered into agreements for the design, construction and launch of four additional satellites, SXM-9, SXM-10, SXM-11 and SXM-12.

Our satellites have been designed to last fifteen-years. Our in-orbit satellites may experience component failures which could adversely affect their useful lives. We monitor the operating condition of our in-orbit satellites and if events or circumstances indicate that the depreciable lives of our in-orbit satellites have changed, we will modify the depreciable life accordingly. If we were to revise our estimates, our depreciation expense would change.

Income Taxes. Deferred income taxes are recognized for the tax consequences related to temporary differences between the carrying amount of assets and liabilities for financial reporting purposes and the amounts used for tax purposes, based on enacted tax laws and statutory tax rates applicable to the periods in which the differences are expected to affect taxable income.

We assess the recoverability of deferred tax assets at each reporting date and, where applicable, a valuation allowance is recognized when, based on the weight of all available evidence, it is considered more likely than not that all, or some portion, of the deferred tax assets will not be realized. Our assessment includes an analysis of whether deferred tax assets will be realized in the ordinary course of operations based on the available positive and negative evidence, including the scheduling of deferred tax liabilities and forecasted income from operations. The underlying assumptions we use in forecasting future taxable income require significant judgment. In the event that actual income from operations differs from forecasted amounts, or if we change our estimates of forecasted income from operations, we could record additional charges or reduce allowances in order to adjust the carrying value of deferred tax assets to their realizable amount. Such adjustments could be material to our consolidated financial statements.

As of December 31, 2023, we had a valuation allowance of $88 relating to deferred tax assets that are not more likely than not to be realized due to the timing of certain state net operating loss limitations and acquired net operating losses that were not likely to be utilized.

ASC 740, *Income Taxes*, requires a company to first determine whether it is more likely than not that a tax position will be sustained based on its technical merits as of the reporting date, assuming that taxing authorities will examine the position and have full knowledge of all relevant information. A tax position that meets this more likely than not threshold is then measured and recognized at the largest amount of benefit that is greater than fifty percent likely to be realized upon effective settlement with a taxing authority. If the tax position is not more likely than not to be sustained, the gross amount of the unrecognized tax position will not be recorded in the financial statements but will be shown in tabular format within the uncertain income tax positions. Changes in recognition or measurement are reflected in the period in which the change in judgment occurs due to the following conditions: (1) the tax position is “more likely than not” to be sustained, (2) the tax position, amount, and/or timing is ultimately settled through negotiation or litigation, or (3) the statute of limitations for the tax position has expired. A number of years may elapse before an uncertain tax position is effectively settled or until there is a lapse in the applicable statute of limitations. We record interest and penalties related to uncertain tax positions in Income tax expense in our consolidated statements of comprehensive income. As of December 31, 2023, the gross liability for income taxes associated with uncertain tax positions was $171.

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 - 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, impairment, restructuring and acquisition costs, costs associated with the Transactions, other non-cash charges such as share-based payment expense, and legal settlements and reserves (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, 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 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 Years Ended December 31,	
	2023	2022
Net income:	$ 1,258	$ 1,213
Add back items excluded from Adjusted EBITDA:		
Legal settlements and reserves	24	—
Impairment, restructuring and acquisition costs	82	64
Share-based payment expense [1]	184	197
Depreciation and amortization	554	536
Interest expense	423	422
Other expense	5	9
Income tax expense	260	392
Adjusted EBITDA	$ 2,790	$ 2,833

(1) Allocation of share-based payment expense:

	For the Years Ended December 31,	
	2023	2022
Programming and content	$ 34	$ 34
Customer service and billing	5	6
Transmission	6	6
Sales and marketing	45	52
Engineering, design and development	46	39
General and administrative	48	60
Total share-based payment expense	$ 184	$ 197

Free cash flow - is derived from cash flow provided by operating activities, 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, including tax efficient investments in clean energy as well as 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 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 maturities. We believe free cash flow provides useful supplemental information to investors regarding our current cash flow, along with other GAAP measures (such as cash flows from operating and investing activities), to determine our financial condition, and to compare our operating performance to other communications, entertainment and media companies. Free cash flow is calculated as follows:

	For the Years Ended December 31, 2023	2022
Cash Flow information		
Net cash provided by operating activities	$ 1,850	$ 1,976
Net cash used in investing activities	(686)	(548)
Net cash used in financing activities	(1,005)	(1,562)
Free Cash Flow		
Net cash provided by operating activities	1,850	1,976
Additions to property and equipment	(650)	(426)
Sales of other investments	3	1
Free cash flow	$ 1,203	$ 1,551

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.

Subscriber acquisition cost, per installation - 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 Years Ended December 31, 2023	2022
Subscriber acquisition costs, excluding connected vehicle services	$ 359	$ 352
Less: margin from sales of radios and accessories, excluding connected vehicle services	(179)	(176)
	$ 180	$ 176
Installations (in thousands)	13,640	12,270
SAC, per installation [(a)]	$ 13.18	$ 14.32

(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 7A. *QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK*

As of December 31, 2023, we did not hold or issue any 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.

As of December 31, 2023, we also held the following investment:

In connection with the recapitalization of Sirius XM Canada on May 25, 2017, we loaned Sirius XM Canada $130.8 million. The carrying value of the loan as of December 31, 2023 was $8.0 million and approximated its fair value. The loan is denominated in Canadian dollars and it is subject to changes in foreign currency. The loan is considered a long-term investment with any unrealized gains or losses reported within Accumulated other comprehensive (loss) income. The loan has a term of fifteen years, bears interest at a rate of 7.62% per annum and includes customary covenants and events of default, including an event of default relating to Sirius XM Canada's failure to maintain specified leverage ratios. Had the Canadian to U.S. dollar exchange rate been 10% lower as of December 31, 2023, the value of this loan would have been approximately $0.8 million lower.

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, which is currently based on SOFR, plus an applicable rate based on its debt to operating cash flow ratio. We currently do not use interest rate derivative instruments to manage our exposure to interest rate fluctuations.

ITEM 8. *FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA*

See the Index to Consolidated Financial Statements and financial statements and financial statement schedule contained in Part IV, Item 15, herein, which are incorporated herein by reference.

ITEM 9. *CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE*

None.

ITEM 9A. *CONTROLS AND PROCEDURES*

Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our reports under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's 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. Any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. An evaluation was performed under the supervision and with the participation of our management, including Jennifer C. Witz, our Chief Executive Officer, and Thomas D. Barry, our Executive Vice President 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 Exchange Act) as of December 31, 2023. 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 December 31, 2023 at the reasonable assurance level.

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 Exchange Act) during the year ended December 31, 2023 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rule 13a-15(f) and 15d-15(f) under the Exchange Act. We have performed an evaluation under the supervision and with the participation of our management, including our Chief Executive Officer and our Chief Financial Officer, of the effectiveness of our internal control over financial reporting. Our management used the Internal Control-Integrated Framework (*2013*) issued by the Committee of Sponsoring Organizations of the Treadway Commission to perform this evaluation. Based on that evaluation, our management, including our Chief Executive Officer and Chief Financial Officer, concluded that our internal control over financial reporting was effective as of December 31, 2023.

KPMG LLP, an independent registered public accounting firm, which has audited and reported on the consolidated financial statements contained in this Annual Report on Form 10-K, has issued its report on the effectiveness of our internal control over financial reporting.

Audit Report of the Independent Registered Public Accounting Firm

The effectiveness of our internal control over financial reporting as of December 31, 2023 has been audited by KPMG LLP, an independent registered public accounting firm, as stated in their audit report appearing on page F-4 of this Annual Report on Form 10-K.

ITEM 9B. ***OTHER INFORMATION***

None.

ITEM 9C. ***DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS***

None.

PART III

ITEM 10. *DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE*

Information about our executive officers is contained in the discussion entitled "Information About Our Executive Officers" in Part I of this Annual Report on Form 10-K.

The additional information required by this Item 10 is incorporated in this report by reference to the applicable information in our definitive proxy statement for the 2024 annual meeting of stockholders set forth under the captions *Stock Ownership*, *Governance of the Company, Item 1. Election of Directors* and *Item 2. Ratification of Independent Registered Public Accountants*, which we expect to file with the Securities and Exchange Commission prior to May 1, 2024.

Code of Ethics

We have adopted a code of ethics that applies to all employees, including executive officers, and to directors. The Code of Ethics is available on the Corporate Governance page of our website at *www.siriusxm.com.* If we ever were to amend or waive any provision of our Code of Ethics that applies to our principal executive officer, principal financial officer, principal accounting officer or any person performing similar functions, we intend to satisfy our disclosure obligations with respect to any such waiver or amendment by posting such information on our internet website set forth above rather than filing a Form 8-K.

ITEM 11. *EXECUTIVE COMPENSATION*

The information required by this Item 11 is incorporated in this report by reference to the applicable information in our definitive proxy statement for the 2024 annual meeting of stockholders set forth under the captions *Item 1. Election of Directors* and *Executive Compensation*, which we expect to file with the Securities and Exchange Commission prior to May 1, 2024.

ITEM 12. *SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS*

Certain information required by this Item 12 is set forth under the heading "Equity Compensation Plan Information" in Part II, Item 5, of this Annual Report on Form 10-K.

The additional information required by this Item 12 is incorporated in this report by reference to the applicable information in our definitive proxy statement for the 2024 annual meeting of stockholders set forth under the caption *Stock Ownership*, which we expect to file with the Securities and Exchange Commission prior to May 1, 2024.

ITEM 13. *CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE*

The information required by this Item 13 is incorporated in this report by reference to the applicable information in our definitive proxy statement for the 2024 annual meeting of stockholders set forth under the captions *Governance of the Company* and *Item 1. Election of Directors*, which we expect to file with the Securities and Exchange Commission prior to May 1, 2024.

ITEM 14. *PRINCIPAL ACCOUNTANT FEES AND SERVICES*

Our independent registered public accounting firm is KPMG LLP, New York, NY, Auditor ID: 185.

The information required by this Item 14 is incorporated in this report by reference to the applicable information in our definitive proxy statement for the 2024 annual meeting of stockholders set forth under the caption *Item 2. Ratification of Independent Registered Public Accountants* - *Principal Accountant Fees and Services*, which we expect to file with the Securities and Exchange Commission prior to May 1, 2024.

PART IV

ITEM 15. *EXHIBIT AND FINANCIAL STATEMENT SCHEDULES*

Documents filed as part of this report:

(1) Financial Statements. See Index to Consolidated Financial Statements appearing on page F-1.

(2) Financial Statement Schedules. See Index to Consolidated Financial Statements appearing on page F-1.

(3) Exhibits. See Exhibit Index, which is incorporated herein by reference.

ITEM 16. *FORM 10-K SUMMARY*

None.

EXHIBIT INDEX

Exhibit	Description
2.1	Certificate of Ownership and Merger, dated as of January 12, 2011, merging XM Satellite Radio Inc. with and into Sirius XM Radio Inc. (incorporated by reference to Exhibit 3.1 to Sirius XM Radio Inc.'s Current Report on Form 8-K filed on January 12, 2011 (File No. 001-34295)).
2.2	Agreement and Plan of Merger, dated as of November 14, 2013, by and among Sirius XM Radio Inc., Sirius XM Holdings Inc. and Sirius XM Merger Sub Inc. (incorporated by reference to Exhibit 2.1 to Sirius XM Holdings Inc.'s Current Report on Form 8-K filed on November 15, 2013 (File No. 001-34295)).
2.3	Agreement and Plan of Merger and Reorganization by and among Sirius XM Holdings Inc., Pandora Media, Inc. and White Oaks Acquisition Corp., dated as of September 23, 2018 (incorporated by reference to Exhibit 2.1 to Sirius XM Holdings Inc.'s Current Report on Form 8-K filed on September 24, 2018 (File No. 001-34295)).
2.4†	Agreement and Plan of Merger, dated as of December 11, 2023, by and among Sirius XM Holdings Inc., Liberty Media Corporation, Liberty Sirius XM Holdings Inc. and Radio Merger Sub, LLC (incorporated by reference to Exhibit 2.1 to Sirius XM Holdings Inc.'s Current Report on Form 8-K filed on December 13, 2023 (File No. 001-34295)).
3.1	Amended and Restated Certificate of Incorporation of Sirius XM Holdings Inc. (incorporated by reference to Exhibit 3.1 to Sirius XM Holdings Inc.'s Current Report on Form 8-K filed on November 15, 2013 (File No. 001-34295)).
3.2	Amended and Restated By-Laws of Sirius XM Holdings Inc. (incorporated by reference to Exhibit 3.2 to Sirius XM Holdings Inc.'s Current Report on Form 8-K filed on November 15, 2013 (File No. 001-34295)).
4.1	Form of certificate for shares of Sirius XM Holdings Inc.'s common stock (incorporated by reference to Exhibit 4.1 to Sirius XM Holdings Inc.'s Annual Report on Form 10-K for the year ended December 31, 2013 (File No. 001-34295)).
4.2	Indenture, dated as of July 5, 2017, among Sirius XM Radio Inc., the guarantors named therein and U.S. Bank National Association, as trustee, relating to the 5.000% Senior Notes due 2027 (incorporated by reference to Exhibit 4.2 to Sirius XM Holdings Inc.'s Current Report on Form 8-K filed on July 5, 2017 (File No. 001-34295)).
4.3	Indenture, dated as of June 7, 2019, among Sirius XM Radio Inc., the guarantors named therein and U.S. Bank National Association, as trustee, relating to the 5.500% Senior Notes due 2029 (incorporated by reference to Exhibit 4.1 to Sirius XM Holdings Inc.'s Current Report on Form 8-K filed on June 7, 2019 (File No. 001-34295)).
4.4	Indenture, dated as of June 11, 2020, relating to the 4.125% Senior Notes due 2030, among Sirius XM Radio Inc., the guarantors named therein and U.S. Bank National Association, as trustee (incorporated by reference to Exhibit 4.1 to Sirius XM Holdings Inc.'s Current Report on Form 8-K dated June 11, 2020 (File No. 001-34295)).
4.5	Indenture, dated as of June 21, 2021, relating to the 4.000% Senior Notes due 2028, among Sirius XM Radio Inc., the guarantors named therein and U.S. Bank National Association, as trustee (incorporated by reference to Exhibit 4.1 to Sirius XM Holdings Inc.'s Current Report on Form 8-K dated June 21, 2021 (File No. 001-34295)).
4.6	Indenture, dated as of August 16, 2021, relating to the 3.125% Senior Notes due 2026, among Sirius XM Radio Inc., the guarantors named therein and U.S. Bank National Association, as trustee (incorporated by reference to Exhibit 4.1 to Sirius XM Holdings Inc.'s Current Report on Form 8-K dated August 16, 2021 (File No. 001-34295)).
4.7	Indenture, dated as of August 16, 2021, relating to the 3.875% Senior Notes due 2031, among Sirius XM Radio Inc., the guarantors named therein and U.S. Bank National Association, as trustee (incorporated by reference to Exhibit 4.2 to Sirius XM Holdings Inc.'s Current Report on Form 8-K dated August 16, 2021 (File No. 001-34295)).
4.8	Investment Agreement, dated as of February 17, 2009, between Sirius XM Radio Inc. and Liberty Radio LLC (incorporated by reference to Exhibit 4.55 to Sirius XM Radio Inc.'s Annual Report on Form 10-K for the year ended December 31, 2008 (File No. 001-34295)).
4.9	Assignment and Assumption of Investment Agreement among Sirius XM Radio Inc., Sirius XM Holdings Inc. and Liberty Radio LLC, dated as of November 15, 2013 (incorporated by reference to Exhibit 4.15 to Sirius XM Holdings Inc.'s Annual Report on Form 10-K for the year ended December 31, 2013 (File No. 001-34295)).
4.10	Description of Registrant's Securities (incorporated by reference to Exhibit 4.15 to Sirius XM Holdings Inc.'s Annual Report on Form 10-K for the year ended December 31, 2019 (File No. 001-34295)).
10.1†	Reorganization Agreement, dated as of December 11, 2023, by and among Sirius XM Holdings Inc., Liberty Media Corporation and Liberty Sirius XM Holdings Inc. (incorporated by reference to Exhibit 10.1 to Sirius XM Holdings Inc.'s Current Report on Form 8-K filed on December 13, 2023 (File No. 001-34295)).

Exhibit	Description
10.2	Voting Agreement, dated as of December 11, 2023, by and among Sirius XM Holdings Inc., Liberty Media Corporation, Liberty Sirius XM Holdings Inc. and each of The John C. Malone 1995 Revocable Trust, The Leslie A. Malone 1995 Revocable Trust, The Malone Family Land Preservation Foundation and John C. Malone June 2003 Charitable Remainder Unitrust (incorporated by reference to Exhibit 10.2 to Sirius XM Holdings Inc.'s Current Report on Form 8-K filed on December 13, 2023 (File No. 001-34295)).
10.3	Credit Agreement, dated as of December 5, 2012, among Sirius XM Radio Inc., JPMorgan Chase Bank, N.A. as administrative agent, and the other agents and lenders party thereto (incorporated by reference to Exhibit 10.1 to Sirius XM Radio Inc.'s Current Report on Form 8-K filed on December 10, 2012 (File No. 001-34295)).
10.4	Amendment No. 1, dated as of April 22, 2014, to the Credit Agreement, dated as of December 5, 2012, among Sirius XM Radio Inc., the Lenders party thereto and JPMorgan Chase Bank, N.A. as administrative agent for the Lenders, as collateral agent for the Secured Parties and as an Issuing Bank (incorporated by reference to Exhibit 10.1 to Sirius XM Holdings Inc.'s Current Report on Form 8-K filed on April 22, 2014 (File No. 001-34295)).
10.5	Amendment No. 2, dated as of June 16, 2015, to the Credit Agreement, dated as of December 5, 2012, among Sirius XM Radio Inc., JPMorgan Chase Bank, N.A., as administrative agent, and the other agents and lenders parties thereto (incorporated by reference to Exhibit 10.1 to Sirius XM Holdings Inc.'s Current Report on Form 8-K filed on June 19, 2015 (File No. 001-34295)).
10.6	Amendment No. 3, dated as of June 29, 2018, to the Credit Agreement, dated as of December 5, 2012, among Sirius XM Radio Inc., JPMorgan Chase Bank, N.A., as administrative agent, and the other agents and lenders parties thereto (incorporated by reference to Exhibit 10.1 to Sirius XM Holdings Inc.'s Current Report on Form 8-K filed on July 3, 2018 (File No. 001-34295)).
10.7	Amendment No. 5, dated as of August 31, 2021, to the Credit Agreement, dated as of December 5, 2012, among Sirius XM Radio Inc., JPMorgan Chase Bank, N.A., as administrative agent, and the other agents and lenders parties thereto (incorporated by reference to Exhibit 10.1 to Sirius XM Holdings Inc.'s Current Report on Form 8-K filed on September 1, 2021 (File No. 001-34295)).
10.8	Amendment No. 6, dated as of April 11, 2022, to the Credit Agreement, dated as of December 5, 2012, among Sirius XM Radio Inc., JPMorgan Chase Bank, N.A., as administrative agent, and the other agents and lenders parties thereto (incorporated by reference to Exhibit 10.1 to Sirius XM Holdings Inc.'s Current Report on Form 8-K filed on April 11. 2022 (File No. 001-34295).
10.9	Amendment No. 7, dated as of March 29, 2023, to the Credit Agreement, dated as of December 5, 2012, among Sirius XM Radio Inc., JPMorgan Chase Bank, N.A., as administrative agent, and the other agents and lenders parties thereto (incorporated by reference to Exhibit 10.1 to Sirius XM Holdings Inc.'s Quarterly Report on Form 10-Q filed on April 27. 2023 (File No. 001-34295).
10.10	Amendment No. 8, dated as of December 29, 2023, to the Credit Agreement, dated as of December 5, 2012, among Sirius XM Radio Inc., JPMorgan Chase Bank, N.A., as administrative agent, and the other agents and lenders parties thereto(incorporated by reference to Exhibit 10.1 to Sirius XM Holdings Inc.'s Current Report on Form 8-K filed on January 3. 2024 (File No. 001-34295).
**10.11	Technology Licensing Agreement among XM Satellite Radio Inc., XM Satellite Radio Holdings Inc., WorldSpace Management Corporation and American Mobile Satellite Corporation, dated as of January 1, 1998, amended by Amendment No. 1 to Technology Licensing Agreement (incorporated by reference to Exhibit 10.4 to Amendment No. 1 to XM Satellite Radio Holdings Inc.'s Registration Statement on Form S-1 (File No. 333-83619)).
*10.12	Amended and Restated Sirius Satellite Radio 2003 Long-Term Stock Incentive Plan (incorporated by reference to Exhibit 10.10 to Sirius XM Radio Inc.'s Quarterly Report on Form 10-Q for the quarter ended June 30, 2004 (File No. 001-34295)).
*10.13	XM Satellite Radio Holdings Inc. 2007 Stock Incentive Plan (incorporated by reference to Exhibit 10.5 to XM Satellite Radio Holdings Inc.'s Quarterly Report on Form 10-Q for the quarter ended June 30, 2007 (File No. 000-27441)).
*10.14	Form of Non-Qualified Stock Option Agreement pursuant to the XM Satellite Radio Holdings Inc. 2007 Stock Incentive Plan (incorporated by reference to Exhibit 10.2 to XM Satellite Radio Holdings Inc.'s Current Report on Form 8-K filed June 1, 2007 (File No. 000-27441)).
*10.15	Form of Restricted Stock Agreement pursuant to the XM Satellite Radio Holdings Inc. 2007 Stock Incentive Plan (incorporated by reference to Exhibit 10.3 to XM Satellite Radio Holdings Inc.'s Current Report on Form 8-K filed June 1, 2007 (File No. 000-27441)).
*10.16	Sirius XM Radio 401(k) Savings Plan, January 1, 2009 Restatement (incorporated by reference to Exhibit 10.30 to Sirius XM Radio Inc.'s Annual Report on Form 10-K for the year ended December 31, 2009 (File No. 001-34295)).

Exhibit	Description
*10.17	Sirius XM Radio Inc. 2009 Long-Term Stock Incentive Plan (incorporated by reference to Exhibit 4.9 to Sirius XM Radio Inc.'s Registration Statement on Form S-8 (File No. 333-160386)).
*10.18	Sirius XM Holdings Inc. 2015 Long-Term Stock Incentive Plan (incorporated by reference to Appendix A to Sirius XM Holdings Inc.'s definitive Proxy Statement on Schedule 14A filed on April 6, 2015 (File No. 001-34295)).
*10.19	Form of Director Non-Qualified Stock Option Agreement pursuant to the Sirius XM Radio Inc. 2009 Long-Term Stock Incentive Plan (incorporated by reference to Exhibit 10.34 to Sirius XM Radio Inc.'s Annual Report on Form 10-K for the year ended December 31, 2011 (File No. 001-34295)).
*10.20	Form of Director Non-Qualified Stock Option Agreement pursuant to the Sirius XM Holdings Inc. 2009 Long-Term Stock Incentive Plan (incorporated by reference to Exhibit 10.18 to Sirius XM Holdings Inc.'s Annual Report for the year ended December 31, 2014 (File No. 001-34295)).
*10.21	Form of Non-Qualified Stock Option Agreement pursuant to the Sirius XM Radio Inc. 2009 Long-Term Stock Incentive Plan (incorporated by reference to Exhibit 10.35 to Sirius XM Radio Inc.'s Annual Report on Form 10-K for the year ended December 31, 2011 (File No. 001-34295)).
*10.22	Form of Non-Qualified Stock Option Agreement pursuant to the Sirius XM Holdings Inc. 2009 Long-Term Stock Incentive Plan (incorporated by reference to Exhibit 10.20 to Sirius XM Holdings Inc.'s Annual Report filed for the year ended December 31, 2014 (File No. 001-34295)).
*10.23	Form of Director Non-Qualified Stock Option Agreement pursuant to the Sirius XM Holdings Inc. 2015 Long-Term Stock Incentive Plan (incorporated by reference to Exhibit 10.22 to Sirius XM Holdings Inc.'s Annual Report on Form 10-K for the year ended December 31, 2015 (File No. 001-34295)).
*10.24	Form of Non-Qualified Stock Option Agreement pursuant to the Sirius XM Holdings Inc. 2015 Long-Term Stock Incentive Plan (incorporated by reference to Exhibit 10.23 to Sirius XM Holdings Inc.'s Annual Report on Form 10-K for the year ended December 31, 2015 (File No. 001-34295)).
*10.25	Form of SVP Restricted Stock Unit Agreement pursuant to the Sirius XM Holdings Inc. 2015 Long-Term Stock Incentive Plan (incorporated by reference to Exhibit 10.24 to Sirius XM Holdings Inc.'s Annual Report on Form 10-K for the year ended December 31, 2016 (001-34295)).
*10.26	Form of Performance-Based Restricted Stock Unit Agreement pursuant to the Sirius XM Holdings Inc. 2015 Long-Term Stock Incentive Plan (incorporated by reference to Exhibit 10.25 to Sirius XM Holdings Inc.'s Annual Report on Form 10-K for the year ended December 31, 2016 (001-34295)).
*10.27	Form of SVP Non-Qualified Stock Option Agreement pursuant to the Sirius XM Holdings Inc. 2015 Long-Term Stock Incentive Plan (incorporated by reference to Exhibit 10.26 to Sirius XM Holdings Inc.'s Annual Report on Form 10-K for the year ended December 31, 2016 (001-34295)).
*10.28	Form of Option Award Agreement between Sirius XM Radio Inc. and James E. Meyer (incorporated by reference to Exhibit 10.1 to Sirius XM Radio Inc.'s Current Report on Form 8-K filed October 16, 2009 (File No. 001-34295)).
*10.29	Employment Agreement, dated as of November 21, 2022 between Sirius XM Radio Inc. and Patrick L. Donnelly (incorporated by reference to Exhibit 10.1 to Sirius XM Holdings Inc.'s Current Report on Form 8-K filed on November 22, 2022 (File No. 001-34295)).
*10.30	Employment Agreement, dated as of December 14, 2023 between Sirius XM Radio Inc. and Jennifer Witz (incorporated by reference to Exhibit 10.1 to Sirius XM Holdings Inc.'s Current Report on Form 8-K filed on December 15, 2023 (File No. 001-34295)).
*10.31	Letter Agreement, dated December 14, 2023, regarding private use of aircraft between Sirius XM Radio Inc. and Jennifer C. Witz (incorporated by reference to Exhibit 10.2 to Sirius XM Holdings Inc.'s Current Report on Form 8-K filed on December 15, 2023 (File No. 001-34295)).
*10.32	Employment Agreement, dated as of December 27, 2020 between Sirius XM Radio Inc. and Scott A. Greenstein (incorporated by reference to Exhibit 10.1 to Sirius XM Holdings Inc.'s Current Report on Form 8-K filed on December 8, 2020 (File No. 001-34295)).
*10.33	Employment Agreement, dated June 28, 2022, between Sirius XM Radio Inc. and Joseph A. Verbrugge (incorporated by reference to Exhibit 10.1 to Sirius XM Holdings Inc.'s Current Report on Form 8-K filed on June 29, 2022 (File No. 001-34295)).
*10.34	Employment Agreement, dated December 10, 2021, between Sirius XM Radio Inc. and Joseph Inzerillo (incorporated by reference to Exhibit 10.1 to Sirius XM Holdings Inc.'s Current Report on Form 8-K filed on December 13, 2021 (File No. 001-34295)).

Exhibit	Description
*10.35	Employment Agreement, dated April 3, 2023 between Sirius XM Radio Inc. and Thomas D. Barry (incorporated by reference to Exhibit 10.1 to Sirius XM Holdings Inc.'s Current Report on Form 8-K filed on April 4, 2023 (File No. 001-34295)).
*10.36	Assignment and Assumption Agreement, dated as of November 15, 2013, among Sirius XM Holdings Inc. and Sirius XM Radio Inc. (incorporated by reference to Exhibit 10.1 to Sirius XM Holdings Inc.'s Current Report on Form 8-K filed on November 15, 2013 (File No. 001-34295)).
*10.37	Omnibus Amendment, dated November 15, 2013, to the XM Satellite Radio Holdings Inc. Talent Option Plan, the XM Satellite Radio Holdings Inc. 1998 Shares Award Plan, as amended, the Amended and Restated Sirius Satellite Radio 2003 Long-Term Stock Incentive Plan, the XM Satellite Radio Holdings Inc. 2007 Stock Incentive Plan and the Sirius XM Radio Inc. 2009 Long-Term Stock Incentive Plan and their Related Stock Option Agreements, Restricted Stock Agreements and Restricted Stock Unit Agreements (incorporated by reference to Exhibit 10.2 to Sirius XM Holdings Inc.'s Current Report on Form 8-K filed on November 15, 2013 (File No. 001-34295)).
*10.38	Sirius XM Holdings Inc. Deferred Compensation Plan (incorporated by reference to Exhibit 10.2 to Sirius XM Holdings Inc.'s Current Report on Form 8-K filed on June 30, 2015 (File No. 001-34295)).
10.39	Tax Sharing Agreement, dated as of February 1, 2021 between Sirius XM Holdings Inc. and Liberty Media Corporation (incorporated by reference to Exhibit 10.44 to Sirius XM Holdings Inc.'s Annual Report on Form 10-K for the year ended December 31, 2020 filed on February 2, 2021 (File No. 001-34295)).
10.40	Section 253 Agreement, dated as of November 1, 2021, between Sirius XM Holdings Inc. and Liberty Media Corporation (incorporated by reference to Exhibit 10.2 to Sirius XM Holdings Inc.'s Current Report on Form 8-K filed on November 4, 2021 (File No. 001-34295)).
21.1	List of Subsidiaries (filed herewith).
23.1	Consent of KPMG LLP (filed herewith).
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 Thomas D. Barry, 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 (furnished herewith).
32.2	Certificate of Thomas D. Barry, 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 (furnished herewith).
97.1	Incentive Compensation Clawback Policy (filed herewith).
99.1	Amended and Restated Certificate of Incorporation of Sirius XM Radio Inc., as amended (incorporated by reference to Exhibit 3.3 to Sirius XM Holdings Inc.'s Annual Report on Form 10-K for the year ended December 31, 2013 (File No. 001-34295)).
99.2	Amended and Restated By-Laws of Sirius XM Radio Inc., as amended (incorporated by reference to Exhibit 3.4 to Sirius XM Holdings Inc.'s Annual Report on Form 10-K for the year ended December 31, 2013 (File No. 001-34295)).
101.1	The following financial information from our Annual Report on Form 10-K for the year ended December 31, 2023 formatted in Inline eXtensible Business Reporting Language (Inline XBRL): (i) Consolidated Statements of Comprehensive Income for the years ended December 31, 2023, 2022 and 2021; (ii) Consolidated Balance Sheets as of December 31, 2023 and 2022; (iii) Consolidated Statements of Stockholders' (Deficit) Equity for the years ended December 31, 2023, 2022 and 2021; (iv) Consolidated Statements of Cash Flows for the years ended December 31, 2023, 2022 and 2021; and (v) Combined Notes to Consolidated Financial Statements.
104.1	Cover Page Interactive Data File (Embedded within the Inline XBRL document and included in Exhibit 101.1)

* This document has been identified as a management contract or compensatory plan or arrangement.

** Pursuant to the Commission's Orders Granting Confidential Treatment under Rule 406 of the Securities Act of 1933 or Rule 24(b)-2 under the Securities Exchange Act of 1934, certain confidential portions of this Exhibit were omitted by means of redacting a portion of the text.

† Schedules have been omitted pursuant to Item 601(b)(2) of Regulation S-K. Holdings hereby undertakes to furnish supplemental copies of any of the omitted schedules upon request by the Securities and Exchange Commission ("SEC"); provided, however, that Holdings may request confidential treatment pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended, for any schedules so furnished.

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 for any other 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 and may not describe the actual state of affairs for any other purpose as of the date they were made 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 1st day of February 2024.

SIRIUS XM HOLDINGS INC.

By: /s/ Thomas D. Barry

Thomas D. Barry
Executive Vice President and Chief Financial Officer
(Principal Financial Officer and Authorized Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Gregory B. Maffei **(Gregory B. Maffei)**	Chairman of the Board of Directors and Director	February 1, 2024
/s/ James E. Meyer **(James E. Meyer)**	Vice Chairman of the Board of Directors and Director	February 1, 2024
/s/ Jennifer C. Witz **(Jennifer C. Witz)**	Chief Executive Officer and Director (Principal Executive Officer)	February 1, 2024
/s/ Thomas D. Barry **(Thomas D. Barry)**	Executive Vice President and Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	February 1, 2024
/s/ Cary Krefetz **(Cary Krefetz)**	Senior Vice President and Controller	February 1, 2024
/s/ David A. Blau **(David A. Blau)**	Director	February 1, 2024
/s/ Eddy W. Hartenstein **(Eddy W. Hartenstein)**	Director and Lead Independent Director	February 1, 2024
/s/ Robin S. P. Hickenlooper **(Robin S. P. Hickenlooper)**	Director	February 1, 2024
/s/ James P. Holden **(James P. Holden)**	Director	February 1, 2024
/s/ Evan D. Malone **(Evan D. Malone)**	Director	February 1, 2024
/s/ Jonelle Procope **(Jonelle Procope)**	Director	February 1, 2024
/s/ Michael Rapino **(Michael Rapino)**	Director	February 1, 2024
/s/ Kristina M. Salen **(Kristina M. Salen)**	Director	February 1, 2024
/s/ Carl E. Vogel **(Carl E. Vogel)**	Director	February 1, 2024
/s/ David M. Zaslav **(David M. Zaslav)**	Director	February 1, 2024

SIRIUS XM HOLDINGS INC. AND SUBSIDIARIES
INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors
Sirius XM Holdings Inc.:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Sirius XM Holdings Inc. and subsidiaries (the Company) as of December 31, 2023 and 2022, the related consolidated statements of comprehensive income, stockholders' equity (deficit), and cash flows for each of the years in the three-year period ended December 31, 2023, and the related notes and financial statement schedule II (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2023 and 2022, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2023, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2023, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated February 1, 2024 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of a critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Sufficiency of audit evidence over certain subscriber and advertising revenues

As discussed in Notes 2 and 18 to the consolidated financial statements, and disclosed in the consolidated statements of comprehensive income, the Company generated $8,953 million of revenues, of which $6,342 million was Sirius XM subscriber revenue and $1,589 million was Pandora advertising revenue, for the year ended December 31, 2023. The Company's accounting for these subscriber and advertising revenues involved multiple information technology (IT) systems.

We identified the evaluation of the sufficiency of audit evidence related to Sirius XM subscriber and Pandora advertising revenue as a critical audit matter. Evaluating the sufficiency of audit evidence obtained required auditor judgment due to the number of IT applications used by the Company that involved IT professionals with specialized skills and knowledge.

The following are the primary procedures we performed to address this critical audit matter. We applied auditor judgment to determine the nature and extent of procedures to be performed over subscriber and advertising revenues. We evaluated the design and tested the operating effectiveness of certain internal controls related to the Sirius XM subscriber and Pandora advertising revenue recognition processes. We involved IT professionals with specialized skills and knowledge, who assisted in testing certain IT application controls and general IT controls used by the Company in its revenue recognition processes and testing the interface of relevant revenue data between different IT systems used in the revenue recognition processes. For Sirius XM subscriber revenue, we assessed the recorded revenue by comparing the total cash received during the year, adjusted for reconciling items, to the revenue recorded in the general ledger. For a sample of Pandora advertising revenues, we traced the recorded amounts to underlying source documents and system reports. We evaluated the sufficiency of audit evidence obtained by assessing the results of procedures performed, including the appropriateness of the nature and extent of such evidence.

/s/ KPMG LLP

We have served as the Company's auditor since 2008.

New York, New York
February 1, 2024

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors
Sirius XM Holdings Inc.:

Opinion on Internal Control Over Financial Reporting

We have audited Sirius XM Holdings Inc. and subsidiaries' (the Company) internal control over financial reporting as of December 31, 2023, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2023, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2023 and 2022, the related consolidated statements of comprehensive income, stockholders' equity (deficit), and cash flows for each of the years in the three-year period ended December 31, 2023, and the related notes and financial statement schedule II (collectively, the consolidated financial statements), and our report dated February 1, 2024 expressed an unqualified opinion on those consolidated financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying *Management's Report on Internal Control over Financial Reporting*. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed 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. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ KPMG LLP

New York, New York
February 1, 2024

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

(in millions, except per share data)	For the Years Ended December 31, 2023	2022	2021
Revenue:			
Subscriber revenue	$ 6,866	$ 6,892	$ 6,614
Advertising revenue	1,758	1,772	1,730
Equipment revenue	193	189	201
Other revenue	136	150	151
Total revenue	8,953	9,003	8,696
Operating expenses:			
Cost of services:			
Revenue share and royalties	2,895	2,802	2,672
Programming and content	618	604	559
Customer service and billing	476	497	501
Transmission	206	214	218
Cost of equipment	14	13	18
Subscriber acquisition costs	359	352	325
Sales and marketing	931	1,075	1,056
Engineering, design and development	322	285	265
General and administrative	550	525	514
Depreciation and amortization	554	536	533
Impairment, restructuring and acquisition costs	82	64	20
Total operating expenses	7,007	6,967	6,681
Income from operations	1,946	2,036	2,015
Other (expense) income:			
Interest expense	(423)	(422)	(415)
Loss on extinguishment of debt	—	—	(83)
Other (expense) income	(5)	(9)	9
Total other expense	(428)	(431)	(489)
Income before income taxes	1,518	1,605	1,526
Income tax expense	(260)	(392)	(212)
Net income	$ 1,258	$ 1,213	$ 1,314
Foreign currency translation adjustment, net of tax	7	(19)	—
Total comprehensive income	$ 1,265	$ 1,194	$ 1,314
Net income per common share:			
Basic	$ 0.33	$ 0.31	$ 0.32
Diluted	$ 0.32	$ 0.31	$ 0.32
Weighted average common shares outstanding:			
Basic	3,858	3,916	4,062
Diluted	3,888	3,990	4,143

See accompanying notes to the consolidated financial statements.

SIRIUS XM HOLDINGS INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS

(in millions, except per share data)	December 31, 2023	December 31, 2022
ASSETS		
Current assets:		
Cash and cash equivalents	$ 216	$ 57
Receivables, net	709	655
Related party current assets	36	42
Prepaid expenses and other current assets	310	284
Total current assets	1,271	1,038
Property and equipment, net	1,754	1,499
Intangible assets, net	2,905	3,050
Goodwill	3,249	3,249
Related party long-term assets	497	488
Deferred tax assets	155	147
Operating lease right-of-use assets	279	315
Other long-term assets	264	236
Total assets	$ 10,374	$ 10,022
LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIT)		
Current liabilities:		
Accounts payable and accrued expenses	$ 1,306	$ 1,248
Accrued interest	166	165
Current portion of deferred revenue	1,195	1,322
Current maturities of debt	505	196
Operating lease current liabilities	46	50
Related party current liabilities	8	—
Total current liabilities	3,226	2,981
Long-term deferred revenue	88	81
Long-term debt	8,690	9,256
Deferred tax liabilities	509	565
Operating lease liabilities	292	320
Other long-term liabilities	134	170
Total liabilities	12,939	13,373
Commitments and contingencies (Note 16)		
Stockholders’ equity (deficit):		
Common stock, par value $0.001 per share; 9,000 shares authorized; 3,843 and 3,891 shares issued and outstanding at December 31, 2023 and December 31, 2022, respectively	4	4
Accumulated other comprehensive loss, net of tax	3	(4)
Accumulated deficit	(2,572)	(3,351)
Total stockholders’ equity (deficit)	(2,565)	(3,351)
Total liabilities and stockholders’ equity (deficit)	$ 10,374	$ 10,022

See accompanying notes to the consolidated financial statements.

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

(in millions)	Common Stock Shares	Common Stock Amount	Accumulated Other Comprehensive Income (Loss)	Additional Paid-in Capital	Treasury Stock Shares	Treasury Stock Amount	Accumulated Deficit	Total Stockholders' Equity (Deficit)
Balance at January 1, 2021	4,176	$ 4	$ 15	$ —	3	$ (19)	$ (2,285)	$ (2,285)
Comprehensive income, net of tax	—	—	—	—	—	—	1,314	1,314
Share-based payment expense	—	—	—	215	—	—	—	215
Exercise of stock options and vesting of restricted stock units	38	—	—	10	—	—	—	10
Withholding taxes on net share settlement of stock-based compensation	—	—	—	(103)	—	—	—	(103)
Cash dividends paid on common stock, $0.0658845 per share	—	—	—	(126)	—	—	(142)	(268)
Issuance of restricted stock units in connection with business acquisition	—	—	—	4	—	—	—	4
Common stock repurchased	—	—	—	—	245	(1,512)	—	(1,512)
Common stock retired	(246)	—	—	—	(247)	1,523	(1,523)	—
Balance at December 31, 2021	3,968	$ 4	$ 15	$ —	1	$ (8)	$ (2,636)	$ (2,625)
Cumulative effect of change in accounting principles	—	—	—	—	—	—	(10)	(10)
Comprehensive income, net of tax	—	—	(19)	—	—	—	1,213	1,194
Share-based payment expense	—	—	—	213	—	—	—	213
Exercise of stock options and vesting of restricted stock units	27	—	—	4	—	—	—	4
Withholding taxes on net share settlement of stock-based compensation	—	—	—	(114)	—	—	—	(114)
Capital contribution to Liberty Media related to Tax Sharing Agreement	—	—	—	—	—	—	(35)	(35)
Cash dividends paid on common stock, $0.3400845 per share	—	—	—	(103)	—	—	(1,236)	(1,339)
Common stock repurchased	—	—	—	—	103	(639)	—	(639)
Common stock retired	(104)	—	—	—	(104)	647	(647)	—
Balance at December 31, 2022	3,891	$ 4	$ (4)	$ —	—	$ —	$ (3,351)	$ (3,351)
Comprehensive income, net of tax	—	—	7	—	—	—	1,258	1,265
Share-based payment expense	—	—	—	202	—	—	—	202
Exercise of stock options and vesting of restricted stock units	21	—	—	4	—	—	—	4
Withholding taxes on net share settlement of stock-based compensation	—	—	—	(63)	—	—	—	(63)
Capital contribution from Liberty Media related to Tax Sharing Agreement	—	—	—	—	—	—	35	35
Cash dividends paid on common stock, $0.0992 per share	—	—	—	(143)	—	—	(240)	(383)
Common stock repurchased	—	—	—	—	69	(274)	—	(274)
Common stock retired	(69)	—	—	—	(69)	274	(274)	—
Balance at December 31, 2023	3,843	$ 4	$ 3	$ —	—	$ —	$ (2,572)	$ (2,565)

See accompanying notes to the consolidated financial statements.

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

	For the Years Ended December 31,		
(in millions)	2023	2022	2021
Cash flows from operating activities:			
Net income	$ 1,258	$ 1,213	$ 1,314
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	554	536	533
Non-cash impairment and restructuring costs	26	61	24
Non-cash interest expense, net of amortization of premium	14	15	21
Change in fair value of contingent consideration	—	—	(17)
Provision for doubtful accounts	59	59	53
Loss on extinguishment of debt	—	—	83
Loss on unconsolidated entity investments, net	15	5	18
Dividend received from unconsolidated entity investment	—	8	2
(Gain) loss on other investments	(7)	10	(5)
Share-based payment expense	184	197	202
Deferred income tax (benefit) expense	(64)	202	131
Amortization of right-of-use assets	45	49	50
Changes in operating assets and liabilities:			
Receivables	(114)	10	(108)
Related party, net	49	(26)	7
Prepaid expenses and other current assets	(26)	(38)	(47)
Other long-term assets	1	(1)	(8)
Accounts payable and accrued expenses	62	(71)	104
Accrued interest	1	(8)	(1)
Deferred revenue	(121)	(148)	(287)
Operating lease liabilities	(50)	(63)	(55)
Other long-term liabilities	(36)	(34)	(16)
Net cash provided by operating activities	1,850	1,976	1,998
Cash flows from investing activities:			
Additions to property and equipment	(650)	(426)	(388)
Proceeds from insurance recoveries	—	—	225
(Purchase) sale of other investments	3	1	(4)
Acquisition of business, net of cash acquired	—	(136)	(14)
Proceeds from sale of real estate	—	15	—
Investments in related parties and other equity investees	(39)	(2)	(21)
Repayment from related party	—	—	2
Net cash used in investing activities	(686)	(548)	(200)
Cash flows from financing activities:			
Proceeds from exercise of stock options	4	4	10
Taxes paid from net share settlements for stock-based compensation	(63)	(114)	(103)
Revolving credit facility borrowings	1,670	2,300	1,177
Revolving credit facility repayments	(1,750)	(2,220)	(1,830)
Proceeds from long-term borrowings, net of costs	—	499	4,442
Principal payments of long-term borrowings	(202)	(6)	(3,503)
Payment of premiums on redemption of debt	—	—	(62)
Payment of contingent consideration for business acquisition	(3)	(3)	(22)
Distribution to parent related to Tax Sharing Agreement	—	(36)	—
Other financing activities	(4)	—	—
Common stock repurchased and retired	(274)	(647)	(1,523)
Dividends paid	(383)	(1,339)	(268)
Net cash used in financing activities	(1,005)	(1,562)	(1,682)
Net increase (decrease) in cash, cash equivalents and restricted cash	159	(134)	116
Cash, cash equivalents and restricted cash at beginning of period (1)	65	199	83
Cash, cash equivalents and restricted cash at end of period (1)	$ 224	$ 65	$ 199

See accompanying notes to the consolidated financial statements.

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

(in millions)	For the Years Ended December 31, 2023	2022	2021
Supplemental Disclosure of Cash and Non-Cash Flow Information			
Cash paid during the period for:			
Interest, net of amounts capitalized	$ 405	$ 411	$ 393
Income taxes paid	$ 278	$ 275	$ 82
Non-cash investing and financing activities:			
Finance lease obligations incurred to acquire assets	$ 8	$ 14	$ —
Accumulated other comprehensive income (loss), net of tax	$ 7	$ (19)	$ —
Capital contribution from Liberty Media pursuant to Tax Sharing Agreement	$ 35	$ —	$ —

(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)	December 31, 2023	December 31, 2022	December 31, 2021	December 31, 2020
Cash and cash equivalents	$ 216	$ 57	$ 191	$ 71
Restricted cash included in Other long-term assets	8	8	8	12
Total cash, cash equivalents and restricted cash at end of period	$ 224	$ 65	$ 199	$ 83

See accompanying notes to the consolidated financial statements.

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

(1) Business & Basis of Presentation

This Annual Report on Form 10-K 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.

Business

We operate two complementary audio entertainment businesses - one of which we refer to as “SiriusXM” and the second of which we refer to as “Pandora and Off-platform”.

SiriusXM

Our SiriusXM 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. SiriusXM packages include live, curated and certain exclusive and on demand programming. The SiriusXM 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 SiriusXM 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 SiriusXM Media brand, direct sales of our satellite radios and accessories, and other ancillary services. As of December 31, 2023, our SiriusXM business had approximately 33.9 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 and fuel prices, a traffic information service, and real-time weather services in boats and airplanes.

SiriusXM 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

Our Pandora and Off-platform business operates a music, comedy and podcast streaming discovery platform, offering a personalized experience for each listener wherever and whenever they want to listen, whether through 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 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 December 31, 2023, Pandora had approximately 6.0 million subscribers.

The majority of revenue from Pandora is generated from advertising on our Pandora ad-supported radio service which is sold under the SiriusXM 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 offer advertisers the ability to execute campaigns across the Pandora and SoundCloud 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 December 31, 2023, Liberty Media Corporation ("Liberty Media") beneficially owned, directly and indirectly, 83.4% 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 12 for more information regarding related parties.

Basis of Presentation

The accompanying 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.

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 18 for information related to our segments.

We have evaluated events subsequent to the balance sheet date and prior to the filing of this Annual Report on Form 10-K for the year ended December 31, 2023 and have determined that no events have occurred that would require adjustment to our consolidated financial statements. For a discussion of subsequent events that do not require adjustment to our consolidated financial statements refer to Note 19.

We identified an error in our previously issued consolidated financial statements related to the presentation of cash flows associated with borrowings and repayments related to our Senior Secured Credit Facility. We have corrected this error in the accompanying consolidated statements of cash flows for the years ended December 31, 2022 and 2021 to present on a gross basis the borrowings from the revolving credit facility of $2,300 and $1,177, respectively, and repayments of the revolving credit facility of $2,220 and $1,830, respectively. The corrections had no impact to the total net cash used in financing activities in either period. We evaluated the materiality of these errors both qualitatively and quantitatively and have concluded that this error is immaterial to all impacted periods.

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 consolidated financial statements include asset impairment, depreciable lives of our satellites, share-based payment expense and income taxes.

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

Table of Contents

(2) Summary of Significant Accounting Policies

In addition to the significant accounting policies discussed in this Note 2, the following table includes our significant accounting policies that are described in other notes to our consolidated financial statements, including the number and page of the note:

Significant Accounting Policy	Note #	Page #
Acquisitions	3	F-16
Fair Value Measurements	4	F-16
Goodwill	8	F-18
Intangible Assets	9	F-19
Property and Equipment	10	F-21
Equity Method Investments	12	F-24
Share-Based Compensation	15	F-29
Legal Reserves	16	F-32
Income Taxes	17	F-35

Cash and Cash Equivalents

Our cash and cash equivalents consist of cash on hand, money market funds, certificates of deposit, in-transit credit card receipts and highly liquid investments purchased with an original maturity of three months or less.

Revenue Recognition

Revenue is measured according to Accounting Standards Codification ("ASC") 606, *Revenue - Revenue from Contracts with Customers*, and is recognized based on consideration specified in a contract with a customer, and excludes any sales incentives and amounts collected on behalf of third parties. We recognize revenue when we satisfy a performance obligation by transferring control over a service or product to a customer. We report revenues net of any tax assessed by a governmental authority that is both imposed on, and concurrent with, a specific revenue-producing transaction between a seller and a customer in our consolidated statements of comprehensive income. Collected taxes are recorded within Other current liabilities until remitted to the relevant taxing authority. For equipment sales, we are responsible for arranging for shipping and handling. Shipping and handling costs billed to customers are recorded as revenue and are reported as a component of Cost of equipment.

The following is a description of the principal activities from which we generate our revenue, including from self-pay and paid promotional subscribers, advertising, and sales of equipment.

Subscriber revenue consists primarily of subscription fees and other ancillary subscription based revenues. Revenue is recognized on a straight line basis when the performance obligations to provide each service for the period are satisfied, which is over time as our subscription services are continuously transmitted and can be consumed by customers at any time. Consumers purchasing or leasing a vehicle with a factory-installed satellite radio may receive between a three and twelve month subscription to our service. In certain cases, the subscription fees for these consumers are prepaid by the applicable automaker. Prepaid subscription fees received from automakers or directly from consumers are recorded as deferred revenue and amortized to revenue ratably over the service period which commences upon sale. Activation fees are recognized over one month as the activation fees are non-refundable and do not provide for a material right to the customer. There is no revenue recognized for unpaid trial subscriptions. In some cases we pay a loyalty fee to the automakers when we receive a certain amount of payments from self-pay customers acquired from that automaker. These fees are considered incremental costs to obtain a contract and are, therefore, recognized as an asset and amortized to Subscriber acquisition costs over an average subscriber life. Revenue share and loyalty fees paid to an automaker offering a paid trial are accounted for as a reduction of revenue as the payment does not provide a distinct good or service.

Music royalty fee primarily consists of U.S. music royalty fees ("MRF") collected from subscribers. The related costs we incur for the right to broadcast music and other programming are recorded as Revenue share and royalties expense. Fees received from subscribers for the MRF are recorded as deferred revenue and amortized to Subscriber revenue ratably over the service period.

We recognize revenue from the sale of advertising as performance obligations are satisfied, which generally occurs as ads are delivered. For our satellite radio service, ads are delivered when they are aired. For our streaming services, ads are delivered primarily based on impressions. Agency fees are calculated based on a stated percentage applied to gross billing revenue for our advertising inventory and are reported as a reduction of advertising revenue. Additionally, we pay certain third parties a percentage of advertising revenue. Advertising revenue is recorded gross of such revenue share payments as we control the advertising service, including the ability to establish pricing, and we are primarily responsible for providing the service. Advertising revenue share payments are recorded to Revenue share and royalties during the period in which the advertising is transmitted.

Equipment revenue and royalties from the sale of satellite radios, components and accessories are recognized upon shipment, net of discounts and rebates. Shipping and handling costs billed to customers are recorded as revenue. Shipping and handling costs associated with shipping goods to customers are reported as a component of Cost of equipment. Other revenue primarily includes revenue recognized from royalties received from Sirius XM Canada.

Customers pay for the services in advance of the performance obligation and therefore these prepayments are recorded as deferred revenue. The deferred revenue is recognized as revenue in our consolidated statement of comprehensive income as the services are provided. Changes in the deferred revenue balance during the year ended December 31, 2023 were not materially impacted by other factors.

As the majority of our contracts are one year or less, we have utilized the optional exemption under ASC 606-10-50-14 and do not disclose information about the remaining performance obligations for contracts which have original expected durations of one year or less. As of December 31, 2023, less than seven percent of our total deferred revenue balance related to contracts that extend beyond one year. These contracts primarily include prepaid data trials, which are typically provided for three to five years, and self-pay customers who prepay for their audio subscriptions for up to three years. These amounts are recognized on a straight-line basis as our services are provided.

Revenue Share

We share a portion of our subscription revenues earned from self-pay subscribers with certain automakers. The terms of the revenue share agreements vary with each automaker, but are typically based upon the earned audio revenue as reported or gross billed audio revenue. Revenue share on self-pay revenue is recognized as an expense and recorded in Revenue share and royalties in our consolidated statements of comprehensive income. We also pay revenue share to certain talent on non-music stations on our satellite radio service and to podcast talent based on advertising revenue for the related channel or podcast. Revenue share on non-music channels and podcasts is recognized in Revenue share and royalties in our consolidated statements of comprehensive income when it is earned. In some cases, we pay minimum guarantees for revenue share to podcast owners which is recorded in Prepaid and other current assets in our consolidated balance sheets. The minimum guarantee is recognized in Revenue share and royalties primarily on a straight line basis over the contractual term. The prepaid balance is regularly reviewed for recoverability and any amount not deemed to be recoverable is recognized as an expense in the period.

Royalties

In connection with our businesses, we must enter into royalty arrangements with two sets of rights holders: holders of musical compositions copyrights (that is, the music and lyrics) and holders of sound recordings copyrights (that is, the actual recording of a work). Our Sirius XM and Pandora businesses use both statutory and direct music licenses as part of their businesses. We license varying rights - such as performance and mechanical rights - for use in our Sirius XM and Pandora businesses based on the various radio and interactive services they offer. The music rights licensing arrangements for our Sirius XM and Pandora businesses are complex.

Musical Composition Copyrights

We pay performance royalties for our Sirius XM and Pandora businesses to holders and rights administrators of musical compositions copyrights, including performing rights organizations and other copyright owners. These performance royalties are based on agreements with performing rights organizations which represent the holders of these performance rights. Our Sirius XM and Pandora businesses have arrangements with these performance rights organizations. Arrangements with Sirius

XM generally include fixed payments during the term of the agreement and arrangements with Pandora for its ad-supported radio service have variable payments based on usage and ownership of a royalty pool.

Pandora must also license reproduction rights, which are also referred to as mechanical rights, to offer the interactive features of the Pandora services. For our Pandora subscription services, copyright holders receive payments for these rights at the rates determined in accordance with the statutory license set forth in Section 115 of the United States Copyright Act. These mechanical royalties are calculated as the greater of a percentage of our revenue or a percentage of our payments to record labels.

Sound Recording Copyrights

For our non-interactive satellite radio or streaming services we may license sound recordings under direct licenses with the owners of sound recordings or based on the royalty rate established by the CRB. For our Sirius XM business, the royalty rate for sound recordings has been set by the CRB. The revenue subject to royalty includes subscription revenue from our U.S. satellite digital audio radio subscribers, and advertising revenue from channels other than those channels that make only incidental performances of sound recordings. The rates and terms permit us to reduce the payment due each month for those sound recordings that are separately licensed and sound recordings that are directly licensed from copyright owners and exclude from our revenue certain other items, such as royalties paid to us for intellectual property, sales and use taxes, bad debt expense and generally revenue attributable to areas of our business that do not involve the use of copyrighted sound recordings.

For our Pandora business, we have entered into direct license agreements with major and independent music labels and distributors for a significant majority of the sound recordings that stream on the Pandora ad-supported service, Pandora Plus and Pandora Premium. For sound recordings that we stream and for which we have not entered into a direct license agreement with the sound recording rights holders, the sound recordings are streamed pursuant to the statutory royalty rates set by the CRB. Pandora pays royalties to owners of sound recordings on either a per-performance fee based on the number of sound recordings transmitted or a percentage of revenue associated with the applicable service. Certain of these agreements also require Pandora to pay a per-subscriber minimum amount.

Programming Costs

Programming costs which are for a specified number of events are amortized on an event-by-event basis; programming costs which are for a specified season or include programming through a dedicated channel are amortized over the season or period on a straight-line basis. We allocate a portion of certain programming costs which are related to sponsorship and marketing activities to Sales and marketing expense on a straight-line basis over the term of the agreement.

Advertising Costs

Media is expensed when aired and advertising production costs are expensed as incurred. Advertising production costs include expenses related to marketing and retention activities, including expenses related to direct mail, outbound telemarketing and email communications. We also incur advertising production costs related to cooperative marketing and promotional events and sponsorships. During the years ended December 31, 2023, 2022 and 2021, we recorded advertising costs of $421, $513 and $515, respectively. These costs are reflected in Sales and marketing expense in our consolidated statements of comprehensive income.

Subscriber Acquisition Costs

Subscriber acquisition costs consist of costs incurred to acquire new subscribers which include hardware subsidies paid to radio manufacturers, distributors and automakers, including subsidies paid to automakers who include a satellite radio and a prepaid subscription to our service in the sale or lease price of a new vehicle; subsidies paid for chipsets and certain other components used in manufacturing radios; device royalties for certain radios and chipsets; commissions paid to retailers and automakers as incentives to purchase, install and activate radios; product warranty obligations; freight; and provisions for inventory allowance attributable to inventory consumed in our automotive and retail distribution channels. Subscriber acquisition costs do not include advertising costs, loyalty payments to distributors and dealers of radios and revenue share payments to automakers and retailers of radios.

Subsidies paid to radio manufacturers and automakers are expensed upon installation, shipment, receipt of product or activation and are included in Subscriber acquisition costs because we are responsible for providing the service to the customers. Commissions paid to retailers and automakers are expensed upon either the sale or activation of radios. Chipsets that are shipped to radio manufacturers and held on consignment are recorded as inventory and expensed as Subscriber acquisition costs when placed into production by radio manufacturers. Costs for chipsets are expensed as Subscriber acquisition costs when the automaker confirms receipt.

Research & Development Costs

Research and development costs are expensed as incurred and primarily include the cost of new product development, chipset design, software development and engineering. During the years ended December 31, 2023, 2022 and 2021, we recorded research and development costs of $276, $246 and $229, respectively. These costs are reported as a component of Engineering, design and development expense in our consolidated statements of comprehensive income.

Recent Accounting Pronouncements

Accounting Standard Update 2023-09, Improvements to Income Tax Disclosures ("ASU 2023-09"). In December 2023, the FASB issued ASU 2023-09, which requires more detailed income tax disclosures. The guidance requires entities to disclose disaggregated information about their effective tax rate reconciliation as well as expanded information on income taxes paid by jurisdiction. The disclosure requirements will be applied on a prospective basis, with the option to apply them retrospectively. The standard is effective for fiscal years beginning after December 15, 2024, with early adoption permitted. We are evaluating the disclosure requirements related to the new standard.

Accounting Standard Update 2023-07, Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures ("ASU 2023-07"). In November 2023, the FASB issued ASU 2023-07, which is intended to improve reportable segment disclosure requirements, primarily through additional disclosures about significant segment expenses. The standard is effective for fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024, with early adoption permitted. The amendments should be applied retrospectively to all prior periods presented in the financial statements. We are evaluating the disclosure requirements related to the new standard.

Accounting Standard Update ("ASU") 2023-02, Investments—Equity Method and Joint Ventures (Topic 323): Accounting for Investments in Tax Credit Structures Using the Proportional Amortization Method. In March 2023, the Financial Accounting Standards Board ("FASB") issued ASU 2023-02 which amended the guidance related to accounting for investments in tax credit structures to allow the use of the proportional amortization method. The amendment permits reporting entities to elect to account for their equity investments in tax credit structures using the proportional amortization method if certain conditions are met. This amendment requires entities to make disclosures about all investments in a tax credit program for which they have elected to account for using the proportional amortization method, including those investments in an elected tax credit program that do not meet the conditions to apply the proportional amortization method. We expect to elect the proportional amortization method for qualifying investments in tax credit structures when the amendments in this ASU become effective in the first quarter of 2024 using the modified retrospective method. We are evaluating the impact ASU 2023-02 will have on our consolidated financial statements, however, we do not expect the impacts of adoption to materially impact our results from our existing investments. Future investments could have a material impact to our consolidated assets and liabilities related to the capitalization of unfunded future commitments and results of operations related to the amortization of any investment balance in proportion to the income tax benefits received.

Recently Adopted Accounting Policies

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 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 an increase of $10, net of tax, to our accumulated deficit. The adoption of ASU 2020-06 did not have a material impact on our diluted earnings per share.

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

(3) Acquisitions

On May 20, 2022, we completed an acquisition for total cash consideration of $93. We recognized goodwill of $69, indefinite-lived intangible assets of $1 and other assets of $23. The other assets represent acquired content which will be amortized over its estimated useful life to Programming and content in our consolidated statements of comprehensive income.

On January 12, 2022, we completed an acquisition for total cash consideration of $43. We recognized goodwill of $29, other definite-lived intangible assets of $19 and liabilities of $4.

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 year ended December 31, 2023. Acquisition related costs for the years ended December 31, 2022 and 2021 were $2 and $12, respectively.

(4) Fair Value Measurements

The fair value of a financial instrument is the amount at which the instrument could be exchanged in an orderly transaction between market participants. As of December 31, 2023 and 2022, the carrying amounts of cash and cash equivalents, receivables, and accounts payable approximated fair value due to the short-term nature of these instruments. ASC 820, *Fair Value Measurements and Disclosures*, establishes a fair value hierarchy for input into valuation techniques as follows:

i. Level 1 input: unadjusted quoted prices in active markets for identical instrument;

ii. Level 2 input: observable market data for the same or similar instrument but not Level 1, including quoted prices for identical or similar assets or liabilities in markets that are not active or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities; and

iii. Level 3 input: unobservable inputs developed using management's assumptions about the inputs used for pricing the asset or liability.

Investments are periodically reviewed for impairment and an impairment is recorded whenever declines in fair value below carrying value are determined to be other than temporary. In making this determination, we consider, among other factors, the severity and duration of the decline as well as the likelihood of a recovery within a reasonable timeframe.

Our assets and liabilities measured at fair value were as follows:

	December 31, 2023				December 31, 2022			
	Level 1	Level 2	Level 3	Total Fair Value	Level 1	Level 2	Level 3	Total Fair Value
Liabilities:								
Debt [(a)]	—	$ 8,523	—	$ 8,523	—	$ 8,362	—	$ 8,362

(a) The fair value for non-publicly traded instruments is based upon estimates from a market maker and brokerage firm. Refer to Note 13 for information related to the carrying value of our debt as of December 31, 2023 and 2022.

(5) Restructuring Costs

During the year ended December 31, 2023, restructuring costs were $49. In 2023, we initiated measures to pursue greater efficiency and to realign our business and focus on strategic priorities. As part of these measures, we reduced the size of our workforce by approximately 475 roles, or 8%. We recorded a charge of $34 primarily related to severance and other related costs. In addition, we vacated two of our leased locations and recorded impairments of $12 to reduce the carrying value of the related right of use assets to their estimated fair value. Additionally, we accrued expenses of $3 for which we will not recognize any future economic benefits. The restructuring and related impairment charges were recorded to Impairment, restructuring and acquisition costs in our consolidated statements of comprehensive income.

During the year ended December 31, 2022, we evaluated our office space needs, and, based on this, we vacated certain office spaces and recorded an impairment of $16 to reduce the carrying value of the related right of use assets to their estimated fair values. Additionally, we wrote off fixed assets of $5 in connection with furniture and equipment located at the impaired office spaces. Separately, we performed an analysis surrounding initiatives that we are no longer pursuing and recorded an impairment of $43 associated with terminated software projects and an impairment of $6 related to severance. The total charge of $70 was recorded to Impairment, restructuring and acquisition costs in our consolidated statements of comprehensive income.

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

During the year ended December 31, 2021, we evaluated our office space needs and, based on this, we vacated certain office spaces and recorded an impairment of $18 to reduce the carrying value of the related right of use assets to their estimated 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 total charge of $25 was recorded to Impairment, restructuring and acquisition costs in our consolidated statements of comprehensive income.

(6) 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 (stock options, restricted stock units and convertible debt) were exercised or converted into common stock, calculated using the treasury stock method. We had no participating securities during the years ended December 31, 2023, 2022 and 2021.

Common stock equivalents of 152, 92 and 93 for the years ended December 31, 2023, 2022 and 2021, respectively, were excluded from the calculation of diluted net income per common share as the effect would have been anti-dilutive.

	For the Years Ended December 31,		
	2023	2022	2021
Numerator:			
Net Income available to common stockholders for basic net income per common share	$ 1,258	$ 1,213	$ 1,314
Effect of interest on assumed conversions of convertible notes, net of tax	1	4	8
Net Income available to common stockholders for dilutive net income per common share	$ 1,259	$ 1,217	$ 1,322
Denominator:			
Weighted average common shares outstanding for basic net income per common share	3,858	3,916	4,062
Weighted average impact of assumed convertible notes	12	31	30
Weighted average impact of dilutive equity instruments	18	43	51
Weighted average shares for diluted net income per common share	3,888	3,990	4,143
Net income per common share:			
Basic	$ 0.33	$ 0.31	$ 0.32
Diluted	$ 0.32	$ 0.31	$ 0.32

(7) 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 consolidated statements of comprehensive income.

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

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:

	December 31, 2023	December 31, 2022
Gross customer accounts receivable	$ 631	$ 585
Allowance for doubtful accounts	(15)	(11)
Customer accounts receivable, net	$ 616	$ 574
Receivables from distributors	56	53
Other receivables	37	28
Total receivables, net	$ 709	$ 655

(8) 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. Our Sirius XM reporting unit, which has an allocated goodwill balance of $2,290, had a negative carrying amount as of December 31, 2023.

During the year ended December 31, 2023, we elected to perform a qualitative impairment assessment which indicated that the fair value of our reporting units exceeded their carrying values and therefore were not at risk of impairment. No impairment losses were recorded for goodwill during the years ended December 31, 2023, 2022 and 2021.

As of December 31, 2023, 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 December 31, 2023, the carrying amount of goodwill for our Sirius XM and Pandora and Off-platform reporting units was $2,290 and $959, respectively.

Refer to the table below for our goodwill activity for the years ended December 31, 2023 and 2022:

	Sirius XM	Pandora and Off-platform	Total
Balance at January 1, 2022	$ 2,290	$ 861	$ 3,151
Acquisition	—	98	98
Balance at December 31, 2022	2,290	959	3,249
Acquisition	—	—	—
Balance at December 31, 2023	$ 2,290	$ 959	$ 3,249

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

(9) Intangible Assets

Our intangible assets include the following:

		December 31, 2023			December 31, 2022		
	Weighted Average Useful Lives	Gross Carrying Value	Accumulated 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	(149)	71	220	(135)	85
Licensing agreements	12 years	3	(3)	—	45	(45)	—
Software and technology	7 years	28	(22)	6	31	(21)	10
Due to Acquisitions recorded to Pandora and Off-platform Reporting Unit:							
Indefinite life intangible assets:							
Trademarks	Indefinite	312	—	312	312	—	312
Definite life intangible assets:							
Customer relationships	8 years	442	(279)	163	442	(225)	217
Software and technology	5 years	391	(372)	19	391	(299)	92
Total intangible assets		$ 3,730	$ (825)	$ 2,905	$ 3,775	$ (725)	$ 3,050

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.

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.

ASC 350-30-35, *Intangibles - Goodwill and Other*, provides for an option to first perform a qualitative assessment to determine whether it is more likely than not that an asset is impaired. If the qualitative assessment supports that it is more likely than not that the fair value of the asset exceeds its carrying value, a quantitative impairment test is not required. If the qualitative assessment does not support the fair value of the asset, then a quantitative assessment is performed. 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.

We completed a qualitative assessment of our FCC licenses and Pandora trademarks during the fourth quarter of 2023. As of the date of our annual assessment, our qualitative impairment assessment of the fair value of our indefinite intangible assets indicated that the fair value of such assets exceeded their carrying value and therefore were not at risk of impairment.

We completed a quantitative assessment of our FCC licenses and Pandora trademarks during the fourth quarter of 2022. As of the date of our annual assessment for 2022, our impairment assessment of the fair value of our indefinite intangible assets indicated that the estimated fair value of our FCC licenses and Pandora trademarks exceeded their carrying values and therefore no impairment existed.

We completed our qualitative assessments of our FCC licenses and XM and Pandora trademarks during the fourth quarter of 2021. As of the date of our annual assessment, our qualitative impairment assessment of the fair value of our indefinite intangible assets indicated that the fair value of such assets exceeded their carrying value and therefore were not at risk of impairment.

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

Definite Life Intangible Assets

Definite-lived intangible assets are amortized over their respective estimated useful lives to their estimated residual values, in a pattern that reflects when the economic benefits will be consumed, and are reviewed for impairment under the provisions of ASC 360-10-35, *Property, Plant and Equipment/Overall/Subsequent Measurement*. We review intangible assets subject to amortization for impairment whenever events or circumstances indicate that the carrying amount of an asset may not be recoverable. If the sum of the expected cash flows, undiscounted and without interest, is less than the carrying amount of the asset, an impairment loss is recognized in an amount by which the carrying amount of the asset exceeds its fair value.

Amortization expense for all definite life intangible assets was $144, $156 and $154 for the years ended December 31, 2023, 2022 and 2021, respectively. There were retirements of definite lived intangible assets of $44 and we recognized a related impairment loss of $1 during year ended December 31, 2023. There were no retirements or impairments of definite lived intangible assets during the years ended December 31, 2022 and 2021.

The expected amortization expense for each of the fiscal years 2024 through 2028 and for periods thereafter is as follows:

Years ending December 31,	Amount
2024	$ 77
2025	71
2026	71
2027	25
2028	15
Thereafter	—
Total definite life intangible assets, net	$ 259

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

(10) Property and Equipment

Property and equipment, including satellites, are stated at cost, less accumulated depreciation. Equipment under leases is stated at the present value of minimum lease payments. Depreciation is calculated using the straight-line method over the following estimated useful life of the asset:

Satellite system	15 years		
Terrestrial repeater network	5	-	15 years
Broadcast studio equipment	3	-	15 years
Capitalized software and hardware	2	-	7 years
Satellite telemetry, tracking and control facilities	3	-	15 years
Furniture, fixtures, equipment and other	2	-	7 years
Building	20	or	30 years
Leasehold improvements	Lesser of useful life or remaining lease term		

We review long-lived assets, such as property and equipment, for impairment whenever events or changes in circumstances indicate the carrying amount may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to the estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds the estimated future cash flows, an impairment charge is recognized in an amount by which the carrying amount exceeds the fair value of the asset. During the year ended December 31, 2023, we retired property and equipment of $289, and recorded related impairment charges of $14 primarily related to terminated software projects. During the year ended December 31, 2022, we recorded impairment charges of $48 related to the write off of terminated software projects and fixed assets in connection with furniture and equipment located at impaired office spaces. Refer to the Note 5 for more information. During the year ended December 31, 2021, we recorded an impairment charge of $220 related to our SXM-7 satellite which was offset by insurance recoveries. Refer to the discussion below for more information.

Property and equipment, net, consists of the following:

	December 31, 2023	December 31, 2022
Satellite system	$ 1,598	$ 1,841
Terrestrial repeater network	117	118
Leasehold improvements	106	100
Broadcast studio equipment	146	133
Capitalized software and hardware	2,178	1,821
Satellite telemetry, tracking and control facilities	84	76
Furniture, fixtures, equipment and other	110	89
Land	32	32
Building	74	70
Construction in progress	538	313
Total property and equipment	4,983	4,593
Accumulated depreciation	(3,229)	(3,094)
Property and equipment, net	$ 1,754	$ 1,499

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

Construction in progress consists of the following:

	December 31, 2023	December 31, 2022
Satellite system	$ 490	$ 212
Terrestrial repeater network	7	10
Capitalized software and hardware	17	56
Other	24	35
Construction in progress	$ 538	$ 313

Depreciation and amortization expense on property and equipment was $410, $380 and $379 for the years ended December 31, 2023, 2022 and 2021, respectively. In addition to the property and equipment impaired above, we sold real estate during the year ended December 31, 2022 for net proceeds of $15 resulting in a gain of $8 which has been recorded to Impairment, restructuring and acquisition costs in our consolidated statements of comprehensive income.

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 $16, $5 and $7 for the years ended December 31, 2023, 2022, and 2021, respectively, which related to the construction of our SXM-9, SXM-10, SXM-11 and SXM-12 satellites. We also capitalize a portion of share-based compensation related to employee time for capitalized software projects. Capitalized share-based compensation costs were $18, $16 and $13 for the years ended December 31, 2023, 2022 and 2021, respectively.

Satellites

As of December 31, 2023, we operated a fleet of five 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 December 31, 2023:

Satellite Description	Year Delivered	Estimated End of Depreciable Life	FCC License Expiration Year
SIRIUS FM-5	2009	2024	2025
SIRIUS FM-6	2013	2028	2030
XM-3	2005	2020	2026
XM-5	2010	2025	2026
SXM-8	2021	2036	2029

During the year ended December 30, 2021, we recorded an impairment charge of $220 to Impairment, restructuring and acquisition costs in our consolidated statements of comprehensive income related to the total loss of our 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. During the year ended December 30, 2021, we collected $225 of insurance recoveries. Of this amount, $220 was recorded as a reduction to Impairment, restructuring and acquisition costs during year ended December 30, 2021. The remaining $5 was recorded in Other income during the year ended December 30, 2021. SXM-7 remains in-orbit at its assigned orbital location, but is not being used to provide satellite radio service.

During 2023, we removed our XM-4 satellite from service and in October 2023 we completed the de-orbiting and decommissioning of the satellite. Our XM-3 satellite remains available as an in-orbit spare.

(11) 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 19 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 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.

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

During the years ended December 31, 2023, 2022 and 2021, we ceased using certain leased locations and recorded an impairment charge of $12, $16 and $18, respectively, to write down the carrying value of the right-of-use assets for these locations to their estimated fair values. Refer to Note 5 for additional information.

The components of lease expense were as follows:

	For the Years Ended December 31, 2023	For the Years Ended December 31, 2022
Operating lease cost	$ 61	$ 76
Finance lease cost	4	1
Sublease income	(3)	(3)
Total lease cost	$ 62	$ 74

Supplemental cash flow information related to leases was as follows:

	For the Years Ended December 31, 2023	For the Years Ended December 31, 2022
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows from operating leases	$ 77	$ 81
Financing cash flows from finance leases	$ 5	$ 1
Right-of-use assets obtained in exchange for lease obligations:		
Operating leases	$ 16	$ 28

Supplemental balance sheet information related to leases was as follows:

	December 31, 2023	December 31, 2022
Operating Leases		
Operating lease right-of-use assets	$ 279	$ 315
Operating lease current liabilities	46	50
Operating lease liabilities	292	320
Total operating lease liabilities	$ 338	$ 370

	December 31, 2023	December 31, 2022
Finance Leases		
Property and equipment, gross	$ 33	$ 22
Accumulated depreciation	(12)	(8)
Property and equipment, net	$ 21	$ 14
Current maturities of debt	$ 5	$ 3
Long-term debt	10	9
Total finance lease liabilities	$ 15	$ 12

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

	December 31, 2023	December 31, 2022
Weighted Average Remaining Lease Term		
Operating leases	7 years	8 years
Finance leases	3 years	4 years

	December 31, 2023	December 31, 2022
Weighted Average Discount Rate		
Operating leases	5.2 %	5.2 %
Finance leases	2.3 %	2.3 %

Maturities of lease liabilities were as follows:

	Operating Leases	Finance Leases
Year ending December 31,		
2024	$ 61	$ 4
2025	64	6
2026	61	5
2027	55	—
2028	48	—
Thereafter	116	—
Total future minimum lease payments	405	15
Less imputed interest	(67)	—
Total	$ 338	$ 15

(12) 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 December 31, 2023, Liberty Media beneficially owned, directly and indirectly, 83.4% 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. Refer to Note 17 for more information regarding the tax sharing agreement.

On December 11, 2023, Holdings entered into definitive agreements whereby, subject to the terms thereof, Liberty Sirius XM Holdings Inc., a Delaware corporation and a wholly owned subsidiary of Liberty Media ("New Sirius"), would split-off from Liberty Media. The transactions would be effectuated by means of a redemptive split-off of New Sirius (the "Split-Off"), which will own all of the assets and liabilities attributed to Liberty Media's Series A Liberty SiriusXM common stock ("LSXMA"), Series B Liberty SiriusXM common stock ("LSXMB") and Series C Liberty SiriusXM common stock ("LSXMK", together with the LSXMB and LSXMA stock, the "Liberty SiriusXM Group"). Following the Split-Off, New Sirius will combine with Holdings through the merger of Radio Merger Sub, LLC, a Delaware limited liability company and a wholly owned subsidiary of New Sirius ("Merger Sub"), with Holdings, with Holdings becoming a wholly owned subsidiary of New Sirius (the "Merger" and, together with the Split-Off, the "Transactions"). As part of the Merger, New Sirius will be renamed "Sirius XM Holdings Inc."

To effect the Transactions, on December 11, 2023, Liberty Media entered into (i) a Reorganization Agreement (the "Reorganization Agreement") with Holdings and New Sirius, and (ii) an Agreement and Plan of Merger (the "Merger Agreement") with New Sirius, Holdings and Merger Sub.

In connection with the Merger Agreement and the Reorganization Agreement, on December 11, 2023, certain trusts related to Dr. John C. Malone (collectively, the "Malone Stockholders") entered into a voting agreement (the "Voting Agreement") with Liberty Media, Holdings and New Sirius, pursuant to which, among other things, the Malone Stockholders agreed, subject to the terms of the Voting Agreement, to vote their respective shares of Liberty Media's LSXMA and LSXMB in favor of the Split-Off.

The Transactions have been unanimously approved by Liberty Media's Board of Directors and a Special Committee of the Board of Directors of Holdings and by Holdings' Board of Directors. The Transactions are expected to be completed early in the third quarter of 2024, subject to approval by a majority of the aggregate voting power of the shares of Liberty SiriusXM common stock present, whether in-person or by proxy, at a stockholder meeting, the receipt by Liberty Media and New Sirius of tax opinions from their respective tax counsel, as well as the receipt of required regulatory approvals and the satisfaction of other customary closing conditions. A subsidiary of Liberty Media owning a majority of the outstanding shares of Holdings has delivered a written consent approving the Transactions on behalf of a majority of Holdings' stockholders. Following the Transactions, Liberty Media and New Sirius will operate independently, and neither is expected to have any ownership interest in the other. All of the executive officers of Holdings immediately prior to consummation of the Transactions will be the initial executive officers of New Sirius, and New Sirius will continue to operate under the SiriusXM name and brand.

The Reorganization Agreement, the Merger Agreement and the Voting Agreement are filed as exhibits to this Annual Report on Form 10-K.

During the year ended December 31, 2023, we recognized costs associated with the Transactions of $16 which were recorded to Impairment, restructuring and acquisition costs in our consolidated statements of comprehensive income.

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 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. 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.

Our related party long-term assets as of December 31, 2023 and December 31, 2022 included the carrying value of our investment balance in Sirius XM Canada of $423 and $412, respectively, and, as of each of December 31, 2023 and December 31, 2022, also included $8, for the long-term value of the outstanding loan to Sirius XM Canada.

Sirius XM Canada paid gross dividends to us of $1, $9 and $2 during the years ended December 31, 2023, 2022 and 2021, respectively. 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 consolidated statements of comprehensive income of $104, $111 and $101 during the years ended December 31, 2023, 2022 and 2021, respectively.

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

SoundCloud

We have an investment in SoundCloud which is accounted for as an equity method investment and recorded in Related party long-term assets in our consolidated balance sheets. Sirius XM has appointed two individuals to serve on SoundCloud's ten-member board of managers. Sirius XM's share of SoundCloud's net loss was $2, $6 and $2 for the years ended December 31, 2023, 2022 and 2021, respectively, which was recorded in Other (expense) income in our 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 platforms. We recorded revenue share expense related to this agreement of $54, $55 and $60 for the years ended December 31, 2023, 2022 and 2021, respectively. We also had related party liabilities of $20 and $19 as of December 31, 2023 and December 31, 2022, respectively, related to this agreement.

(13) Debt

Our debt as of December 31, 2023 and December 31, 2022 consisted of the following:

					Principal Amount at	Carrying value[a] at	
Issuer / Borrower	Issued	Debt	Maturity Date	Interest Payable	December 31, 2023	December 31, 2023	December 31, 2022
Pandora (c) (d)	June 2018	1.75% Convertible Senior Notes	December 1, 2023	semi-annually on June 1 and December 1	$ —	$ —	$ 193
Sirius XM (b) (f)	April 2022	Incremental Term Loan	April 11, 2024	variable fee paid monthly	500	500	500
Sirius XM (b)	August 2021	3.125% Senior Notes	September 1, 2026	semi-annually on March 1 and September 1	1,000	994	992
Sirius XM (b)	July 2017	5.00% Senior Notes	August 1, 2027	semi-annually on February 1 and August 1	1,500	1,494	1,492
Sirius XM (b)	June 2021	4.00% Senior Notes	July 15, 2028	semi-annually on January 15 and July 15	2,000	1,985	1,982
Sirius XM (b)	June 2019	5.500% Senior Notes	July 1, 2029	semi-annually on January 1 and July 1	1,250	1,241	1,240
Sirius XM (b)	June 2020	4.125% Senior Notes	July 1, 2030	semi-annually on January 1 and July 1	1,500	1,488	1,487
Sirius XM (b)	August 2021	3.875% Senior Notes	September 1, 2031	semi-annually on March 1 and September 1	1,500	1,487	1,485
Sirius XM (e)	December 2012	Senior Secured Revolving Credit Facility (the "Credit Facility")	August 31, 2026	variable fee paid quarterly	—	—	80
Sirius XM	Various	Finance leases	Various	n/a	n/a	15	12
Total Debt						9,204	9,463
Less: total current maturities						505	196
Less: total deferred financing costs						9	11
Total long-term debt						$ 8,690	$ 9,256

(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 the Incremental Term Loan and these notes.

(c) Holdings unconditionally guaranteed all of the payment obligations of Pandora under these notes.

(d) 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. During the year ended December 31, 2023, certain investors exercised their right to require a Special Repurchase, as defined in the indenture governing such notes, and Pandora repurchased $173 in outstanding principal amount of the 1.75% Convertible Senior Notes due 2023 with cash for an aggregate purchase price equal to 100% of the principal amount of the notes repurchased plus accrued and unpaid interest to the date of repurchase. In December 2023, Pandora retired the remaining $20 of outstanding principal amount of the 1.75% Convertible Senior Notes due 2023 at maturity with cash for 100% of the principal amount plus accrued and unpaid interest to the date of maturity.

(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 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. From and after July 1, 2023, Sirius XM borrowings are based on the Secured Overnight Financing Rate ("SOFR") plus an applicable rate based on its debt to operating cash flow ratio. 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 was 0.25% per annum as of December 31, 2023. All of Sirius XM's outstanding borrowings under the Credit Facility are classified as Long-term debt within our consolidated balance sheets due to the long-term maturity of this debt.

(f) In April 2022, Sirius XM entered into an amendment to the Credit Facility to incorporate an Incremental Term Loan borrowing of $500 which matures on April 11, 2024. Interest on the Incremental Term Loan borrowing is based on SOFR plus an applicable rate.

Retired Debt

On August 2, 2021, Sirius XM redeemed $1,000 in outstanding principal amount of its 3.875% Senior Notes due 2022 for an aggregate purchase price, including interest, of $1,019. On August 16, 2021, Sirius XM redeemed $1,500 in outstanding principal amount of its 4.625% Senior Notes due 2024 for an aggregate purchase price, including premium and interest, of $1,541. On September 2, 2021, Sirius XM redeemed $1,000 in outstanding principal amount of its 5.375% Senior Notes due 2026 for an aggregate purchase price, including premium and interest, of $1,034. During the year ended December 31, 2021, we recognized $83 to Loss on extinguishment of debt, consisting primarily of redemption premiums of $62, unamortized discount and unamortized deferred financing fees, as a result of these redemptions.

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.

At December 31, 2023 and December 31, 2022, we were in compliance with our debt covenants.

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

(14) 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 3,843 and 3,891 shares of common stock issued and outstanding on December 31, 2023 and December 31, 2022, respectively.

As of December 31, 2023, there were 211 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.

Quarterly Dividends

During the year ended December 31, 2023, our board of directors declared and paid the following dividend:

Declaration Date	Dividend Per Share	Record Date	Total Amount	Payment Date
January 25, 2023	$ 0.0242	February 9, 2023	$ 94	February 24, 2023
April 19, 2023	$ 0.0242	May 5, 2023	$ 94	May 24, 2023
July 26, 2023	$ 0.0242	August 8, 2023	$ 93	August 30, 2023
October 25, 2023	$ 0.0266	November 7, 2023	$ 102	November 29, 2023

Stock Repurchase Program

As of December 31, 2023, our board of directors had approved for repurchase an aggregate of $18,000 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 December 31, 2023, our cumulative repurchases since December 2012 under our stock repurchase program totaled 3,731 shares for $16,834, and $1,166 remained available for future share repurchases under our stock repurchase program.

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

	December 31, 2023		December 31, 2022		December 31, 2021	
Share Repurchase Type	Shares	Amount	Shares	Amount	Shares	Amount
Open Market Repurchases	69	$ 274	103	$ 639	245	$ 1,512

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 December 31, 2023 and December 31, 2022.

(15) Benefit Plans

We recognized share-based payment expense of $184, $197 and $202 for the years ended December 31, 2023, 2022 and 2021, respectively.

We account for equity instruments granted in accordance with ASC 718, *Compensation - Stock Compensation*. ASC 718 requires all share-based compensation payments to be recognized in the financial statements based on fair value. We use the Black-Scholes-Merton option-pricing model to value stock option awards, and have elected to treat awards with graded vesting as a single award. Share-based compensation expense is recognized ratably over the requisite service period, which is generally the vesting period. We measure restricted stock unit awards using the fair market value of the restricted shares of common stock on the day the award is granted. We measure the value of restricted units that will vest depending a relative total stockholder return metric – that is, the performance of our common stock as compared other companies included in the S&P 500 Index – using a special option-based valuation method, known as a Monte Carlo simulation. Since the results of such awards depend on future results, which are not known on the grant date, the Monte Carlo simulation attempts to take into consideration the terms of the awards, potential future returns, payout rates, and other factors to estimate a fair value of the award. The Monte Carlo simulation method uses factual data for the company and employs various assumptions. Stock-based awards granted to employees, non-employees and members of our board of directors include stock options and restricted stock units.

Fair value as determined using the Black-Scholes-Merton model varies based on assumptions used for the expected life, expected stock price volatility, expected dividend yield and risk-free interest rates. For the years ended December 31, 2023, 2022, and 2021, we estimated the fair value of awards granted using the hybrid approach for volatility, which weights observable historical volatility and implied volatility of qualifying actively traded options on our common stock. The expected life assumption represents the weighted-average period stock-based awards are expected to remain outstanding. These expected life assumptions are established through a review of historical exercise behavior of stock-based award grants with similar vesting periods. Where historical patterns do not exist for non-employees, contractual terms are used. Dividend yield is based on the current expected annual dividend per share and our stock price. The risk-free interest rate represents the daily treasury yield curve rate at the grant date based on the closing market bid yields on actively traded U.S. treasury securities in the over-the-counter market for the expected term. Our assumptions may change in future periods.

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 expire ten 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 receive one share of common stock upon vesting. As of December 31, 2023, 106 shares of common stock were available for future grants under the 2015 Plan.

The Compensation Committee intends to award equity-based compensation to our senior management in the form of: stock options, restricted stock units, PRSUs, which will cliff vest after a performance period target established by the Compensation Committee is achieved, and PRSUs, which will cliff vest after a performance period based on the performance of our common stock relative to the companies included in the S&P 500 Index, which we refer to as a relative “TSR” or “total stockholder return” metric. TSRs 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 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.

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

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 Years Ended December 31,		
	2023	2022	2021
Risk-free interest rate	4.0%	2.0%	0.6%
Expected life of options — years	3.8	3.40	6.06
Expected stock price volatility	32%	31%	33%
Expected dividend yield	2.0%	1.3%	1.0%

The following table summarizes stock option activity under our share-based plans for the years ended December 31, 2023, 2022 and 2021:

	Options	Weighted-Average Exercise Price Per Share	Weighted-Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value
Outstanding at the beginning of January 1, 2021	184	$ 4.73		
Granted	54	$ 6.14		
Exercised	(72)	$ 3.98		
Forfeited, cancelled or expired	(5)	$ 6.73		
Outstanding as of December 31, 2021	161	$ 5.47		
Granted	11	$ 6.46		
Exercised	(35)	$ 4.31		
Forfeited, cancelled or expired	(3)	$ 6.52		
Outstanding as of December 31, 2022	134	$ 5.55		
Granted	9	$ 4.92		
Exercised	(12)	$ 4.33		
Forfeited, cancelled or expired	(9)	$ 5.91		
Outstanding as of December 31, 2023	122	$ 5.60	4.88	$ 40
Exercisable as of December 31, 2023	80	$ 5.50	4.29	$ 36

The weighted average grant date fair value per stock option granted during the years ended December 31, 2023, 2022 and 2021 was $1.23, $1.48 and $1.77, respectively. The total intrinsic value of stock options exercised during the years ended December 31, 2023, 2022 and 2021 was $15, $77 and $170, respectively. During the years ended December 31, 2023, 2022 and 2021 the number of net settled shares issued as a result of stock option exercises was 2, 8 and 22, respectively.

We recognized share-based payment expense associated with stock options of $30, $35 and $42 for each of the years ended December 31, 2023, 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 years ended December 31, 2023, 2022 and 2021:

	Shares	Grant Date Fair Value Per Share
Nonvested at the beginning of January 1, 2021	75	$ 6.06
Granted	40	$ 6.35
Vested	(26)	$ 6.02
Forfeited	(9)	$ 6.11
Nonvested as of December 31, 2021	80	$ 6.22
Granted	46	$ 6.55
Vested	(32)	$ 6.18
Forfeited	(9)	$ 6.36
Nonvested as of December 31, 2022	85	$ 6.38
Granted	47	$ 4.72
Vested	(31)	$ 6.39
Forfeited	(12)	$ 6.15
Nonvested as of December 31, 2023	89	$ 5.59

The total intrinsic value of restricted stock units, including PRSUs, vesting during the years ended December 31, 2023, 2022 and 2021 was $147, $207 and $166, respectively. During the years ended December 31, 2023, 2022 and 2021 the number of net settled shares issued as a result of restricted stock units vesting totaled 19, 19 and 16, respectively. During the years ended December 31, 2023, 2022 and 2021 we granted 4, 6 and 7 PRSUs to certain employees, respectively. 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 years ended December 31, 2023, 2022 and 2021 we granted 1, 4 and 1, respectively, 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 years ended December 31, 2023, 2022 and 2021.

We recognized share-based payment expense associated with restricted stock units, including PRSUs, of $154, $162 and $160 for the years ended December 31, 2023, 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 December 31, 2023 and December 31, 2022 was $423 and $472, respectively. The total unrecognized compensation costs at December 31, 2023 are expected to be recognized over a weighted-average period of 2.6 years.

401(k) Savings Plans

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 match 50% 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 $20, $19 and $21 for the years ended December 31, 2023, 2022 and 2021, respectively, in connection with the Sirius XM Plan.

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

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 $(3), $(1) and $4 for the years ended December 31, 2023, 2022 and 2021, respectively. As of December 31, 2023 and December 31, 2022, the fair value of the investments held in the trust were $53 and $47, respectively, which is included in Other long-term assets in our consolidated balance sheets and classified as trading securities. Trading gains and losses associated with these investments are recorded in Other (expense) income within our consolidated statements of comprehensive income. The associated liability is recorded within Other long-term liabilities in our consolidated balance sheets, and any increase or decrease in the liability is recorded in General and administrative expense within our consolidated statements of comprehensive income. We recorded gains (losses) on investments held in the trust of $7, $(10) and $5 for the years ended December 31, 2023, 2022 and 2021, respectively.

(16) Commitments and Contingencies

The following table summarizes our expected contractual cash commitments as of December 31, 2023:

	2024	2025	2026	2027	2028	Thereafter	Total
Debt obligations	$ 505	$ 6	$ 1,004	$ 1,500	$ 2,000	$ 4,250	$ 9,265
Cash interest payments	390	380	378	344	269	367	2,128
Satellite and transmission	292	203	91	40	—	—	626
Programming and content	447	358	242	151	79	63	1,340
Sales and marketing	96	27	18	6	—	—	147
Satellite incentive payments	8	8	3	3	3	12	37
Operating lease obligations	56	51	47	39	29	49	271
Royalties, minimum guarantees and other	407	305	84	23	9	1	829
Total (1)	$ 2,201	$ 1,338	$ 1,867	$ 2,106	$ 2,389	$ 4,742	$ 14,643

(1) The table does not include our reserve for uncertain tax positions, which at December 31, 2023 totaled $50.

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 for the design, construction and launch of four additional satellites, SXM-9, SXM-10, SXM-11 and SXM-12. 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. 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-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. Total rent recognized in connection with leases for the years ended December 31, 2023, 2022 and 2021 was $64, $68 and $69, respectively.

Royalties, Minimum Guarantees and Other. We have entered into music royalty arrangements that include fixed payments. In addition, certain of our podcast agreements also contain minimum guarantees. As of December 31, 2023, we had future fixed commitments related to music royalty and podcast agreements of $581, of which $265 will be paid in 2024 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 forecasts 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 forecasts, considers factors such as listening hours, downloads, 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 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.

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.

New York State v. Sirius XM Radio Inc. On December 20, 2023, the People of the State of New York, by Letitia James, Attorney General of the State of New York (the “NY AG”), filed a Petition in the Supreme Court of the State of New York, New York County, against us. The Petition alleges various violations of New York law and the federal Restore Online

Shoppers' Confidence Act ("ROSCA") arising out of our subscription cancellation practices. The Petition is the product of a subpoena that the NY AG issued in December 2021 seeking documents relating to our subscription cancellation practices and the related investigation. In general, the Petition alleges that we require consumers to devote an excessive amount of time to cancel subscriptions and have not implemented cancellation processes that are simple and efficient.

The Petition claims to be brought under certain provisions of New York law that authorize the NY AG to initiate special proceedings seeking injunctive and other equitable relief in cases of persistent business fraud or illegality. The Petition seeks: a permanent injunction from us violating provisions of New York law and ROSCA arising out of the alleged fraudulent, deceptive and illegal practices associated with our subscription cancellation procedures; an accounting of each consumer who cancelled, or sought to cancel, a satellite radio subscription, including the duration of the cancel interaction and the funds collected from such consumers after that interaction; monetary restitution and damages to aggrieved consumers; disgorgement of all profits resulting from the alleged illegal, deceptive and fraudulent acts; civil penalties; and the NY AG's costs.

In January 2024, Sirius XM filed to remove this action to the United States District Court for the Southern District of New York. The NY AG has informed the court that it intends to oppose the removal and seek a remand to the Supreme Court of the State of New York. We believe we have substantial defenses to the claims asserted in this action, and we intend to defend this action vigorously.

U.S. Music Royalty Fee Actions and Mass Arbitrations. A number of class actions and mass arbitrations have been commenced against us relating to our pricing, billing and subscription marketing practices. Although each class action and mass arbitration contains unique allegations; in general, the actions and arbitrations allege that we falsely advertised our music subscription plans at lower prices than we actually charge, that we allegedly did not disclose our "U.S. Music Royalty Fee", and that we have taken other actions to prevent customers from discovering the existence, amount and nature of the U.S. Music Royalty Fee in violation of various state consumer protection laws.

The plaintiffs and claimants seek to enjoin us from advertising our music subscription plans without specifically disclosing the existence and amount of the U.S. Music Royalty Fee. The plaintiffs and claimants also seek disgorgement, restitution and/or damages in the aggregate amount of U.S Music Royalty Fees paid by customers, as well as statutory and punitive damages where available.

To date, the actions and arbitrations filed against us include:

- On April 14, 2023, Ayana Stevenson and David Ambrose, individually, as private attorneys general, and on behalf of all other California persons similarly situated, filed a class action complaint against Sirius XM in the Superior Court of the State of California, County of Contra Costa. The case was removed to the United States District Court for the Northern District of California which compelled arbitration of all claims on November 9, 2023.

- On May 17, 2023, Robyn Posternock, Muriel Salters and Philip Munning, individually, as private attorneys general, and on behalf of all other New Jersey persons similarly situated, filed a class action complaint against Sirius XM in the United States District Court for the District of New Jersey. Ms. Salters and Mr. Munning have since withdrawn their claims and a motion to compel arbitration with Ms. Posternock has been fully briefed.

- On June 5, 2023, Christopher Carovillano and Steven Brandt, individually, as private attorneys general, and on behalf of all other United States persons similarly situated (excluding persons in the states of California, New Jersey and Washington), filed a class action complaint against Sirius XM in the United States District Court for the Southern District of New York. A motion to dismiss that complaint has been fully briefed.

- Commencing on June 5, 2023, the law firm of Hattis & Lukacs filed a series of mass arbitration claims against Sirius XM before the American Arbitration Association (the "AAA"), they currently purport to act on behalf of approximately 23,000 claimants. Currently, only claims for approximately 1,425 claimants in California and New Jersey remain pending before the AAA. The AAA has declined to administer the other claims.

- Other law firms have since threatened mass arbitration claims against Sirius XM before the AAA on behalf of approximately 28,000 additional claimants, many of which have added potential causes of action under the Electronic Funds Transfer Act.

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

We believe we have substantial defenses to the claims asserted in these actions and arbitrations, and we intend to defend these actions 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.

(17) Income Taxes

Current federal income tax expense or benefit represents the amounts expected to be reported on our income tax return, and deferred income tax expense or benefit represents the change in net deferred tax assets and liabilities. Deferred tax assets and liabilities are determined based on the difference between the financial statement and tax bases of assets and liabilities as measured by the enacted income tax rates that will be in effect when these differences reverse. The current state income tax provision is primarily related to taxable income in certain states that have suspended or limited the ability to use net operating loss carryforwards or where net operating losses have been fully utilized. Income tax expense is the sum of current income tax plus the change in deferred tax assets and liabilities.

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, resulting in our inclusion in the 2021 consolidated tax return of Liberty Media. 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.

Our current tax expense is the amount of tax payable on the basis of a hypothetical, current-year separate return. We provided deferred taxes on temporary differences and on any carryforwards that we could claim on our hypothetical return and assess the need for a valuation allowance on the basis of our projected separate return results. Any difference between the tax expense (or benefit) allocated to us under the separate return method and payments to be made to (or received from) Liberty Media for tax expense are treated as either dividends or capital contributions.

Income tax expense consisted of the following:

	For the Years Ended December 31,		
	2023	2022	2021
Current taxes:			
Federal	$ (300)	$ (140)	$ (31)
State	(24)	(50)	(50)
Total current taxes	(324)	(190)	(81)
Deferred taxes:			
Federal	57	(163)	(210)
State	7	(39)	79
Total deferred taxes	64	(202)	(131)
Total income tax expense	$ (260)	$ (392)	$ (212)

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

The following table presents a reconciliation of the U.S. federal statutory tax rate and our effective tax rate:

	For the Years Ended December 31,		
	2023	2022	2021
Federal tax expense, at statutory rate	21.0 %	21.0 %	21.0 %
State income tax expense, net of federal benefit	4.1 %	4.1 %	4.1 %
Change in valuation allowance	(1.7)%	2.2 %	1.5 %
Tax credits	(7.5)%	(1.5)%	(4.7)%
Share-based compensation	0.8 %	(0.8)%	(1.0)%
Impact of nondeductible compensation	0.7 %	0.8 %	0.6 %
Uncertain tax positions	0.4 %	(0.8)%	(0.1)%
Audit Settlements	— %	— %	(7.6)%
Other, net	(0.7)%	(0.6)%	0.1 %
Effective tax rate	17.1 %	24.4 %	13.9 %

Our effective tax rate of 17.1% for the year ended December 31, 2023 was primarily driven by federal and state income tax expense, partially offset by the benefits related to research and development and certain other credits, as well as a release in state valuation allowance. Our effective tax rate of 24.4% for the year ended December 31, 2022 was primarily impacted by federal and state income tax expense as well as changes in state valuation allowance, partially offset by a benefit related to research and development and certain other credits. Our effective tax rate of 13.9% for the year ended December 31, 2021 was primarily impacted by federal and state income tax expense, partially offset by settlements with various states as well as a benefit related to research and development and certain other credits.

Deferred income taxes are recognized for the tax consequences related to temporary differences between the carrying amount of assets and liabilities for financial reporting purposes and the amounts used for tax purposes at each year-end, based on enacted tax laws and statutory tax rates applicable to the periods in which the differences are expected to affect taxable income. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences can be carried forward under tax law. Our evaluation of the realizability of deferred tax assets considers both positive and negative evidence, including historical financial performance, scheduled reversal of deferred tax assets and liabilities, projected taxable income and tax planning strategies. The weight given to the potential effects of positive and negative evidence is based on the extent to which it can be objectively verified. A valuation allowance is recognized when, based on the weight of all available evidence, it is considered more likely than not that all, or some portion, of the deferred tax assets will not be realized.

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

The tax effects of temporary differences that give rise to significant portions of the deferred tax assets and deferred tax liabilities, shown before jurisdictional netting, are presented below:

	For the Years Ended December 31,	
	2023	2022
Deferred tax assets:		
Net operating loss carryforwards and tax credits	$ 361	$ 405
Deferred revenue	42	45
Accrued bonus	28	28
Expensed costs capitalized for tax	66	66
Investments	18	23
Stock based compensation	51	54
Operating lease liability	85	94
Other	26	17
Total deferred tax assets	677	732
Deferred tax liabilities:		
Depreciation of property and equipment	(149)	(206)
FCC license	(521)	(520)
Other intangible assets	(204)	(234)
Right of use asset	(68)	(77)
Other	(1)	—
Total deferred tax liabilities	(943)	(1,037)
Net deferred tax assets before valuation allowance	(266)	(305)
Valuation allowance	(88)	(113)
Total net deferred tax (liability) asset	$ (354)	$ (418)

Net operating loss carryforwards and tax credits decreased as a result of the utilization of net operating losses related to current year taxable income. As of December 31, 2023, our gross federal net operating loss carryforwards were approximately $284 which are subject to Section 382 limitations.

As of December 31, 2023 and 2022, we had a valuation allowance related to deferred tax assets of $88 and $113, respectively, that were not likely to be realized due to the timing of certain federal and state net operating loss limitations. During the year ended December 31, 2023, our valuation allowance decreased primarily as a result of the impact of an increase in forecasted earnings, resulting in higher projected utilization of net operating losses.

ASC 740, *Income Taxes*, requires a company to first determine whether it is more likely than not that a tax position will be sustained based on its technical merits as of the reporting date, assuming that taxing authorities will examine the position and have full knowledge of all relevant information. A tax position that meets this more likely than not threshold is then measured and recognized at the largest amount of benefit that is greater than fifty percent likely to be realized upon effective settlement with a taxing authority. If the tax position is not more likely than not to be sustained, the gross amount of the unrecognized tax position will not be recorded in the financial statements but will be shown in tabular format within the uncertain income tax positions. Changes in recognition or measurement are reflected in the period in which the change in judgment occurs due to the following conditions: (1) the tax position is "more likely than not" to be sustained, (2) the tax position, amount, and/or timing is ultimately settled through negotiation or litigation, or (3) the statute of limitations for the tax position has expired. A number of years may elapse before an uncertain tax position is effectively settled or until there is a lapse in the applicable statute of limitations. We record interest and penalties related to uncertain tax positions in Income tax expense in our consolidated statements of comprehensive income.

As of December 31, 2023 and 2022, we had unrecognized tax benefits and uncertain tax positions of $171 and $198, respectively. If recognized, $171 of unrecognized tax benefits would affect our effective tax rate. Uncertain tax positions are recognized in Other long-term liabilities which, as of December 31, 2023 and 2022 were $50 and $81, respectively, including accrued interest.

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

We have state income tax audits pending. We do not expect the ultimate outcome of these audits to have a material adverse effect on our financial position or results of operations. We also do not currently anticipate that our existing reserves related to uncertain tax positions as of December 31, 2023 will significantly increase or decrease during the year ending December 31, 2024. Various events could cause our current expectations to change. Should our position with respect to the majority of these uncertain tax positions be upheld, the effect would be recorded in our consolidated statements of comprehensive income as part of the income tax provision. We recorded interest expense of $2 and $(3) for the years ended December 31, 2023 and 2022, respectively, related to unrecognized tax benefits.

Changes in our unrecognized tax benefits and uncertain tax positions from January 1 through December 31 are set forth below:

	2023	2022
Balance, beginning of year	$ 198	$ 179
Increases in tax positions for prior years	4	3
Increases in tax positions for current year	32	31
Decreases in tax positions for prior years	(2)	(15)
Decreases in tax positions for current years	(3)	—
Decreases related to settlement with taxing authorities	(58)	—
Balance, end of year	$ 171	$ 198

As part of our ESG strategies, we have made, and expect to make, certain tax-efficient investments in clean energy technologies. These include investments in entities that own projects and technologies related to industrial carbon capture and storage. These investments will produce tax credits under Section 45Q of the Internal Revenue Code and related tax losses.

On August 16, 2022, the Inflation Reduction Act of 2022, or IRA, was signed into law. Among other things, the IRA imposes a 15% corporate alternative minimum tax for tax years beginning after December 31, 2022, levies a 1% excise tax on net stock repurchases after December 31, 2022, and provides tax incentives to promote clean energy. Beginning in 2023, our net stock repurchases were subject to the excise tax. Based on the historical net repurchase activity, the excise tax and the other provisions of the IRA are not expected to have a material impact on our results of operations or financial position.

(18) 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 $3 of intersegment advertising revenue during the year ended December 31, 2023 and less than $1 of intersegment advertising revenue during each of the years ended December 31, 2022 and 2021.

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

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

	For the Year Ended December 31, 2023		
	Sirius XM	Pandora and Off-platform	Total
Revenue			
Subscriber revenue	$ 6,342	$ 524	$ 6,866
Advertising revenue	169	1,589	1,758
Equipment revenue	193	—	193
Other revenue	136	—	136
Total revenue	6,840	2,113	8,953
Cost of services (a)	(2,689)	(1,475)	(4,164)
Segment gross profit	$ 4,151	$ 638	$ 4,789

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

	For the Year Ended December 31, 2023
Segment Gross Profit	$ 4,789
Subscriber acquisition costs	(359)
Sales and marketing (a)	(886)
Engineering, design and development (a)	(276)
General and administrative (a)	(502)
Depreciation and amortization	(554)
Share-based payment expense	(184)
Impairment, restructuring and acquisition costs	(82)
Total other (expense) income	(428)
Consolidated income before income taxes	$ 1,518

(a) Share-based payment expense of $45 related to cost of services, $45 related to sales and marketing, $46 related to engineering, design and development and $48 related to general and administrative has been excluded for the year ended December 31, 2023.

	For the Year Ended December 31, 2022		
	Sirius XM	Pandora and Off-platform	Total
Revenue			
Subscriber revenue	$ 6,370	$ 522	$ 6,892
Advertising revenue	196	1,576	1,772
Equipment revenue	189	—	189
Other revenue	150	—	150
Total revenue	6,905	2,098	9,003
Cost of services (b)	(2,641)	(1,443)	(4,084)
Segment gross profit	$ 4,264	$ 655	$ 4,919

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

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

	For the Year Ended December 31, 2022
Segment Gross Profit	$ 4,919
Subscriber acquisition costs	(352)
Sales and marketing [(b)]	(1,023)
Engineering, design and development [(b)]	(246)
General and administrative [(b)]	(465)
Depreciation and amortization	(536)
Share-based payment expense	(197)
Impairment, restructuring and acquisition costs	(64)
Total other (expense) income	(431)
Consolidated income before income taxes	$ 1,605

(b) Share-based payment expense of $46 related to cost of services, $52 related to sales and marketing, $39 related to engineering, design and development and $60 related to general and administrative has been excluded for the year ended December 31, 2022.

	For the Year Ended December 31, 2021		
	Sirius XM	Pandora and Off-platform	Total
Revenue			
Subscriber revenue	$ 6,084	$ 530	$ 6,614
Advertising revenue	188	1,542	1,730
Equipment revenue	201	—	201
Other revenue	151	—	151
Total revenue	6,624	2,072	8,696
Cost of services [(c)]	(2,594)	(1,329)	(3,923)
Segment gross profit	$ 4,030	$ 743	$ 4,773

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

	For the Year Ended December 31, 2021
Segment Gross Profit	$ 4,773
Subscriber acquisition costs	(325)
Sales and marketing [(c)]	(998)
Engineering, design and development [(c)]	(229)
General and administrative [(c)]	(451)
Depreciation and amortization	(533)
Share-based payment expense	(202)
Impairment, restructuring and acquisition costs	(20)
Total other (expense) income	(489)
Consolidated income before income taxes	$ 1,526

(c) Share-based payment expense of $45 related to cost of services, $58 related to sales and marketing, $36 related to engineering, design and development and $63 related to general and administrative has been excluded for the year ended December 31, 2021.

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

As of December 31, 2023, long-lived assets were predominantly located in the United States. No individual foreign country represented a material portion of our consolidated revenue during the year ended December 31, 2023.

(19) Subsequent Events

Capital Return Program

On January 24, 2024, our board of directors declared a quarterly dividend on our common stock in the amount of $0.0266 per share of common stock payable on February 23, 2024 to stockholders of record as of the close of business on February 9, 2024.

Credit Facility Modification

On January 26, 2024, Sirius XM entered into an amendment (“Amendment No. 9”) to its existing Credit Facility. Prior to Amendment No. 9, the Credit Facility consisted of a (i) $1,750 senior secured revolving credit facility, from which Sirius XM could borrow and reborrow from time to time and (ii) a $500 incremental term loan, borrowings from each of which Sirius XM could use for working capital and other general corporate purchases, including share repurchases, dividends and the financing of acquisitions. Amendment No. 9 provides for certain changes to the Credit Agreement, including the addition of a $1,100 incremental term loan.

SIRIUS XM HOLDINGS INC. AND SUBSIDIARIES
Schedule II - Schedule of Valuation and Qualifying Accounts

(in millions)

Description	Balance January 1,	Charged to Expenses	Write-offs/ Payments/ Other	Balance December 31,
2023				
Allowance for doubtful accounts	$ 11	59	(55)	$ 15
Deferred tax assets—valuation allowance	$ 113	—	(25)	$ 88
2022				
Allowance for doubtful accounts	$ 10	59	(58)	$ 11
Deferred tax assets—valuation allowance	$ 83	35	(5)	$ 113
2021				
Allowance for doubtful accounts	$ 15	53	(58)	$ 10
Deferred tax assets—valuation allowance	$ 54	29	—	$ 83

Exhibit 21.1

SIRIUS XM HOLDINGS INC.
SUBSIDIARIES

Sirius XM Radio Inc.

Automatic Labs Inc.
Satellite CD Radio LLC
Sirius XM Connected Vehicle Services Inc.
Sirius XM Connected Vehicle Services Holdings Inc.
SXM CVS Canada Inc.
XM 1500 Eckington LLC
XM Emall Inc.
XM Investment LLC
XM Radio LLC
Pandora Media, LLC
AdsWizz Inc.
Stitcher Media LLC
Audios Ventures Inc. (dba Simplecast)

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the registration statements (No. 333-229468, 333-228088, 333-152574, 333-159206, 333-160386, 333-179600, 333-204302, and 333-205409) on Form S-8 of our reports dated February 1, 2024, with respect to the consolidated financial statements and financial statement schedule II of Sirius XM Holdings Inc. and subsidiaries and the effectiveness of internal control over financial reporting.

/s/ KPMG LLP

New York, New York
February 1, 2024

Exhibit 31.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER

I, Jennifer C. Witz, certify that:

1. I have reviewed this Annual Report on Form 10-K for the fiscal year ended December 31, 2023 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)

February 1, 2024

Exhibit 31.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER

I, Thomas D. Barry, certify that:

1. I have reviewed this Annual Report on Form 10-K for the fiscal year ended December 31, 2023 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/ THOMAS D. BARRY

Thomas D. Barry
Executive Vice President and Chief Financial Officer
(Principal Financial Officer)

February 1, 2024

Exhibit 32.1

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 Annual Report of Sirius XM Holdings Inc. (the "Company") on Form 10-K for the fiscal year ended December 31, 2023 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)

February 1, 2024

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.

Exhibit 32.2

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 Annual Report of Sirius XM Holdings Inc. (the “Company”) on Form 10-K for the fiscal year ended December 31, 2023 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Thomas D. Barry, 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/ THOMAS D. BARRY
Thomas D. Barry
Executive Vice President and Chief Financial Officer
(Principal Financial Officer)

February 1, 2024

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.

SiriusXM

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Adopted November 16, 2023

CLAWBACK POLICY

1. POLICY

In accordance with the applicable rules of Rule 5608 of the Nasdaq ("Nasdaq") listing rules (the "Listing Rules") and Section 10D and Rule 10D-1 ("Rule 10D-1") of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), the Board of Directors (the "Board") of Sirius XM Holdings Inc. (the "Company") has adopted this Clawback Policy (this "Clawback Policy") to provide for the recovery of erroneously awarded incentive-based compensation from Officers of the Company.

2. APPLICABILITY

This Clawback Policy applies to all current or former "Officers" of the Company (as defined below) who received Recoverable Incentive Compensation (as defined below) during the Recoupment Period (as defined below). For purposes of this Clawback Policy, "Officers" means each individual who is or was during the applicable period designated by the Board (or an applicable committee thereof) to constitute an "officer" of the Company, as defined in Rule 16a-1(f) under the Exchange Act.

3. RECOUPMENT/CLAWBACK

In the event of a Restatement (as defined below), the Compensation Committee (if composed entirely of independent directors, or in the absence of such a committee, a majority of independent directors serving on the Board) (as applicable, the "Committee") shall require a current or former Officer to reimburse, repay or otherwise forfeit any Excess Incentive Compensation (as defined below) received by such Officer at any time during the three completed fiscal years immediately preceding a Restatement Determination (as defined below) (such period, the "Recoupment Period"). For purposes of this Clawback Policy, Recoverable Incentive Compensation is deemed "received" during the Company's fiscal period during which the financial reporting measure specified for the incentive compensation award is attained, even if the payment or grant of the Recoverable Incentive Compensation occurs after the end of that period.

"Excess Incentive Compensation" means, without regard to any taxes paid or payable, the amount of Recoverable Incentive Compensation that was received by the Officer, based on the incorrectly reported financial results of the Company, over the Recoverable Incentive Compensation that would have been received by the Officer if such amount(s) had been determined based on the financial results of the Company as set forth or reflected in the Restatement, in each case, as determined by the Committee. If the Committee cannot reasonably determine the amount of Excess Incentive

Compensation received by the Officer based on the information set forth or reflected in the Restatement (i.e., if the amount of such Excess Incentive Compensation is not subject to mathematical recalculation directly from the applicable Restatement (for example, if the applicable Financial Reporting Measure is based on or derived from the Company's stock price or total shareholder return)), then it will make its determination based on a reasonable estimate of the effect of the Restatement on the Company. Where the Committee has made a determination of the amount of Excess Incentive Compensation based on a reasonable estimate of the effect of the applicable Restatement on the Company's stock price or total shareholder return, it will maintain documentation of the determination of that reasonable estimate and, upon request, provide such documentation to Nasdaq.

"Financial Reporting Measures" means measures that are determined and presented in accordance with the accounting principles used in preparing the Company's financial statements, and any measures that are derived wholly or in part from such measures. For purposes of this Clawback Policy, financial reporting measures include, but are not limited to, stock price and total shareholder return. A Financial Reporting Measure need not be presented within the financial statements or included in a filing with the SEC.

"Incentive Compensation" means any cash, equity-based or equity-linked compensation to the extent the amount is paid, earned, vested or granted based wholly or in part on the attainment of one or more Financial Reporting Measures.

"Recoverable Incentive Compensation" means all Incentive Compensation received on or after the Effective Date by an Officer: (i) after beginning service as an Officer; (ii) while the Company has a class of securities listed on a national securities exchange or a national securities association; and (iii) during the Recoupment Period.

"Restatement" means an accounting restatement (i) due to the material noncompliance of the Company with any financial reporting requirement under the securities laws, including any required accounting restatement to correct an error in previously issued financial restatements that is material to the previously issued financial statements, or (ii) that corrects an error that is not material to previously issued financial statements, but would result in a material misstatement if the error were not corrected in the current period or left uncorrected in the current period.

"Restatement Determination" means the earlier to occur of (i) the date the Board, the Committee and/or management concludes (or reasonably should have concluded) that a Restatement is required, or (ii) the date a regulator, court or other legally authorized entity directs the Company to prepare a Restatement of a previously issued financial statement.

In the event of a Restatement Determination, the Committee shall promptly determine the amount of any Excess Incentive Compensation for each Officer in connection with the Restatement and shall promptly thereafter provide each Officer with a written notice containing the amount of Excess Incentive Compensation accompanied by all information reasonably necessary to support such calculation and a demand for repayment or return, as applicable. The Committee shall have discretion to determine the appropriate means of recovery of Excess Incentive Compensation based on all applicable facts and circumstances and taking into account the time value of money and the cost to stockholders of delaying recovery, including, subject to applicable law, by electing to withhold future unpaid compensation, by set-off, or by rescinding or cancelling unvested or vested stock or other equity-based awards. The right of recovery under this Clawback Policy shall run in favor of the Company. Any action by the Company to recover Excess Incentive Compensation under this Clawback Policy from an Officer shall not, whether alone or in combination with any other action, event or condition, be deemed (i) "good reason" for resignation or to serve as a basis for a claim of constructive termination under any benefits or compensation arrangement applicable to such Officer, or (ii) to constitute a breach of a contract or other arrangement to which such Officer is party.

4. ADMINISTRATION OF CLAWBACK POLICY

Administration of this Clawback Policy shall be the responsibility of the Committee. The Committee is authorized to interpret and construe this Clawback Policy and to make all determinations reasonably necessary, appropriate, or advisable for the administration of this Clawback Policy and for the Company’s compliance with the Listing Rules, Section 10D, Rule 10D-1 and any other applicable law, regulation, rule or interpretation of the SEC or Nasdaq promulgated or issued in connection therewith.

Notwithstanding anything set forth herein to the contrary, the Company shall not be required to seek recovery of compensation under this Clawback Policy (i) if the Committee reasonably determines that the direct expenses to be paid to a third party to recover the Excess Incentive Compensation would exceed the amount of the compensation to be recovered, making recovery impracticable, and provides all required information to Nasdaq, (ii) if recovery would be in violation of any home country law applicable to the Company or an Officer which law was adopted prior to November 28, 2022, *provided that,* before determining that it would be impracticable to recover any amount of Excess Incentive Compensation based on violation of home country law, the Company has obtained an opinion of home country counsel, acceptable to Nasdaq, that recovery would result in such a violation and a copy of the opinion is provided to Nasdaq, or (iii) to the extent applicable, if recovery would likely cause an otherwise tax-qualified retirement plan, under which benefits are broadly available to employees of the Company, to fail to meet the requirements of 26 U.S.C. 401(a)(13) or 26 U.S.C. 411(a) and regulations thereunder. In connection with the foregoing, the Committee must also make a determination that, as a result of any or all of the foregoing, recovery under this Clawback Policy would be impracticable.

5. NO INDEMNIFICATION

None of the Company or any of its subsidiaries shall be permitted to indemnify or insure any Officer against (i) the loss of any Excess Incentive Compensation that is repaid, returned or recovered pursuant to the terms of this Clawback Policy, or (ii) any claims relating to the Company’s enforcement of its rights under this Clawback Policy.

6. OTHER RECOVERY RIGHTS

This Clawback Policy shall be binding and enforceable against all Officers and, to the extent required by applicable law, their beneficiaries, heirs, executors, administrators or other legal representatives. The Committee intends that this Clawback Policy will be applied to the extent required by applicable law. Any employment agreement, equity award agreement, compensatory plan or any other agreement or arrangement with an Officer shall be deemed to include, as a condition to the grant of any benefit thereunder, an agreement by the Officer to abide by the terms of this Clawback Policy. Any right of recovery under this Clawback Policy is in addition to, and not in lieu of, any other remedies or rights of recovery that may be available to the Company under applicable law, regulation or rule or pursuant to the terms of any policy of the Company or any provision in any employment agreement, equity award agreement, compensatory plan, agreement or other arrangement; *provided, that*, to the extent permitted by applicable law, if an Officer has already reimbursed or otherwise repaid the Company in respect of any Excess Incentive Compensation required to be repaid as a result of any duplicative recovery obligations established by the Company or pursuant to applicable law, the Committee may reduce such amount(s) from the amount of any Excess Incentive Compensation otherwise required to be repaid under this Clawback Policy.

7. EFFECTIVENESS OF CLAWBACK POLICY

This Clawback Policy shall become effective as of October 2, 2023 (the "Effective Date"). This Clawback Policy may be suspended, amended, modified or terminated by the Board of Directors/the Committee at any time.