SIRIUS XM RADIO INC.

(Exact name of company as specified in its charter)

ANNUAL REPORT

For the Fiscal Year Ended December 31, 2016

Explanatory Note

Sirius XM Radio Inc. ("Sirius XM") is furnishing this Annual Report for the fiscal year ended December 31, 2016 (the "Annual Report") in order to comply with the reporting obligations in the indentures governing its 4.25% Senior Notes due 2020, 5.75% Senior Notes due 2021, 5.25% Senior Secured Notes due 2022, 4.625% Senior Notes due 2023, 6.00% Senior Notes due 2024, 5.375% Senior Notes due 2025 and 5.375% Senior Notes due 2026 (collectively, the "Notes").

Before making any investment decisions in Sirius XM or Sirius XM Holdings Inc. ("Holdings"), investors should read the following consolidated financial statements and Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") of Sirius XM in conjunction with Holdings' Annual Report on Form 10-K for the fiscal year ended December 31, 2016 and Holdings' other reports available through the Securities and Exchange Commission website at www.sec.gov and our website at www.siriusxm.com, and with Sirius XM's other reports available through our website. Holdings' Annual Report on Form 10-K for the fiscal year ended December 31, 2016 is hereby incorporated by reference except for Section 9A and Exhibits 31.1, 31.2, 32.1 and 32.2 contained therein. Sirius XM is a wholly-owned subsidiary of Holdings and Holdings has no operations independent of Sirius XM. Refer to Note 1 to the consolidated financial statements included within this Annual Report for an explanation of differences between Sirius XM and Holdings' consolidated financial statements.

The terms "Sirius XM," "we," "us," "our," and the "Company," as used herein and unless otherwise stated or indicated by context, refer to Sirius XM Radio Inc. and its subsidiaries.

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SELECTED FINANCIAL DATA

Our selected financial data set forth below with respect to the consolidated statements of comprehensive income for the years ended December 31, 2016, 2015 and 2014, and with respect to the consolidated balance sheets at December 31, 2016 and 2015, are derived from our audited consolidated financial statements included in this Annual Report. Historical operating and balance sheet data included within the following selected financial data from 2012 through 2014 is derived from our audited consolidated financial statements, which are not included in this Annual Report. This selected financial data should be read in conjunction with the audited consolidated financial statements, and related notes thereto, and “Management's Discussion and Analysis of Financial Condition and Results of Operations” included in this Annual Report.

	As of and for the Years Ended December 31,				
(in thousands, except per share data)	2016 (1)	2015	2014	2013 (2)	2012 (3)
Statements of Comprehensive Income Data (4):					
Total revenue	$ 5,017,220	$ 4,570,058	$ 4,181,095	$ 3,799,095	$ 3,402,040
Net income (loss) attributable to Sirius XM Radio Inc.'s sole stockholder	$ 745,933	$ 509,724	$ 544,795	$ (66,494)	$ 3,472,702
Cash dividends declared per share	$ —	$ —	$ —	$ —	$ 0.05
Balance Sheet Data:					
Cash and cash equivalents	$ 213,939	$ 111,838	$ 147,724	$ 134,805	$ 520,945
Restricted investments	$ 9,888	$ 9,888	$ 5,922	$ 5,718	$ 3,999
Total assets (5)	$13,180,407	$11,568,824	$ 9,905,275	$ 8,833,675	$ 9,024,800
Long-term debt, net of current portion (5)	$ 5,842,764	$ 5,443,614	$ 4,487,419	$ 3,088,701	$ 2,400,943
Stockholder equity	$ 4,395,863	$ 3,355,671	$ 2,846,047	$ 2,301,346	$ 4,039,565

(1) For the year ended December 31, 2016, we recorded $293,896 as an increase to our Deferred tax assets and decrease to our Accumulated deficit as a result of the adoption of Accounting Standards Update 2016-09, *Compensation-Stock Compensation (Topic 718)*.

(2) The selected financial data for 2013 includes the balances and approximately two months of activity related to the acquisition of the connected vehicle business of Agero, Inc. in November 2013. For the year ended December 31, 2013, we had a $464,102 loss on change in fair value of debt and equity instruments, primarily related to our then outstanding 7% Exchangeable Senior Subordinated Notes due December 2014.

(3) For the year ended December 31, 2012, we had an income tax benefit of $2,998,234 due to the release of our valuation allowance. A special cash dividend was paid during 2012.

(4) Net income (loss) per share for Sirius XM is not presented since Sirius XM is a wholly-owned subsidiary of Holdings.

(5) The 2012 - 2015 balances reflect the adoption of Accounting Standards Update 2015-03, *Interest- Imputation of Interest (Subtopic 835-30): Simplifying the Presentation of Debt Issuance Costs,* and Accounting Standards Update 2015-15, *Presentation and Subsequent Measurement of Debt Issuance Costs Associated with Line-of-Credit Agreements.* As a result of our adoption of these ASUs, Total Assets was reduced by $7,155, $6,444, $17,821 and $30,043 for the years ended December 31, 2015, 2014, 2013 and 2012, respectively, and Long-term debt, net of current portion, was reduced by $7,155, $6,444, $5,120 and $30,043 for the years ended December 31, 2015, 2014, 2013 and 2012, respectively.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

All amounts referenced in this discussion and analysis are in thousands, except per subscriber and per installation amounts, unless otherwise stated.

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and related notes included elsewhere in this Annual Report and with Holdings' Annual Report on Form 10-K for the year ended December 31, 2016.

Special Note Regarding Forward-Looking Statements

We have made various statements in this Annual Report 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 furnished to holders of the Notes, in our press releases and in other documents. In addition, from time to time, we, through our management, may make oral 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. 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. 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. We believe these factors include but are not limited to those described under "Part I - Item 1A. Risk Factors" in Holdings' Annual Report on Form 10-K for the fiscal year ended December 31, 2016. These factors should not be construed as exhaustive and should be read in conjunction with the other cautionary statements that are included Holdings' Annual Report on Form 10-K and in this Annual Report. 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.

Executive Summary

We transmit music, sports, entertainment, comedy, talk, news, traffic and weather channels, as well as infotainment services, in the United States on a subscription fee basis through our two proprietary satellite radio systems. Subscribers can also receive music and other channels, plus features such as SiriusXM On Demand and MySXM, over our Internet radio service, including through applications for mobile devices, home devices and other consumer electronic equipment. We are also a leader in providing connected vehicle services. 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 have agreements with every major automaker ("OEMs") to offer satellite radio in their vehicles. We also acquire subscribers through marketing to owners and lessees of previously owned vehicles that include factory-installed satellite radios that are not currently subscribing to our services. Our satellite radios are primarily distributed through automakers; retail stores nationwide; and through our website. Satellite radio services are also offered to customers of certain rental car companies.

As of December 31, 2016, we had approximately 31.3 million subscribers of which approximately 26.0 million were self-pay subscribers and approximately 5.4 million were paid promotional subscribers. Our subscriber totals include subscribers under our regular pricing plans; discounted pricing plans; subscribers that have prepaid, including payments either made or due from automakers for subscriptions included in the sale or lease price of a vehicle; subscribers to our Internet services who do not also have satellite radio subscriptions; and certain subscribers to our weather, traffic, and data services who do not also have satellite radio subscriptions. Subscribers and subscription related revenues and expenses associated with our connected vehicle services and the Sirius XM Canada service are not included in our subscriber count or subscriber-based operating metrics.

Our primary source of revenue is subscription fees, with most of our customers subscribing to annual, semi-annual, quarterly or monthly plans. We offer discounts for prepaid, longer term subscription plans, as well as a multiple subscription discount. We also derive revenue from activation and other fees, the sale of advertising on select non-music channels, the direct sale of satellite radios and accessories, and other ancillary services, such as our weather, traffic and data services.

In certain cases, a subscription to our radio services is included in the sale or lease price of new vehicles or previously owned vehicles. The length of these subscriptions varies but is typically three to twelve months. We receive payments for these subscriptions from certain automakers. We also reimburse various automakers for certain costs associated with satellite radios installed in new vehicles.

As of December 31, 2016, Liberty Media beneficially owned, directly and indirectly, approximately 67% of the outstanding shares of Holdings' common stock. As a result, Holdings is a "controlled company" for the purposes of the NASDAQ corporate governance requirements. Liberty Media owns interests in a range of media, communications and entertainment businesses.

We hold an equity method investment in Sirius XM Canada which offers satellite radio services in Canada. As of December 31, 2016, we owned an approximate 37% equity interest in Sirius XM Canada.

Results of Operations

Set forth below are our results of operations for the year ended December 31, 2016 compared with the year ended December 31, 2015 and the year ended December 31, 2015 compared with the year ended December 31, 2014.

	For the Years Ended December 31,			2016 vs 2015 Change		2015 vs 2014 Change	
	2016	2015	2014	Amount	%	Amount	%
Revenue:							
Subscriber revenue	$4,196,852	$3,824,793	$3,554,302	$ 372,059	10 %	$270,491	8 %
Advertising revenue	138,231	122,292	100,982	15,939	13 %	21,310	21 %
Equipment revenue	118,947	110,923	104,661	8,024	7 %	6,262	6 %
Other revenue	563,190	512,050	421,150	51,140	10 %	90,900	22 %
Total revenue	5,017,220	4,570,058	4,181,095	447,162	10 %	388,963	9 %
Operating expenses:							
Cost of services:							
Revenue share and royalties	1,108,515	1,034,832	810,028	73,683	7 %	224,804	28 %
Programming and content	353,779	293,091	297,313	60,688	21 %	(4,222)	(1)%
Customer service and billing	387,131	377,908	370,585	9,223	2 %	7,323	2 %
Satellite and transmission	103,020	94,609	86,013	8,411	9 %	8,596	10 %
Cost of equipment	40,882	42,724	44,397	(1,842)	(4)%	(1,673)	(4)%
Subscriber acquisition costs	512,809	532,599	493,464	(19,790)	(4)%	39,135	8 %
Sales and marketing	386,724	354,189	336,480	32,535	9 %	17,709	5 %
Engineering, design and development	82,146	64,403	62,784	17,743	28 %	1,619	3 %
General and administrative	341,106	324,801	293,938	16,305	5 %	30,863	10 %
Depreciation and amortization	268,979	272,214	266,423	(3,235)	(1)%	5,791	2 %
Total operating expenses	3,585,091	3,391,370	3,061,425	193,721	6 %	329,945	11 %
Income from operations	1,432,129	1,178,688	1,119,670	253,441	22 %	59,018	5 %
Other income (expense):							
Interest expense	(331,225)	(299,103)	(269,010)	(32,122)	(11)%	(30,093)	(11)%
Loss on extinguishment of debt and credit facilities, net	(24,229)	—	—	(24,229)	— %	—	— %
Gain on change in fair value of debt and equity instruments	—	—	17,069	—	— %	(17,069)	(100)%
Other income	14,985	12,379	14,611	2,606	21 %	(2,232)	(15)%
Total other expense	(340,469)	(286,724)	(237,330)	(53,745)	(19)%	(49,394)	(21)%
Income before income taxes	1,091,660	891,964	882,340	199,696	22 %	9,624	1 %
Income tax expense	(345,727)	(382,240)	(337,545)	36,513	10 %	(44,695)	(13)%
Net income attributable to Sirius XM Radio Inc.'s sole stockholder	$ 745,933	$ 509,724	$ 544,795	$ 236,209	46 %	$(35,071)	(6)%

Total Revenue

Subscriber Revenue includes subscription, activation and other fees.

- *2016 vs. 2015*: For the years ended December 31, 2016 and 2015, subscriber revenue was $4,196,852 and $3,824,793, respectively, an increase of 10%, or $372,059. The period over period increase was primarily attributable to an 8% increase in the daily weighted average number of subscribers as well as a 3% increase in average monthly revenue per subscriber resulting from certain rate increases.
- *2015 vs. 2014*: For the years ended December 31, 2015 and 2014, subscriber revenue was $3,824,793 and $3,554,302, respectively, an increase of 8%, or $270,491. The period over period increase was primarily attributable to an 8% increase in the daily weighted average number of subscribers as well as a 1% increase in average monthly revenue per subscriber resulting from certain rate increases.

We expect subscriber revenues to increase based on the growth of our subscriber base, including the increases in certain of our subscription rates and the sale of additional services to subscribers.

Advertising Revenue includes the sale of advertising on certain non-music channels.

- *2016 vs. 2015*: For the years ended December 31, 2016 and 2015, advertising revenue was $138,231 and $122,292, respectively, an increase of 13%, or $15,939. The increase was primarily due to a greater number of advertising spots sold and transmitted as well as increases in rates charged per spot.
- *2015 vs. 2014*: For the years ended December 31, 2015 and 2014, advertising revenue was $122,292 and $100,982, respectively, an increase of 21%, or $21,310. The increase was primarily due to a greater number of advertising spots sold and transmitted as well as increases in rates charged per spot.

We expect our advertising revenue to continue to grow as more advertisers are attracted to our national platform and growing subscriber base and as we launch additional non-music channels.

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

- *2016 vs. 2015*: For the years ended December 31, 2016 and 2015, equipment revenue was $118,947 and $110,923, respectively, an increase of 7%, or $8,024. The increase was driven by an increase in OEM production and an increase in royalty revenue on certain modules starting in the second quarter of 2016, partially offset by lower revenue generated through our distributors and direct to consumer business.
- *2015 vs. 2014*: For the years ended December 31, 2015 and 2014, equipment revenue was $110,923 and $104,661, respectively, an increase of 6%, or $6,262. The increase was driven by royalties from higher OEM production and sales to distributors, partially offset by lower direct to consumer sales.

We expect equipment revenue to increase due to the increase in royalty revenues associated with the transition of our chipsets.

Other Revenue includes amounts earned from subscribers for the U.S. Music Royalty Fee, revenue from our connected vehicle business and our Canadian affiliate and ancillary revenues.

- *2016 vs. 2015*: For the years ended December 31, 2016 and 2015, other revenue was $563,190 and $512,050, respectively, an increase of 10%, or $51,140. The period over period increase was primarily driven by additional revenues from the U.S. Music Royalty Fee due to an increase in the number of subscribers and subscribers paying at a higher rate of 13.9%. These increases were offset by lower non-recurring engineering fees associated with our connected vehicle services, lower activation revenues from our Canadian affiliate and a change in accounting for a programming contract in the third quarter of 2015.
- *2015 vs. 2014*: For the years ended December 31, 2015 and 2014, other revenue was $512,050 and $421,150, respectively, an increase of 22%, or $90,900. The increase was driven by revenues from the U.S. Music Royalty Fee as the number of subscribers subject to the 13.9% rate increased along with an overall increase in subscribers, higher revenue generated from our connected vehicle services, and increased revenue from our Canadian affiliate.

Other revenue is expected to increase due to an increase in U.S. Music Royalty fees as our subscriber base continues to grow and an increase in revenue from Sirius XM Canada related to service agreements following the closing of the expected transaction in Canada.

Operating Expenses

Revenue Share and Royalties include distribution and content provider revenue share, royalties for transmitting content and web streaming, and advertising revenue share.

- *2016 vs. 2015*: For the years ended December 31, 2016 and 2015, revenue share and royalties were $1,108,515 and $1,034,832, respectively, an increase of 7%, or $73,683, but decreased as a percentage of total revenue. The increase was due to overall greater revenues subject to royalty and revenue sharing arrangements, a 5% increase in the statutory royalty rate applicable to our use of post-1972 recordings, and $45,900 related to music royalty legal settlements and reserves recorded in the fourth quarter of 2016. The increase was mitigated by $128,256 in expense recorded during the twelve months ended December 31, 2015 for the portion of the settlement of the Capitol Records LLC et al. v. Sirius XM Radio Inc. lawsuit related to our use of pre-1972 sound recordings. We recorded $39,808 in expense related to this settlement through the twelve months ended December 31, 2016.

- *2015 vs. 2014*: For the years ended December 31, 2015 and 2014, revenue share and royalties were $1,034,832 and $810,028, respectively, an increase of 28%, or $224,804, and increased as a percentage of total revenue. The increase was primarily due to $128,256 in expense recorded during the year ended December 31, 2015 for the portion of the settlement of the Capitol Records LLC et al. v. Sirius XM Radio Inc. lawsuit related to our use of pre-1972 sound recordings. Revenue share and royalties also increased due to greater revenues subject to royalty and revenue sharing arrangements and a 5.3% increase in the statutory royalty rate for the performance of post-1972 sound recordings.

We expect our revenue share and royalty costs to increase as our revenues grow. As determined by the Copyright Royalty Board, we have paid or will pay royalties for the use of certain post-1972 sound recordings on our satellite radio service of 9.5%, 10.0%, 10.5% and 11% in 2014, 2015, 2016 and 2017, respectively.

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.

- *2016 vs. 2015*: For the years ended December 31, 2016 and 2015, programming and content expenses were $353,779 and $293,091, respectively, an increase of 21%, or $60,688, and increased as a percentage of total revenue. The increase was primarily due to renewed programming licenses as well as increased talent and personnel-related costs.
- *2015 vs. 2014*: For the years ended December 31, 2015 and 2014, programming and content expenses were $293,091 and $297,313, respectively, a decrease of 1%, or $4,222, and decreased as a percentage of total revenue. The decrease was primarily due to the termination of certain programming agreements, partially offset by the addition of new programming arrangements and personnel-related costs.

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

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, transaction fees and bad debt expense.

- *2016 vs. 2015*: For the years ended December 31, 2016 and 2015, customer service and billing expenses were $387,131 and $377,908, respectively, an increase of 2%, or $9,223, but decreased as a percentage of total revenue. The increase was primarily due to costs associated with a higher subscriber base driving increased bad debt expenses, transaction fees, and call center costs, partially offset by lower personnel-related costs and the classification of wireless transmission costs related to our connected vehicle services to Satellite and transmission expense in 2016.
- *2015 vs. 2014*: For the years ended December 31, 2015 and 2014, customer service and billing expenses were $377,908 and $370,585, respectively, an increase of 2%, or $7,323, but decreased as a percentage of total revenue. The increase was primarily due to a higher subscriber base driving increased transaction fees, bad debt expense and personnel-related costs, partially offset by efficiencies achieved from management initiatives implemented at call centers operated by our vendors.

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

Satellite and 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 streaming service.

- *2016 vs. 2015*: For the years ended December 31, 2016 and 2015, satellite and transmission expenses were $103,020 and $94,609, respectively, an increase of 9%, or $8,411, but decreased as a percentage of total revenue. We recorded a loss on disposal of certain obsolete satellite parts of $12,912 in the second quarter of 2016 and a loss on disposal of certain obsolete terrestrial repeaters and related parts of $7,384 in the fourth quarter of 2015. Excluding the losses on disposal of these assets, the increase was driven by inclusion of wireless transmission costs related to our connected vehicle services that were previously recorded to Customer service and billing expense in 2015, partially offset by lower web streaming costs from in-sourcing certain activities.

- *2015 vs. 2014*: For the years ended December 31, 2015 and 2014, satellite and transmission expenses were $94,609 and $86,013, respectively, an increase of 10%, or $8,596, and increased as a percentage of total revenue. The increase was primarily due to the loss on disposal of certain obsolete terrestrial repeaters and related parts of $7,384, and higher costs associated with our Internet streaming operations, partially offset by lower satellite insurance costs.

We expect satellite and transmission expenses, excluding losses from disposal of assets, to remain relatively unchanged.

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.

- *2016 vs. 2015*: For the years ended December 31, 2016 and 2015, cost of equipment was $40,882 and $42,724, respectively, a decrease of 4%, or $1,842, and decreased as a percentage of equipment revenue. The decrease was primarily due to lower aftermarket and direct to consumer sales, partially offset by higher inventory reserves.
- *2015 vs. 2014*: For the years ended December 31, 2015 and 2014, cost of equipment was $42,724 and $44,397, respectively, a decrease of 4%, or $1,673, and decreased as a percentage of equipment revenue. The decrease was primarily due to lower direct to consumer sales, partially offset by higher sales to distributors.

We expect cost of equipment to fluctuate with changes in sales and inventory valuations.

Subscriber Acquisition Costs 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; commissions paid to automakers and retailers; product warranty obligations; freight; and provisions for inventory allowances attributable to inventory consumed in our OEM and retail distribution channels. The majority of subscriber acquisition costs are incurred and expensed in advance of, or concurrent with, 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.

- *2016 vs. 2015*: For the years ended December 31, 2016 and 2015, subscriber acquisition costs were $512,809 and $532,599, respectively, a decrease of 4%, or $19,790, and decreased as a percentage of total revenue. The decrease was driven by lower subsidized costs related to the transition of chipsets and reductions to OEM hardware subsidy rates, partially offset by higher radio installations.
- *2015 vs. 2014*: For the years ended December 31, 2015 and 2014, subscriber acquisition costs were $532,599 and $493,464, respectively, an increase of 8%, or $39,135, but decreased as a percentage of total revenue. Increased costs related to a larger number of satellite radio installations in new vehicles which were partially offset by improved OEM and chipset subsidy rates per vehicle.

We expect subscriber acquisition costs to fluctuate with OEM installations and aftermarket volume; however, the cost of subsidized radio components is expected to decline. We intend to continue to offer subsidies, commissions and other incentives to acquire subscribers.

Sales and Marketing includes costs for marketing, advertising, media and production, including promotional events and sponsorships; cooperative marketing; and personnel. Marketing costs include expenses related to direct mail, outbound telemarketing and email communications.

- *2016 vs. 2015*: For the years ended December 31, 2016 and 2015, sales and marketing expenses were $386,724 and $354,189, respectively, an increase of 9%, or $32,535, but decreased as a percentage of total revenue. The increase was primarily due to additional subscriber communications, retention programs and acquisition campaigns as well as higher personnel-related costs.
- *2015 vs. 2014*: For the years ended December 31, 2015 and 2014, sales and marketing expenses were $354,189 and $336,480, respectively, an increase of 5%, or $17,709, but decreased as a percentage of total revenue. The increase was primarily due to additional subscriber communications, retention programs and acquisition campaigns as well as higher personnel-related costs.

We anticipate that sales and marketing expenses will increase as we expand programs to retain our existing subscribers, win back former subscribers, and attract new 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 costs associated with the incorporation of our radios into new vehicles manufactured by automakers.

- *2016 vs. 2015*: For the years ended December 31, 2016 and 2015, engineering, design and development expenses were $82,146 and $64,403, respectively, an increase of 28%, or $17,743, and increased as a percentage of total revenue. The increase was primarily driven by the inclusion of personnel-related costs from our connected vehicle services that were previously recorded in Sales and marketing and General and administrative expense in 2015, partially offset by lower research and development costs.
- *2015 vs. 2014*: For the years ended December 31, 2015 and 2014, engineering, design and development expenses were $64,403 and $62,784, respectively, an increase of 3%, or $1,619, and decreased as a percentage of total revenue. The increase was driven primarily by additional costs associated with streaming development, partially offset by lower personnel costs.

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

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

- *2016 vs. 2015*: For the years ended December 31, 2016 and 2015, general and administrative expenses were $341,106 and $324,801, respectively, an increase of 5%, or $16,305, but decreased as a percentage of total revenue. The increase was primarily driven by consulting and legal costs.
- *2015 vs. 2014*: For the years ended December 31, 2015 and 2014, general and administrative expenses were $324,801 and $293,938, respectively, an increase of 10%, or $30,863, and increased as a percentage of total revenue. The increase was driven primarily by higher personnel costs, reserves for consumer legal settlements and facilities costs, partially offset by insurance recoveries and lower professional fees related to the proposal made in January 2014 by Liberty Media to acquire the balance of Holdings' common stock not already owned by it.

We expect our general and administrative expenses to remain flat as we expect increased costs to support the growth of our business to be offset by lower legal and consulting costs.

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

- *2016 vs. 2015*: For the years ended December 31, 2016 and 2015, depreciation and amortization expense was $268,979 and $272,214, respectively, a decrease of 1%, or $3,235, and decreased as a percentage of total revenue. Depreciation decreased as certain satellites reached the end of their estimated service lives offset by additional assets placed in-service.
- *2015 vs. 2014*: For the years ended December 31, 2015 and 2014, depreciation and amortization expense was $272,214 and $266,423, respectively, an increase of 2%, or $5,791, but decreased as a percentage of total revenue. The increase was driven by additional software placed in-service, partially offset by a reduction of amortization associated with the stepped-up basis in assets acquired in the Merger (including intangible assets, property and equipment) through the end of their estimated service lives and certain satellites reaching the end of their estimated service lives.

Other Income (Expense)

Interest Expense, Net of Amounts Capitalized, includes interest on outstanding debt.

- *2016 vs. 2015*: For the years ended December 31, 2016 and 2015, interest expense was $331,225 and $299,103, respectively, an increase of 11%, or $32,122. The increase was primarily due to higher average debt during the year ended December 31, 2016 compared to the year ended December 31, 2015.
- *2015 vs. 2014*: For the years ended December 31, 2015 and 2014, interest expense was $299,103 and $269,010, respectively, an increase of 11%, or $30,093. The increase was primarily due to higher average debt during the year ended December 31, 2015 compared to the year ended December 31, 2014. The increase was partially offset by lower average interest rates resulting from the redemption and conversion of higher interest rate debt during 2014.

We expect interest expense to increase in future periods to the extent the amount of our total debt outstanding increases.

Loss on Extinguishment of Debt and Credit Facilities, Net, includes losses incurred as a result of the conversion and retirement of certain debt.

- *2016 vs. 2015*: For the years ended December 31, 2016 and 2015, loss on extinguishment of debt and credit facilities, net, was $24,229 and $0, respectively. During the year ended December 31, 2016, a loss was recorded on the redemption of our then outstanding 5.875% Senior Notes due 2020.
- *2015 vs. 2014*: There was no loss on extinguishment of debt and credit facilities for the years ended December 31, 2015 and 2014.

Gain on Change in Fair Value of Debt and Equity Instruments represents the change in fair value associated with the 7% Exchangeable Senior Subordinated Notes due 2014 that were outstanding until December 1, 2014.

- *2016 vs. 2015*: There was no gain on change in value of debt and equity instruments for the years ended December 31, 2016 and 2015.
- *2015 vs. 2014*: For the years ended December 31, 2015 and 2014, the gain on change in value of debt and equity instruments was $0 and $17,069, respectively. The gain in 2014 resulted from a change in the fair value price of the 7% Exchangeable Senior Subordinated Notes due 2014 ("Exchangeable Notes").

Other Income primarily includes realized gains and losses, interest income, and our share of the income or loss of Sirius XM Canada.

- *2016 vs. 2015*: For the years ended December 31, 2016 and 2015, other income was $14,985 and $12,379, respectively. Other income for the year ended December 31, 2016 was primarily driven by our share of Sirius XM Canada's net income and dividends received from Sirius XM Canada in excess of our investment. Other income for the year ended December 31, 2015 was driven by dividends received from Sirius XM Canada in excess of our investment.
- *2015 vs. 2014*: For the years ended December 31, 2015 and 2014, other income was $12,379 and $14,611, respectively. Other income for the year ended December 31, 2015 was driven by dividends received from Sirius XM Canada in excess of our investment. Other income for the year ended December 31, 2014 was driven by our share of Sirius XM Canada's net income and a gain from the conversion of certain debentures into shares of Sirius XM Canada, partially offset by the amortization expense related to our equity method intangible assets.

Income Taxes

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

- *2016 vs. 2015*: For the years ended December 31, 2016 and 2015, income tax expense was $345,727 and $382,240, respectively. Our annual effective tax rate for the year ended December 31, 2016 was 31.7%. In the fourth quarter of 2016, we recognized a $66,326 Federal tax credit under the Protecting Americans from Tax Hikes Act of 2015 related to research and development activities, which reduced our effective tax rate by 6.1%.
- *2015 vs. 2014*: For the years ended December 31, 2015 and 2014, income tax expense was $382,240 and $337,545, respectively. Our annual effective tax rate for the year ended December 31, 2015 was 42.9%, which was impacted by tax law changes in the District of Columbia and New York City. The tax law change in the District of Columbia will reduce our future taxes and use less of certain net operating losses in the future. The District of Columbia tax law change resulted in a $44,392 increase in our valuation allowance during the year ended December 31, 2015. The tax law change in New York City will increase certain net operating losses to be utilized in the future. The New York City tax law change resulted in a $14,831 increase in our deferred tax asset during the year ended December 31, 2015. Our effective tax rate for the year ended December 31, 2014 was 38.3% primarily due to the impact of the loss on change in fair value of the derivative related to the share repurchase agreement with Liberty Media.

Key Financial and Operating Performance Metrics

In this section, we present certain financial performance measures that are not calculated and presented in accordance with generally accepted accounting principles in the United States ("Non-GAAP"), which include free cash flow and adjusted EBITDA. We also present certain operating performance measures, which include average monthly revenue per subscriber, or ARPU; customer service and billing expenses, per average subscriber; and subscriber acquisition cost, or SAC, per installation. Our Adjusted EBITDA excludes the impact of share-based payment expense and certain purchase price accounting adjustments related to the merger of Sirius and XM (the "Merger"). Additionally, when applicable, our adjusted EBITDA and free cash flow metrics exclude 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 accompanying glossary on pages 16 through 20 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 investors find these Non-GAAP financial and operating performance measures useful in evaluating our core trends because they provide a direct view of our underlying contractual costs. We believe investors 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 acquisition and capital expenditures, to repurchase or retire debt, to acquire other companies and to evaluate 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 (pages 16 through 20) 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 our subscriber count or subscriber-based operating metrics.

Set forth below are our subscriber balances as of December 31, 2016 compared to December 31, 2015 and as of December 31, 2015 compared to December 31, 2014:

	As of December 31,			2016 vs 2015 Change		2015 vs 2014 Change	
	2016	2015	2014	Amount	%	Amount [a]	%
Self-pay subscribers	25,951	24,288	22,523	1,663	7%	1,765	8%
Paid promotional subscribers	5,395	5,306	4,788	89	2%	517	11%
Ending subscribers	31,346	29,594	27,311	1,752	6%	2,283	8%

(a) Amounts may not sum as a result of rounding.

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, 2016, 2015 and 2014:

	For the Years Ended December 31,			2016 vs 2015 Change		2015 vs 2014 Change	
	2016	2015	2014	Amount	%	Amount	%
Self-pay subscribers	1,663	1,765	1,441	(102)	(6)%	324	22 %
Paid promotional subscribers	89	517	311	(428)	(83)%	206	66 %
Net additions [(a)]	1,752	2,283	1,752	(531)	(23)%	531	30 %
Daily weighted average number of subscribers	30,494	28,337	26,284	2,157	8 %	2,053	8 %
Average self-pay monthly churn	1.9%	1.8%	1.9%	0.1 %	6 %	(0.1)%	(5)%
New vehicle consumer conversion rate	39%	40%	41%	(1)%	(3)%	(1)%	(2)%
ARPU	$ 12.91	$ 12.53	$ 12.38	$ 0.38	3 %	$ 0.15	1 %
SAC, per installation	$ 31	$ 33	$ 34	$ (2)	(6)%	$ (1)	(3)%
Customer service and billing expenses, per average subscriber	$ 1.00	$ 1.01	$ 1.07	$ (0.01)	(1)%	$ (0.06)	(6)%
Adjusted EBITDA	$1,875,775	$1,657,617	$1,467,775	$ 218,158	13 %	$ 189,842	13 %
Free cash flow	$1,509,113	$1,315,193	$1,155,776	$ 193,920	15 %	$ 159,417	14 %

(a) Amounts may not sum as a result of rounding.

Subscribers. At December 31, 2016, we had approximately 31.3 million subscribers, an increase of approximately 1.8 million subscribers, or 6%, from the approximately 29.6 million subscribers as of December 31, 2015. The increase in total subscribers was primarily due to growth in our self-pay subscriber base, which increased by approximately 1.7 million. The increase in self-pay subscribers was primarily driven by original and subsequent owner trial conversions and subscriber win back programs, partially offset by deactivations.

- *2016 vs. 2015*: For the years ended December 31, 2016 and 2015, net additions were 1,752 thousand and 2,283 thousand, respectively, a decrease of 23%, or 531 thousand. The period over period decrease was due to a decrease in net additions of paid promotional subscribers as a result of slower growth in vehicle sales. The decrease in self-pay net additions was due to increases in deactivations from our larger subscriber base which were largely offset by trial conversions and subscriber win back programs.
- *2015 vs. 2014*: For the years ended December 31, 2015 and 2014, net additions were 2,283 thousand and 1,752 thousand, respectively, an increase of 30%, or 531 thousand. The increase in subscribers was primarily due to increases in original and subsequent owner trial conversions, as well as increases in shipments by OEMs offering paid trials and activations of inactive radios, partially offset by higher deactivations related to vehicle turnover and non-pay churn resulting from changes in telemarketing practices following the Federal Communications Commission's July 10, 2015 order relating to the Telephone Consumer Protection Act of 1991.

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 on pages 16 through 20 for more details.)

- *2016 vs. 2015*: For the years ended December 31, 2016 and 2015, our average self-pay monthly churn rate was 1.9% and 1.8%, respectively. The increase was due to an increase in vehicle-related, non-pay and to a lesser extent voluntary churn.
- *2015 vs. 2014*: For the years ended December 31, 2015 and 2014, our average self-pay monthly churn rate was 1.8% and 1.9%, respectively. The decrease in churn was due to a reduction in the total number of subscribers leaving for voluntary reasons.

New Vehicle Consumer Conversion Rate is the percentage of owners and lessees of new vehicles that receive our service and convert to become self-paying subscribers after an initial promotional period. The metric excludes rental and fleet vehicles. (See accompanying glossary on pages 16 through 20 for more details).

- *2016 vs. 2015*: For the years ended December 31, 2016 and 2015, our new vehicle consumer conversion rate was 39% and 40%, respectively. The decrease in conversion was primarily due to certain manual dialing inefficiencies introduced by our call center vendors as a precautionary response to the Federal Communications

Commission's July 10, 2015 order relating to the Telephone Consumer Protection Act of 1991, increased vehicle penetration rate, and lower conversion of first-time buyers and lessees of satellite radio enabled cars.

- *2015 vs. 2014*: For the years ended December 31, 2015 and 2014, our new vehicle consumer conversion rate was 40% and 41%, respectively. The decrease in conversion was primarily due to an increased vehicle penetration rate and the effect of the suspension of certain outbound calling efforts by our vendors as they evaluated the Federal Communications Commission's July 10, 2015 order relating to the Telephone Consumer Protection Act of 1991, partially offset by improvements in converting previously active subscribers during a trial.

ARPU is derived from total earned subscriber revenue (excluding revenue derived from our connected vehicle services), net advertising revenue and other subscription-related 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 on pages 16 through 20 for more details.)

- *2016 vs. 2015*: For the years ended December 31, 2016 and 2015, ARPU was $12.91 and $12.53, respectively. The increase was driven primarily by increases in certain of our subscription rates, partially offset by growth in subscription discounts offered through customer acquisition and retention programs.
- *2015 vs. 2014*: For the years ended December 31, 2015 and 2014, ARPU was $12.53 and $12.38, respectively. The increase was driven primarily by increases in certain of our subscription rates, partially offset by growth in subscription discounts and limited channel plans offered through customer acquisition and retention programs, and a shift to longer-term promotional data service plans with lower rates.

SAC, Per Installation, is derived from subscriber acquisition costs and margins from the sale of radios, components and accessories, divided by the number of satellite radio installations in new vehicles and shipments of aftermarket radios for the period. (See the accompanying glossary on pages 16 through 20 for more details.)

- *2016 vs. 2015*: For the years ended December 31, 2016 and 2015, SAC, per installation, was $31 and $33, respectively. The decrease was driven by lower subsidized costs related to the transition of chipsets as well as lower OEM hardware subsidy rates.
- *2015 vs. 2014*: For the years ended December 31, 2015 and 2014, SAC, per installation, was $33 and $34, respectively. The decrease was primarily due to lower subsidies on chipsets and improvements in contractual OEM hardware subsidy rates.

Customer Service and Billing Expenses, Per Average Subscriber, is derived from total customer service and billing expenses, excluding connected vehicle customer service and billing expenses and share-based payment expense, 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 on pages 16 through 20 for more details.)

- *2016 vs. 2015*: For the years ended December 31, 2016 and 2015, customer service and billing expenses, per average subscriber, were $1.00 and $1.01, respectively. The decrease was primarily related to efficiencies achieved from call center process enhancements, partially offset by increased bad debt expense.
- *2015 vs. 2014*: For the years ended December 31, 2015 and 2014, customer service and billing expenses, per average subscriber, were $1.01 and $1.07, respectively. The decrease was driven primarily by efficiencies achieved from management initiatives implemented at call centers operated by our vendors, as well as a decrease in the rate at which subscribers call to cancel service.

Adjusted EBITDA. EBITDA is defined as net income before interest expense, income tax expense and depreciation and amortization. Adjusted EBITDA excludes the impact of other income, loss on extinguishment of debt, other non-cash charges, such as certain purchase price accounting adjustments, share-based payment expense, loss on disposal of assets, legal settlements and reserves related to the historical use of sound recordings, and gain on change in fair value of debt and equity instruments. (See the accompanying glossary on pages 16 through 20 for a reconciliation to GAAP and for more details.)

- *2016 vs. 2015*: For the years ended December 31, 2016 and 2015, adjusted EBITDA was $1,875,775 and $1,657,617, respectively, an increase of 13%, or $218,158. The increase was due to growth in revenues primarily as a result of the increase in our subscriber base and certain of our subscription rates and lower subscriber acquisition costs, partially offset by higher revenue share and royalties costs due to growth in our revenues and royalty rates, programming and content, sales and marketing, and general and administrative costs.
- *2015 vs. 2014*: For the years ended December 31, 2015 and 2014, adjusted EBITDA was $1,657,617 and $1,467,775, respectively, an increase of 13%, or $189,842. The increase was due to growth in adjusted revenues

primarily as a result of the increase in our subscriber base and certain of our subscription rates, partially offset by higher costs associated with the growth in our revenues and subscriber base.

Free Cash Flow includes cash provided by operations, net of additions to property and equipment, restricted and other investment activity, the return of capital from investment in unconsolidated entity and excluding the $210,000 pre-1972 sound recordings legal settlement payment made in 2015. (See the accompanying glossary on pages 16 through 20 for a reconciliation to GAAP and for more details.)

- *2016 vs. 2015*: For the years ended December 31, 2016 and 2015, free cash flow was $1,509,113 and $1,315,193, respectively, an increase of $193,920, or 15%. The increase was primarily driven by higher net cash provided by operating activities resulting from improved operating performance; partially offset by an increase in additions to property and equipment resulting primarily from new satellite construction. The $210,000 pre-1972 sound recordings legal settlement payment made in 2015 was excluded from free cash flow.
- *2015 vs. 2014*: For the years ended December 31, 2015 and 2014, free cash flow was $1,315,193 and $1,155,776, respectively, an increase of $159,417, or 14%. Excluding the $210,000 pre-1972 sound recordings legal settlement payment made in 2015, the increase was primarily driven by higher net cash provided by operating activities from improved operating performance, and higher collections from subscribers, partially offset by higher interest payments.

Liquidity and Capital Resources

Cash Flows for the year ended December 31, 2016 compared with the year ended December 31, 2015 and the year ended December 31, 2015 compared with the year ended December 31, 2014.

The following table presents a summary of our cash flow activity for the periods set forth below:

	For the Years Ended December 31,				
	2016	2015	2014	2016 vs 2015	2015 vs 2014
Net cash provided by operating activities	$ 1,676,761	$ 1,189,772	$ 1,216,257	$ 486,989	$ (26,485)
Net cash used in investing activities	(210,124)	(138,858)	(96,324)	(71,266)	(42,534)
Net cash used in financing activities	(1,364,536)	(1,086,800)	(1,107,014)	(277,736)	20,214
Net increase (decrease) in cash and cash equivalents	102,101	(35,886)	12,919	137,987	(48,805)
Cash and cash equivalents at beginning of period	111,838	147,724	134,805	(35,886)	12,919
Cash and cash equivalents at end of period	$ 213,939	$ 111,838	$ 147,724	$ 102,101	$ (35,886)

Cash Flows Provided by Operating Activities

Cash flows provided by operating activities increased by $486,989 to $1,676,761 for the year ended December 31, 2016 from $1,189,772 for the year ended December 31, 2015. Cash flows provided by operating activities decreased by $26,485 to $1,189,772 for the year ended December 31, 2015 from $1,216,257 for the year ended December 31, 2014.

Our largest source of cash provided by operating activities is generated by subscription and subscription-related revenues. We also generate cash from the sale of advertising on certain non-music channels 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 subscribers, general corporate expenditures, and compensation and related costs, including taxes paid in lieu of shares issued for Holdings' stock-based compensation.

Cash Flows Used in Investing Activities

Cash flows used in investing activities were primarily due to additional spending of $43,300 to construct replacement satellites, improve our terrestrial repeater network and for capitalized software. In 2015, our cash flows used in investing activities also included an increase to our letters of credit issued for the benefit of lessors of certain of our office space. In 2014, our cash flows used in investing activities were primarily due to additional spending to improve our terrestrial repeater network and for capitalized software, partially offset by a special one-time dividend received from our investment in Sirius XM Canada of $24,178. We expect to continue to incur significant costs to construct replacement satellites.

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 Holdings' share repurchase program and the payment of a cash dividend on Holdings' common stock. Proceeds from long-term debt, related party debt and equity issuances have been used to fund our operations, construct and launch new satellites and invest in other infrastructure improvements.

Cash flows provided by financing activities in 2016 were due to the issuance of $1,000,000 aggregate principal amount of 5.375% Senior Notes due 2026 and borrowings under the Credit Facility. Cash flows used in financing activities in 2016 were primarily due to the purchase and retirement of shares of Holdings' common stock under Holdings' repurchase program and payment of a cash dividend on Holdings' common stock for $1,721,597, repayments of borrowings under the Credit Facility and the redemption of $650,000 of our then outstanding 5.875% Senior Notes due 2020. Cash flows provided by financing activities in 2015 were due to the issuance of $1,000,000 aggregate principal amount of 5.375% Senior Notes due 2025 and borrowings under the Credit Facility. Cash flows used in financing activities in 2015 was primarily due to the purchase and retirement of shares of Holdings' common stock under Holdings' repurchase program for $2,018,254 and repayments of borrowings under the Credit Facility. Cash flows used in financing activities in 2014 were primarily due to the purchase of shares of Holdings' common stock under Holdings' repurchase program from $2,496,799 and repayments under the Credit Facility. In 2014, we issued $1,500,000 aggregate principal amount of 6.00% Senior Notes due 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, legal settlements, 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, 2016, $1,360,000 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, as well as fund Holdings' stock repurchases, future dividend payments on Holdings' common stock and 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 continually review our operations for opportunities to adjust the timing of expenditures to ensure that sufficient resources are maintained.

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 satellite radio business.

Holdings' Capital Return Program

As of December 31, 2016, Holdings' board of directors had approved for repurchase an aggregate of $10,000,000 of Holdings common stock. As of December 31, 2016, Holdings' cumulative repurchases since December 2012 totaled $7,973,837, and $2,026,163 remained available under Holdings' stock repurchase program.

On October 26, 2016, Holdings' board of directors also declared the first quarterly dividend on Holdings' common stock in the amount of $0.01 per share of common stock. That dividend was paid with our cash on November 30, 2016 to Holdings' stockholders of record as of the close of business on November 9, 2016. The total amount of this dividend was approximately $48,079. Holdings' board of directors expects to declare regular quarterly dividends, in an aggregate annual amount of $0.04 per share of Holdings' common stock.

On January 24, 2017, Holdings' board of directors also declared a quarterly dividend on Holdings' common stock in the amount of $0.01 per share of common stock payable on February 28, 2017 to Holdings' stockholders of record as of the close of business on February 7, 2017.

Debt Covenants

The indentures governing our senior notes, and the agreement governing the Credit Facility include restrictive covenants. As of December 31, 2016, we were in compliance with such covenants. For a discussion of our “Debt Covenants,” refer to Note 10 to our consolidated financial statements in this Annual Report.

Off-Balance Sheet Arrangements

We do not have any significant off-balance sheet arrangements other than those disclosed in Note 13 to our consolidated financial statements in this Annual Report 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 13 to our consolidated financial statements in this Annual Report.

Related Party Transactions

For a discussion of "Related Party Transactions," refer to Note 9 to our consolidated financial statements in this Annual Report.

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 this Annual Report.

Goodwill. Goodwill represents the excess of the purchase price over the estimated fair value of net tangible and identifiable intangible assets acquired in business combinations. Our annual impairment assessment of our single reporting unit is performed as of the fourth quarter of each year. Assessments are performed at other times if events or circumstances indicate it is more likely than not that the asset is impaired. Step one of the impairment assessment compares the fair value of the entity to its carrying value and if the fair value exceeds its carrying value, goodwill is not impaired. If the carrying value exceeds the fair value, the implied fair value of goodwill is compared to the carrying value of goodwill; an impairment loss will be recorded for the amount the carrying value exceeds the implied fair value. Accounting Standards Codification ("ASC") 350-20-35, *Goodwill*, states that if the carrying amount of the reporting unit is zero or negative, the second step of the impairment test shall be performed to measure the amount of impairment loss, if any, when it is more likely than not that a goodwill impairment exists based on adverse qualitative factors. As the carrying amount of our one reporting unit was negative as of the date of our annual assessment for 2016, we performed a qualitative analysis to determine whether it was more likely than not that a goodwill impairment exists. We were not aware of any adverse qualitative factors that would indicate any impairment to our goodwill as of the date of our annual assessment for 2016 and as of December 31, 2016. No impairment losses were recorded for goodwill during the years ended December 31, 2016, 2015 and 2014.

Long-Lived and Indefinite-Lived Assets. We carry our long-lived assets at cost less accumulated amortization and depreciation. We review our long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset is not recoverable. At the time an impairment in the value of a long-lived asset is identified, the impairment is measured as the amount by which the carrying amount of a long-lived asset exceeds its fair value.

Our annual impairment assessment of indefinite-lived assets, our FCC licenses and XM trademark, is performed as of the fourth quarter of each year and an assessment is made at other times if events or changes in circumstances indicate that it is more likely than not that the asset is impaired. 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 company is not required to perform a quantitative impairment test. If the qualitative assessment does not support the fair value of the asset, then a quantitative assessment is performed. We completed qualitative assessments of our FCC licenses and XM trademark during the fourth quarter of 2016, 2015 and 2014. As of the date of our annual assessment for 2016, 2015 and 2014, our qualitative impairment assessment of the fair value of our indefinite intangible assets indicated that such assets substantially exceeded their carrying value and therefore was not at risk of impairment. No impairments were recorded for intangible assets with indefinite lives during the years ended December 31, 2016, 2015 and 2014.

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. We estimate that our FM-5 and FM-6 satellites launched in 2009 and 2013, respectively, will operate effectively through the end of their depreciable life in 2024 and 2028, respectively.

We operate three in-orbit XM satellites, XM-3, XM-4 and XM-5. We estimate that our XM-3 and XM-4 satellites launched in 2005 and 2006, respectively, will reach the end of their depreciable lives in 2020 and 2021, respectively. Our XM-5 satellite was launched in 2010, is used as an in-orbit spare for the Sirius and XM systems and is expected to reach the end of its depreciable life in 2025.

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, 2016, we had a valuation allowance of $47,682 relating to deferred tax assets that are not more likely than not to be realized due to certain state net operating loss limitations and acquired net operating losses that we 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, 2016, the gross liability for income taxes associated with uncertain tax positions was $303,583.

Glossary

Adjusted EBITDA - EBITDA is defined as net income before interest expense, income tax expense and depreciation and amortization. We adjust EBITDA to exclude the impact of other income as well as certain other charges discussed below. Adjusted EBITDA is one of the primary Non-GAAP financial measures we use to (i) evaluate the performance of our on-going core operating results period over period, (ii) base our internal budgets and (iii) compensate management. Adjusted EBITDA is a Non-GAAP financial measure that excludes (if applicable): (i) certain adjustments as a result of the purchase price accounting for the Merger, (ii) share-based payment expense and (iii) other significant operating expense (income) that do not relate to the on-going performance of our business. 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. Because 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 related to the historical use of sound recordings and loss on disposal of assets 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 statements of comprehensive income of certain expenses, including share-based payment expense and certain purchase price accounting for the Merger. 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,		
	2016	2015	2014
Net income:	$ 745,933	$ 509,724	$ 544,795
Add back items excluded from Adjusted EBITDA:			
Purchase price accounting adjustments:			
Revenues	7,251	7,251	7,251
Operating expenses	—	(1,394)	(3,781)
Sound recording legal settlements and reserves	45,900	109,164	—
Loss on disposal of assets	12,912	7,384	—
Gain on change in fair value of debt and equity instruments	—	—	(17,069)
Share-based payment expense	108,604	84,310	78,212
Depreciation and amortization	268,979	272,214	266,423
Interest expense	331,225	299,103	269,010
Loss on extinguishment of debt and credit facilities, net	24,229	—	—
Other income	(14,985)	(12,379)	(14,611)
Income tax expense	345,727	382,240	337,545
Adjusted EBITDA	$ 1,875,775	$ 1,657,617	$ 1,467,775

ARPU - is derived from total earned subscriber revenue, advertising revenue and other subscription-related revenue, excluding revenue associated with our connected vehicle services, divided by the number of months in the period, divided by the daily weighted average number of subscribers for the period. Other subscription-related revenue includes the U.S. Music Royalty Fee. ARPU is calculated as follows:

	For the Years Ended December 31,		
	2016	2015	2014
Subscriber revenue, excluding connected vehicle services	$ 4,108,547	$ 3,726,340	$ 3,466,050
Add: advertising revenue	138,231	122,292	100,982
Add: other subscription-related revenue	478,063	410,644	336,408
	$ 4,724,841	$ 4,259,276	$ 3,903,440
Daily weighted average number of subscribers	30,494	28,337	26,284
ARPU	$ 12.91	$ 12.53	$ 12.38

Average self-pay monthly churn - is defined as the monthly average of self-pay deactivations for the period divided by the average number of self-pay subscribers for the period.

Customer service and billing expenses, per average subscriber - is derived from total customer service and billing expenses, excluding connected vehicle customer service and billing expenses and share-based payment expense, divided by the number of months in the period, divided by the daily weighted average number of subscribers for the period. We believe the exclusion of share-based payment expense in our calculation of customer service and billing expenses, per average subscriber, is useful as share-based payment expense is not directly related to the operational conditions that give rise to variations in the components of our customer service and billing expenses. Customer service and billing expenses, per average subscriber, is calculated as follows:

	For the Years Ended December 31,		
	2016	2015	2014
Customer service and billing expenses, excluding connected vehicle services	$ 367,978	$ 346,789	$ 340,094
Less: share-based payment expense	(3,735)	(2,982)	(2,780)
	$ 364,243	$ 343,807	$ 337,314
Daily weighted average number of subscribers	30,494	28,337	26,284
Customer service and billing expenses, per average subscriber	$ 1.00	$ 1.01	$ 1.07

Free cash flow - is derived from cash flow provided by operating activities, net of additions to property and equipment, restricted and other investment activity and the return of capital from investment in unconsolidated entity. 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 and significant items that do not relate to the on-going performance of our business. 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 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, adjusted for any significant legal settlements. We have excluded the $210,000 payment related to the 2015 pre-1972 sound recordings legal settlement from our free cash flow calculation in the year ended December 31, 2015. 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,		
	2016	2015	2014
Cash Flow information			
Net cash provided by operating activities	$ 1,676,761	$ 1,189,772	$ 1,216,257
Net cash used in investing activities	$ (210,124)	$ (138,858)	$ (96,324)
Net cash used in financing activities	$ (1,364,536)	$ (1,086,800)	$ (1,107,014)
Free Cash Flow			
Net cash provided by operating activities	$ 1,676,761	$ 1,189,772	$ 1,216,257
Equity-related transactions for Holdings [(a)]	42,476	54,279	36,987
Additions to property and equipment	(205,829)	(134,892)	(121,646)
Purchases of restricted and other investments	(4,295)	(3,966)	—
Return of capital from investment in unconsolidated entity	—	—	24,178
Pre-1972 sound recordings legal settlement	—	210,000	—
Free cash flow	$ 1,509,113	$ 1,315,193	$ 1,155,776

(a) Subsequent to our corporate reorganization in November 2013, certain equity-related transactions are reported as related party transactions within Sirius XM's consolidated statements of cash flows. For the years ended December 31, 2016, 2015 and 2014, this included payments of $42,824, $54,539 and $37,318, respectively, for taxes paid in lieu of shares issued for stock-based compensation, and $348, $260 and $331, respectively, in proceeds from the exercise of stock options. These equity-related transactions are classified as Cash flows provided by financing activities within Holdings' consolidated statements of cash flows, and therefore, are adjusted to reflect free cash flow at Sirius XM.

New vehicle consumer conversion rate - is defined as the percentage of owners and lessees of new vehicles that receive our satellite radio service and convert to become self-paying subscribers after the initial promotion period. At the time satellite radio enabled vehicles are sold or leased, the owners or lessees generally receive trial subscriptions ranging from three to twelve months. We measure conversion rate three months after the period in which the trial service ends. The metric excludes rental and fleet vehicles.

Subscriber acquisition cost, per installation - or SAC, per installation, is derived from subscriber acquisition costs and margins from the sale of radios and accessories, 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,		
	2016	2015	2014
Subscriber acquisition costs	$ 512,809	$ 532,599	$ 493,464
Less: margin from sales of radios and accessories	(78,065)	(68,199)	(60,264)
	$ 434,744	$ 464,400	$ 433,200
Installations	14,203	14,041	12,788
SAC, per installation	$ 31	$ 33	$ 34

Independent Auditors' Report

The Board of Directors
Sirius XM Radio Inc. and subsidiaries:

We have audited the accompanying consolidated balance sheets of Sirius XM Radio Inc. and its subsidiaries as of December 31, 2016 and 2015, and the related consolidated statements of comprehensive income, changes in stockholder equity, and cash flows for each of the years in the three-year period ended December 31, 2016. 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 conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States) and in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Sirius XM Radio Inc. and its subsidiaries as of December 31, 2016 and 2015, and the results of their operations and their cash flows for each of the years in the three‑year period ended December 31, 2016, in conformity with U.S. generally accepted accounting principles.

As discussed in Note 2 to the financial statements, the Company changed its method of accounting for share-based payments in 2016 due to the adoption of ASU 2016-09, *Compensation-Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting*.

/s/ KPMG LLP

New York, New York
February 2, 2017

SIRIUS XM RADIO INC. AND SUBSIDIARIES
(a wholly-owned subsidiary of Sirius XM Holdings Inc.)
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

	For the Years Ended December 31,		
(in thousands)	2016	2015	2014
Revenue:			
Subscriber revenue	$ 4,196,852	$ 3,824,793	$ 3,554,302
Advertising revenue	138,231	122,292	100,982
Equipment revenue	118,947	110,923	104,661
Other revenue	563,190	512,050	421,150
Total revenue	5,017,220	4,570,058	4,181,095
Operating expenses:			
Cost of services:			
Revenue share and royalties	1,108,515	1,034,832	810,028
Programming and content	353,779	293,091	297,313
Customer service and billing	387,131	377,908	370,585
Satellite and transmission	103,020	94,609	86,013
Cost of equipment	40,882	42,724	44,397
Subscriber acquisition costs	512,809	532,599	493,464
Sales and marketing	386,724	354,189	336,480
Engineering, design and development	82,146	64,403	62,784
General and administrative	341,106	324,801	293,938
Depreciation and amortization	268,979	272,214	266,423
Total operating expenses	3,585,091	3,391,370	3,061,425
Income from operations	1,432,129	1,178,688	1,119,670
Other income (expense):			
Interest expense	(331,225)	(299,103)	(269,010)
Loss on extinguishment of debt and credit facilities, net	(24,229)	—	—
Gain on change in fair value of debt and equity instruments	—	—	17,069
Other income	14,985	12,379	14,611
Total other expense	(340,469)	(286,724)	(237,330)
Income before income taxes	1,091,660	891,964	882,340
Income tax expense	(345,727)	(382,240)	(337,545)
Net income attributable to Sirius XM Radio Inc.'s sole stockholder	$ 745,933	$ 509,724	$ 544,795
Foreign currency translation adjustment, net of tax	363	(100)	(94)
Total comprehensive income attributable to Sirius XM Radio Inc.'s sole stockholder	$ 746,296	$ 509,624	$ 544,701

See accompanying notes to the consolidated financial statements.

SIRIUS XM RADIO INC. AND SUBSIDIARIES
(a wholly-owned subsidiary of Sirius XM Holdings Inc.)
CONSOLIDATED BALANCE SHEETS

	As of December 31,	
(in thousands, except per share data)	**2016**	**2015**
ASSETS		
Current assets:		
Cash and cash equivalents	$ 213,939	$ 111,838
Receivables, net	223,029	234,782
Inventory, net	20,363	22,295
Related party current assets	6,170	5,941
Prepaid expenses and other current assets	179,148	187,033
Total current assets	642,649	561,889
Property and equipment, net	1,398,693	1,415,401
Intangible assets, net	2,544,801	2,593,346
Goodwill	2,205,107	2,205,107
Related party long-term assets	5,185,730	3,522,162
Deferred tax assets	1,084,330	1,115,731
Other long-term assets	119,097	155,188
Total assets	$ 13,180,407	$ 11,568,824
LIABILITIES AND STOCKHOLDER EQUITY		
Current liabilities:		
Accounts payable and accrued expenses	$ 701,968	$ 625,313
Accrued interest	114,633	91,655
Current portion of deferred revenue	1,832,609	1,771,915
Current maturities of long-term debt	5,485	4,764
Related party current liabilities	2,840	2,840
Total current liabilities	2,657,535	2,496,487
Deferred revenue	176,319	157,609
Long-term debt	5,842,764	5,443,614
Related party long-term liabilities	7,955	10,795
Deferred tax liabilities	6,418	6,681
Other long-term liabilities	93,553	97,967
Total liabilities	8,784,544	8,213,153
Commitments and contingencies (Note 13)		
Stockholder equity:		
Common stock, par value $0.001; 9,000,000 shares authorized; 1 share issued and outstanding at December 31, 2016 and December 31, 2015, respectively	—	—
Accumulated other comprehensive loss, net of tax	(139)	(502)
Additional paid-in capital	8,679,538	8,679,538
Accumulated deficit	(4,283,536)	(5,323,365)
Total stockholder equity	4,395,863	3,355,671
Total liabilities and stockholder equity	$ 13,180,407	$ 11,568,824

See accompanying notes to the consolidated financial statements.

SIRIUS XM RADIO INC. AND SUBSIDIARIES
(a wholly-owned subsidiary of Sirius XM Holdings Inc.)
CONSOLIDATED STATEMENT OF STOCKHOLDER EQUITY

	Common Stock					
(in thousands)	Shares	Amount	Accumulated Other Comprehensive (Loss) Income	Additional Paid-in Capital	Accumulated Deficit	Total Stockholder Equity
Balance at January 1, 2014	1	$ —	$ (308)	$ 8,679,538	$ (6,377,884)	$ 2,301,346
Comprehensive income, net of tax	—	—	(94)	—	544,795	544,701
Balance at December 31, 2014	1	$ —	$ (402)	$ 8,679,538	$ (5,833,089)	$ 2,846,047
Comprehensive income, net of tax	—	—	(100)	—	509,724	509,624
Balance at December 31, 2015	1	$ —	$ (502)	$ 8,679,538	$ (5,323,365)	$ 3,355,671
Cumulative effect of change in accounting principle	—	—	—	—	293,896	293,896
Comprehensive income, net of tax	—	—	363	—	745,933	746,296
Balance at December 31, 2016	1	$ —	$ (139)	$ 8,679,538	$ (4,283,536)	$ 4,395,863

See accompanying notes to the consolidated financial statements.

SIRIUS XM RADIO INC. AND SUBSIDIARIES
(a wholly-owned subsidiary of Sirius XM Holdings Inc.)
CONSOLIDATED STATEMENTS OF CASH FLOWS

	For the Years Ended December 31,		
(in thousands)	**2016**	**2015**	**2014**
Cash flows from operating activities:			
Net income	$ 745,933	$ 509,724	$ 544,795
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	268,979	272,214	266,423
Non-cash interest expense, net of amortization of premium	8,608	7,872	21,039
Provision for doubtful accounts	55,941	47,237	44,961
Amortization of deferred income related to equity method investment	(2,772)	(2,776)	(2,776)
Loss on extinguishment of debt and credit facilities, net	24,229	—	—
Gain on unconsolidated entity investments, net	(12,529)	—	(5,547)
Dividend received from unconsolidated entity investment	7,160	14,788	17,019
Loss on disposal of assets	12,912	7,384	—
Gain on change in fair value of debt and equity investments	—	—	(17,069)
Share-based payment expense	108,604	84,310	78,212
Deferred income taxes	323,562	365,499	327,461
Other non-cash purchase price adjustments	—	(1,394)	(3,781)
Changes in operating assets and liabilities:			
Receivables	(44,188)	(61,440)	(72,628)
Inventory	1,932	(2,898)	(5,534)
Related party, net	(45,140)	(66,963)	(67,324)
Prepaid expenses and other current assets	7,156	(67,204)	(1,195)
Other long-term assets	38,835	(130,741)	3,393
Accounts payable and accrued expenses	78,099	50,427	8,843
Accrued interest	22,978	11,215	38,355
Deferred revenue	79,404	145,242	48,645
Other long-term liabilities	(2,942)	7,276	(7,035)
Net cash provided by operating activities	1,676,761	1,189,772	1,216,257
Cash flows from investing activities:			
Additions to property and equipment	(205,829)	(134,892)	(121,646)
Purchases of restricted and other investments	(4,295)	(3,966)	—
Acquisition of business, net of cash acquired	—	—	1,144
Return of capital from investment in unconsolidated entity	—	—	24,178
Net cash used in investing activities	(210,124)	(138,858)	(96,324)
Cash flows from financing activities:			
Intercompany financing activities	(1,721,597)	(2,018,254)	(2,496,799)
Proceeds from long-term borrowings and revolving credit facility, net of costs	1,847,143	1,728,571	2,406,205
Payment of premiums on redemption of debt	(19,097)	—	—
Repayment of long-term borrowings and revolving credit facility	(1,470,985)	(797,117)	(1,016,420)
Net cash used in financing activities	(1,364,536)	(1,086,800)	(1,107,014)
Net increase (decrease) in cash and cash equivalents	102,101	(35,886)	12,919
Cash and cash equivalents at beginning of period	111,838	147,724	134,805
Cash and cash equivalents at end of period	$ 213,939	$ 111,838	$ 147,724

See accompanying notes to the consolidated financial statements.

SIRIUS XM RADIO INC. AND SUBSIDIARIES
(a wholly-owned subsidiary of Sirius XM Holdings Inc.)
CONSOLIDATED STATEMENTS OF CASH FLOWS - Continued

(in thousands)	For the Years Ended December 31, 2016	2015	2014
Supplemental Disclosure of Cash and Non-Cash Flow Information			
Cash paid during the period for:			
Interest, net of amounts capitalized	$ 292,556	$ 269,925	$ 199,424
Income taxes paid	$ 20,639	$ 12,384	$ 8,713
Non-cash investing and financing activities:			
Capital lease obligations incurred to acquire assets	$ 6,647	$ 7,487	$ 719
Conversion of 7% Exchangeable Notes to common stock, net of debt issuance and deferred financing costs	$ —	$ —	$ 502,097
Purchase price accounting adjustments to goodwill	$ —	$ —	$ 1,698

See accompanying notes to the consolidated financial statements.

(1) Business & Basis of Presentation

Business

We transmit music, sports, entertainment, comedy, talk, news, traffic and weather channels, as well as infotainment services, in the United States on a subscription fee basis through our two proprietary satellite radio systems. Subscribers can also receive music and other channels, plus features such as SiriusXM On Demand and MySXM, over our Internet radio service, including through applications for mobile devices, home devices and other consumer electronic equipment. We are also a leader in providing connected vehicle services. 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 have agreements with every major automaker ("OEMs") to offer satellite radio in their vehicles. We also acquire subscribers through marketing to owners and lessees of previously owned vehicles that include factory-installed satellite radios that are not currently subscribing to our services. Our satellite radios are primarily distributed through automakers; retail stores nationwide; and through our website. Satellite radio services are also offered to customers of certain rental car companies.

Our primary source of revenue is subscription fees, with most of our customers subscribing to annual, semi-annual, quarterly or monthly plans. We offer discounts for prepaid, longer term subscription plans, as well as a multiple subscription discount. We also derive revenue from activation and other fees, the sale of advertising on select non-music channels, the direct sale of satellite radios and accessories, and other ancillary services, such as our weather, traffic and data services.

In certain cases, a subscription to our radio services is included in the sale or lease price of new or previously owned vehicles. The length of these subscriptions varies but is typically three to twelve months. We receive payments for these subscriptions from certain automakers. We also reimburse various automakers for certain costs associated with satellite radios installed in new vehicles.

As of December 31, 2016, Liberty Media Corporation ("Liberty Media") beneficially owned, directly and indirectly, approximately 67% of the outstanding shares of Holdings' common stock. As a result, Holdings is a "controlled company" for the purposes of the NASDAQ corporate governance requirements. Liberty Media owns interests in a range of media, communications and entertainment businesses.

Reorganization of Sirius XM Canada

On May 12, 2016, we entered into an arrangement agreement (the "Arrangement Agreement") with Sirius XM Canada Holdings Inc. ("Sirius XM Canada"), an entity in which we currently hold an approximate 37% economic interest and 25% voting interest. Pursuant to the Arrangement Agreement, the Company and certain Canadian shareholders will form a new company to acquire shares of Sirius XM Canada not already owned by us and certain Canadian shareholders pursuant to a plan of arrangement (the "Transaction"). In connection with the Transaction, Sirius XM Canada's shareholders will be entitled to elect to receive, for each share of Sirius XM Canada held, C$4.50 (U.S. $3.50 as of May 12, 2016) in (i) cash, (ii) shares of Holdings' common stock, (iii) a security exchangeable for shares of Holdings' common stock, or (iv) a combination thereof; provided that no more than 50% of the total consideration in the Transaction (or up to 35,000 shares) will be issued in Holdings' common stock and exchangeable shares. All of the obligations under the Arrangement Agreement are guaranteed by us.

Following the Transaction, we are expected to hold a 70% economic interest and 33% voting interest in Sirius XM Canada, with the remainder of the voting power and economic interest held by Slaight Communications and Obelysk Media, two of Sirius XM Canada's current Canadian shareholders. We expect to contribute to Sirius XM Canada approximately U.S. $275,000 in connection with the Transaction (assuming that all shareholders elect to receive cash in connection with the Transaction), which amount is expected to be used to pay the cash consideration to Sirius XM Canada's shareholders and will be decreased proportionately if shareholders elect to receive consideration in shares of Holdings' common stock or securities exchangeable for Holdings' common stock.

The Transaction has been approved by the stockholders of Sirius XM Canada and has received the required court approval. The Transaction remains subject to receipt of Canadian Radio-Television and Telecommunications Commission approval. Pending receipt of this approval, the Transaction is expected to close early in the second quarter of 2017.

Basis of Presentation

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

The consolidated financial statements for Sirius XM for the annual period ended December 31, 2016 are essentially identical to the consolidated financial statements included in Holdings' Form 10-K for the year ended December 31, 2016, filed with the SEC on February 2, 2017, with the following exceptions:

- As a result of our corporate reorganization effective November 15, 2013, all of the outstanding shares of Sirius XM's common stock were converted, on a share for share basis, into identical shares of common stock of Holdings and all equity-related transactions, including repurchases of Holdings' common stock, a dividend payment on shares of Holdings' common stock, and the issuance of equity related to stock-based compensation to Sirius XM employees, Holdings' directors and third parties have been reported as related party transactions within Sirius XM's consolidated financial statements. Refer to Note 9 for additional information related to related party transactions.
- Changes in fair value related to the 7% Exchangeable Senior Subordinated Notes due 2014 (the "Exchangeable Notes") were recorded in Sirius XM's statements of comprehensive income through the Notes' maturity in December 2014. For the year ended December 31, 2014 there was a $17,069 Gain on change in fair value of debt and equity instruments, respectively, related to the Exchangeable Notes. The difference between the fair value and carrying value of the Exchangeable Notes was eliminated in Holdings' consolidated statements of comprehensive income.
- Changes in fair value related to the share repurchase agreement with Liberty Media were recorded in Holdings' consolidated statements of comprehensive income, through the settlement of this agreement in April 2014. For the year ended December 31, 2014, there was a $34,485 Loss on change in value of derivatives recorded in Holdings' consolidated statements of comprehensive income.

This Annual Report should be read together with Holdings' Annual Report on Form 10-K for the year ended December 31, 2016, which was filed with the SEC on February 2, 2017.

Public companies, including our parent Holdings, 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 makers in deciding how to allocate resources to an individual segment and in assessing performance of the segment. We have determined that we have one reportable segment as our chief operating decision maker, our Chief Executive Officer, assesses performance and allocates resources based on the consolidated results of operations of our business.

We have evaluated events subsequent to the balance sheet date and prior to the furnishing of this Annual Report for the year ended December 31, 2016 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 15.

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 thousands, except per share amounts)

(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 #
Fair Value Measurements	3	F-12
Goodwill	6	F-13
Intangible Assets	7	F-14
Property and Equipment	8	F-15
Equity Method Investments	9	F-17
Share-Based Compensation	12	F-20
Legal Costs	13	F-24
Income Taxes	14	F-26

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

We derive revenue primarily from subscribers, advertising and sales of radios and accessories.

Revenue from subscribers consists primarily of subscription fees and other ancillary subscription based revenues. Revenue is recognized as it is realized or realizable and earned. We recognize subscription fees as our services are provided. Consumers purchasing or leasing a vehicle with a factory-installed satellite radio typically receive between a three and twelve month subscription to our service, certain of which are prepaid. Prepaid subscription fees received from certain automakers are recorded as deferred revenue and amortized to revenue ratably over the service period which commences upon retail sale and activation. There is no revenue recognized for unpaid trial subscriptions.

We recognize revenue from the sale of advertising as the advertising is transmitted. 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. We pay certain third parties a percentage of advertising revenue. Advertising revenue is recorded gross of such revenue share payments as we are the primary obligor in the transaction. 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 U.S. Music Royalty Fees which are recorded as other revenue and the cost component as Revenue share and royalties expense. Fees received from subscribers for the U.S. Music Royalty Fee are recorded as deferred revenue and amortized to revenue ratably over the service period which coincides with the recognition of the subscriber's subscription revenue.

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.

Accounting Standards Codification 605, *Revenue Recognition,* provides guidance on how and when to recognize revenues for arrangements that may involve the delivery or performance of multiple products, services and/or rights to use assets, such as in our bundled subscription plans. Revenue arrangements with multiple deliverables are required to be divided into separate units of accounting if the deliverables in the arrangement meet certain criteria. Consideration must be allocated at the inception of the arrangement to all deliverables based on their relative selling price, which has been determined using vendor specific objective evidence of the selling price to self-pay customers.

Revenue Share

We share a portion of our subscription revenues earned from self-pay subscribers and paid promotional 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 is recorded as an expense in our consolidated statements of comprehensive income and not as a reduction to revenue.

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, 2016, 2015 and 2014, we recorded advertising costs of $226,969, $206,351 and $203,945, 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 OEM 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 not held on consignment 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, 2016, 2015 and 2014, we recorded research and development costs of $69,025, $54,933 and $54,109, respectively. These costs are reported as a component of Engineering, design and development expense in our consolidated statements of comprehensive income.

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

Recent Accounting Pronouncements

In March 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2016-09, *Compensation-Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting*. The areas for simplification in this ASU involve several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, forfeiture calculations, and classification on the statement of cash flows. The amendments in this ASU are effective for fiscal years beginning after December 15, 2016 and interim periods within those fiscal years, and early adoption is permitted. An entity that elects early adoption must adopt all of the amendments in the same period.

We elected to early adopt ASU 2016-09 in the third quarter of 2016, which required that any adjustments be reflected as of January 1, 2016, the beginning of the annual period that includes the interim period of adoption. The primary impact of adoption of ASU 2016-09 was the recognition of excess tax benefits in our provision for income taxes of $1,101 and $1,950 for the three months ended March 31, 2016 and June 30, 2016, respectively. The adoption of this ASU impacted our previously reported quarterly results during fiscal year 2016 as follows:

	For the Three Months Ended				For the Six Months Ended	
	March 31, 2016		June 30, 2016		June 30, 2016	
Income statements:	**As reported**	**As adjusted**	**As reported**	**As adjusted**	**As reported**	**As adjusted**
Income tax expense	$ (109,343)	$ (108,242)	$ (108,260)	$ (106,310)	$ (217,603)	$ (214,552)
Net income	$ 171,339	$ 172,440	$ 173,015	$ 174,965	$ 344,354	$ 347,405

Additionally, we recognized net operating losses related to excess share-based compensation tax return deductions that were previously tracked off balance sheet but not recorded in our financial statements. As of January 1, 2016, $293,896, net of a $1,946 reserve for an uncertain tax position, was recorded as an increase to our Deferred tax assets and decrease to our Accumulated deficit in our consolidated balance sheets as a result of the cumulative effect of this change in accounting principle.

Additional amendments to this ASU related to income taxes and minimum statutory withholding tax requirements had no impact to accumulated deficit, where the cumulative effect of these changes are required to be recorded. Further, there was no impact to our classification of awards as either equity or liabilities. We also elected to true-up forfeitures in the period of adoption and in the future will recognize forfeitures as they occur. This ASU also required excess tax benefits to be separated from other income tax cash flows and classified as an operating activity, however, prior to adoption, there was no impact to the consolidated statement of cash flows as we have not had any excess tax benefits (windfalls) recorded for book purposes. The presentation requirements for cash flows related to employee taxes paid for withheld shares had no impact to any of the periods presented in our consolidated statement of cash flows as such cash flows have historically been presented as a financing activity.

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*. This ASU requires a company to recognize lease assets and liabilities arising from operating leases in the statement of financial position. This ASU does not significantly change the previous lease guidance for how a lessee should recognize the recognition, measurement, and presentation of expenses and cash flows arising from a lease. Additionally, the criteria for classifying a finance lease versus an operating lease are substantially the same as the previous guidance. The amendments in this ASU are effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years, and early adoption is permitted. This ASU must be adopted using a modified retrospective approach. We plan to adopt this ASU on January 1, 2019. We are currently evaluating the impact of the adoption of this ASU on our consolidated financial statements.

In May 2014, the FASB issued ASU 2014-09, *Revenue from Contracts with Customers (Topic 606)*. This ASU is a comprehensive new revenue recognition model that requires a company to recognize revenue to depict the transfer of goods or services to a customer at an amount that reflects the consideration it expects to receive in exchange for those goods or services. This ASU also requires additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments and assets recognized from costs incurred to obtain or fulfill a contract. In August 2015, the FASB issued ASU 2015-14 which amended the effective date of this ASU to fiscal years beginning after December 15, 2017, and early adoption is permitted only for fiscal years beginning after December 15, 2016. In 2016, the FASB issued additional guidance which clarified principal versus agent considerations, identification of performance obligations and the implementation guidance for licensing. In addition, the FASB issued guidance regarding practical expedients related to disclosures of remaining performance obligations, as well as other amendments to guidance on transition, collectibility, non-cash consideration and the presentation of sales and other similar taxes. The two permitted transition methods under the new standard are the full retrospective method, in which case the standard would be applied to each prior reporting period presented, or the modified retrospective method, in which case the cumulative effect of applying the standard would be recognized at the date of initial application.

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

We have substantially completed our evaluation of the impact of this ASU on our subscription fees earned from self-pay subscribers and advertising revenue, and based on the preliminary results of our evaluation, we do not expect the application of this ASU to have a material impact on the recognition of revenue related to these revenues. We are still evaluating the impact of this ASU as it relates to other ancillary revenue streams, as well as certain associated expenses. Depending on the results of our review, there could be changes to the classification and timing of recognition of revenues and expenses related to these ancillary areas. We expect to complete our assessment process, including selecting a transition method for adoption, by the end of the third quarter of 2017 along with our implementation process prior to the adoption of this ASU on January 1, 2018.

(3) 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, 2016 and 2015, 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, 2016				December 31, 2015			
	Level 1	Level 2	Level 3	Total Fair Value	Level 1	Level 2	Level 3	Total Fair Value
Assets:								
Sirius XM Canada - investment [(a)]	$178,696	—	—	$ 178,696	$141,850	—	—	$ 141,850
Liabilities:								
Debt [(b)]	—	$6,008,205	—	$6,008,205	—	$5,649,173	—	$5,649,173

(a) This amount approximates fair value. The carrying value of our investment in Sirius XM Canada was $8,615 and $0 as of December 31, 2016 and 2015, respectively.

(b) The fair value for non-publicly traded instruments is based upon estimates from a market maker and brokerage firm. Refer to Note 10 for information related to the carrying value of our debt as of December 31, 2016 and 2015.

(4) Receivables, net

Receivables, net, includes customer accounts receivable, receivables from distributors and other receivables.

Customer accounts receivable, net, includes receivables from our subscribers and advertising 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 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 thousands, except per share amounts)

Receivables from distributors primarily include billed and unbilled amounts due from OEMs 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 OEMs or other third parties.

Receivables, net, consists of the following:

	December 31, 2016	December 31, 2015
Gross customer accounts receivable	$ 105,737	$ 98,740
Allowance for doubtful accounts	(8,658)	(6,118)
Customer accounts receivable, net	$ 97,079	$ 92,622
Receivables from distributors	98,498	120,012
Other receivables	27,452	22,148
Total receivables, net	$ 223,029	$ 234,782

(5) Inventory, net

Inventory consists of finished goods, refurbished goods, chipsets and other raw material components used in manufacturing radios. Inventory is stated at the lower of cost or market. We record an estimated allowance for inventory that is considered slow moving or obsolete or whose carrying value is in excess of net realizable value. The provision related to products purchased for resale in our direct to consumer distribution channel and components held for resale by us is reported as a component of Cost of equipment in our consolidated statements of comprehensive income. The provision related to inventory consumed in our OEM and retail distribution channel is reported as a component of Subscriber acquisition costs in our consolidated statements of comprehensive income.

Inventory, net, consists of the following:

	December 31, 2016	December 31, 2015
Raw materials	$ 10,219	$ 11,085
Finished goods	19,581	21,159
Allowance for obsolescence	(9,437)	(9,949)
Total inventory, net	$ 20,363	$ 22,295

(6) 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 single reporting unit 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. Step one of the impairment assessment compares the fair value to its carrying value and if the fair value exceeds its carrying value, goodwill is not impaired. If the carrying value exceeds the fair value, the implied fair value of goodwill is compared to the carrying value of goodwill. If the implied fair value exceeds the carrying value then goodwill is not impaired; otherwise, an impairment loss will be recorded by the amount the carrying value exceeds the implied fair value. ASC 350-20-35 states that if the carrying amount of the reporting unit is zero or negative, the second step of the impairment test shall be performed to measure the amount of impairment loss, if any, when it is more likely than not that a goodwill impairment exists based on adverse qualitative factors. As the carrying amount of our one reporting unit was negative as of the date of our annual assessment for 2016, we performed a qualitative analysis to determine whether it was more likely than not that a goodwill impairment exists. We were not aware of any adverse qualitative factors that would indicate any impairment to our goodwill as of the date of our annual assessment for 2016 and as of December 31, 2016.

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

No impairment losses were recorded for goodwill during the years ended December 31, 2016, 2015 and 2014. As of December 31, 2016, the cumulative balance of goodwill impairments recorded since the July 2008 merger (the "Merger") between our wholly owned subsidiary, Vernon Merger Corporation, and XM Satellite Radio Holdings Inc. ("XM"), was $4,766,190, which was recognized during the year ended December 31, 2008.

(7) Intangible Assets

Our intangible assets include the following:

		December 31, 2016			December 31, 2015		
	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	$ 2,083,654	$ —	$ 2,083,654	$ 2,083,654	$ —	$ 2,083,654
Trademark	Indefinite	250,000	—	250,000	250,000	—	250,000
Definite life intangible assets:							
Subscriber relationships	9 years	380,000	(364,893)	15,107	380,000	(336,822)	43,178
OEM relationships	15 years	220,000	(46,444)	173,556	220,000	(31,778)	188,222
Licensing agreements	12 years	45,289	(30,664)	14,625	45,289	(26,977)	18,312
Proprietary software	8 years	27,215	(19,673)	7,542	27,215	(17,752)	9,463
Developed technology	10 years	2,000	(1,683)	317	2,000	(1,483)	517
Leasehold interests	7.4 years	—	—	—	132	(132)	—
Total intangible assets		$ 3,008,158	$ (463,357)	$ 2,544,801	$ 3,008,290	$ (414,944)	$ 2,593,346

Indefinite Life Intangible Assets

We have identified our FCC licenses and the XM trademark 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. The following table outlines the years in which each of our satellite licenses expires:

FCC satellite licenses	Expiration year
SIRIUS FM-5	2025
SIRIUS FM-6	2022
XM-3	2021
XM-4	2022
XM-5	2018

Prior to expiration of our FCC licenses, we are required to apply for a renewal of our FCC licenses. The renewal and extension of our licenses is reasonably certain at minimal cost, which is expensed as incurred. Each of the FCC licenses authorizes us to use the radio spectrum, which is a renewable, 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.

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

We completed qualitative assessments of our FCC licenses and XM trademark during the fourth quarter of 2016, 2015 and 2014. As of the date of our annual assessment for 2016, 2015 and 2014, our qualitative impairment assessment of the fair value of our indefinite intangible assets indicated that such assets substantially exceeded their carrying value and therefore was not at risk of impairment. No impairments were recorded for intangible assets with indefinite lives during the years ended December 31, 2016, 2015 and 2014.

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. No impairments were recorded for intangible assets with definite lives during the years ended December 31, 2016, 2015 and 2014.

Amortization expense for all definite life intangible assets was $48,545, $51,700 and $55,016 for the years ended December 31, 2016, 2015 and 2014, respectively. Expected amortization expense for each of the fiscal years 2017 through 2021 and for periods thereafter is as follows:

Years ending December 31,	Amount
2017	$ 34,882
2018	19,463
2019	19,026
2020	18,446
2021	15,576
Thereafter	103,754
Total definite life intangible assets, net	$ 211,147

(8) Property and Equipment

Property and equipment, including satellites, are stated at cost, less accumulated depreciation. Equipment under capital 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	3 - 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

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

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. We did not record any impairments during the years ended December 31, 2016, 2015 and 2014.

Property and equipment, net, consists of the following:

	December 31, 2016	December 31, 2015
Satellite system	$ 1,586,794	$ 2,388,000
Terrestrial repeater network	127,854	117,127
Leasehold improvements	53,898	49,407
Broadcast studio equipment	84,697	70,888
Capitalized software and hardware	558,101	466,464
Satellite telemetry, tracking and control facilities	77,290	75,440
Furniture, fixtures, equipment and other	90,214	81,871
Land	38,411	38,411
Building	61,597	60,487
Construction in progress	144,954	101,324
Total property and equipment	2,823,810	3,449,419
Accumulated depreciation and amortization	(1,425,117)	(2,034,018)
Property and equipment, net	$ 1,398,693	$ 1,415,401

Construction in progress consists of the following:

	December 31, 2016	December 31, 2015
Satellite system	$ 43,977	$ 12,912
Terrestrial repeater network	1,139	25,578
Capitalized software	82,204	37,064
Other	17,634	25,770
Construction in progress	$ 144,954	$ 101,324

Depreciation expense on property and equipment was $220,434, $220,514 and $211,407 for the years ended December 31, 2016, 2015 and 2014, respectively. We retired property and equipment of $843,129, $43,833 and $19,398 during the years ended December 31, 2016, 2015 and 2014, respectively, which included approximately $801,206 related to satellites during 2016. We recognized a loss on disposal of assets of $12,912 and $7,384, which has been recorded in Satellite and transmission expense in our consolidated statements of comprehensive income, during the years ended December 31, 2016 and 2015, respectively, which related to the disposal of certain obsolete spare parts for a future satellite and obsolete terrestrial repeaters and related parts, respectively. We did not recognize any loss on disposal of assets during the year ended December 31, 2014.

We capitalize a portion of the interest on funds borrowed to finance the construction and launch of our satellites and launch vehicles. Capitalized interest is recorded as part of the asset's cost and depreciated over the satellite's useful life. Capitalized interest costs for the year ended December 31, 2016 was $419, which related to the construction of our SXM-7 and SXM-8 satellites. We did not capitalize any interest costs for the years ended December 31, 2015 and 2014.

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

Satellites

As of December 31, 2016, we owned a fleet of five satellites. The chart below provides certain information on our satellites as of December 31, 2016:

Satellite Description	Year Delivered	Estimated End of Depreciable Life
SIRIUS FM-5	2009	2024
SIRIUS FM-6	2013	2028
XM-3	2005	2020
XM-4	2006	2021
XM-5	2010	2025

(9) Related Party Transactions

In the normal course of business, we enter into transactions with related parties.

Liberty Media

As of December 31, 2016, Liberty Media beneficially owned, directly and indirectly, approximately 67% of the outstanding shares of Holdings' common stock and has two executives and one of its directors on Holdings’ board of directors. Gregory B. Maffei, the President and Chief Executive Officer of Liberty Media, is the Chairman of Holdings’ board of directors. We have not had any related party transactions with Liberty Media during the years ended December 31, 2016 and 2015.

During the year ended December 31, 2014, we recognized $1,025 in Interest expense associated with the portion of our 7% Exchangeable Senior Subordinated Notes due 2014 (the “Exchangeable Notes”) held by Liberty Media through November 2014.

Sirius XM Holdings

Sirius XM is a wholly-owned subsidiary of Holdings. Holdings has no operations independent of Sirius XM. All equity-related transactions, including repurchases of Holdings' common stock, a dividend payment on shares of Holdings' common stock, and the issuance of equity related to stock-based compensation for Sirius XM employees, Holdings' directors and third parties have been reported as related party transactions within Sirius XM's consolidated financial statements. The stock-based compensation for Sirius XM employees, Holdings' directors and third parties has been recorded in Sirius XM's consolidated financial statements. The Related party long-term assets balance as of December 31, 2016 and December 31, 2015 of Sirius XM includes $5,176,811 and $3,522,162, respectively, for net amounts due from Holdings in connection with these equity-related transactions, as well as for the conversion of the 7% Exchangeable Senior Subordinated Notes in December 2014.

During the year ended December 31, 2016, we used $1,721,597 of our cash for the purchase and retirement of shares of Holdings' common stock under Holdings' repurchase program and payment of a cash dividend on Holdings' common stock. This amount is included in our Related party long-term asset balance as a receivable due from Holdings.

Sirius XM Canada

We hold an equity method investment in Sirius XM Canada. As of December 31, 2016, we owned approximately 47,300 of Sirius XM Canada’s Class A shares on a converted basis, representing an approximate 37% equity interest and an approximate 25% voting interest. We primarily provide programming and content services to Sirius XM Canada and are reimbursed from Sirius XM Canada for certain product development costs, production and distribution of chipset radios, as well as for information technology and streaming support costs. Refer to Note 1 Business & Basis of Presentation for information on the pending transaction with Sirius XM Canada.

Investments in which we have the ability to exercise significant influence but not control are accounted for pursuant to the equity method of accounting. We recognize our proportionate share of earnings or losses of Sirius XM Canada as they occur as a component of Other income in our consolidated statements of comprehensive income on a one month lag.

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

The difference between our investment and our share of the fair value of the underlying net assets of Sirius XM Canada is first allocated to either finite-lived intangibles or indefinite-lived intangibles and the balance is attributed to goodwill. We follow ASC 350, Intangibles - Goodwill and Other, which requires that equity method finite-lived intangibles be amortized over their estimated useful life while indefinite-lived intangibles and goodwill are not amortized. The amortization of equity method finite-lived intangible assets is recorded in Interest and investment income in our consolidated statements of comprehensive income. We periodically evaluate our equity method investments to determine if there has been an other-than temporary decline in fair value below carrying value. Equity method finite-lived intangibles, indefinite-lived intangibles and goodwill are included in the carrying amount of the investment.

We had the following related party balances associated with Sirius XM Canada:

	December 31, 2016	December 31, 2015
Related party current assets	$ 6,170	$ 5,941
Related party long-term assets	$ 8,918	$ —
Related party current liabilities	$ 2,840	$ 2,840
Related party long-term liabilities	$ 7,955	$ 10,795

Our related party current asset balances primarily consist of activation fees and streaming and chipset costs for which we are reimbursed. Our related party long-term asset balance as of December 31, 2016 primarily included our investment balance in Sirius XM Canada. Our related party liabilities as of December 31, 2016 and 2015 included $2,776 for the current portion of deferred revenue and $7,867 and $10,639, respectively, for the long-term portion of deferred revenue recorded as of the Merger date related to agreements with XM Canada, now Sirius XM Canada. These costs are being amortized on a straight line basis through 2020.

We recorded the following revenue and other income associated with Sirius XM Canada in our consolidated statements of comprehensive income:

	For the Years Ended December 31,		
	2016	2015	2014
Revenue [(a)]	$ 45,962	$ 56,397	$ 49,691
Other income			
Share of net earnings [(b)]	$ 12,529	$ —	$ 7,889
Dividends [(c)]	$ 3,575	$ 12,645	$ 7,628

(a) Under our agreements with Sirius XM Canada, we currently receive a percentage-based royalty of 10% and 15% for certain types of subscription revenue earned by Sirius XM Canada for Sirius and XM platforms, respectively; and additional royalties for premium services and royalties for activation fees and reimbursements for other charges. We record revenue from Sirius XM Canada as Other revenue in our consolidated statements of comprehensive income. The current license and services agreement entered into with Sirius Canada will expire in 2017. The current license agreement entered into with XM Canada will expire in 2020.

(b) We recognize our proportionate share of earnings or losses of Sirius XM Canada as they occur as a component of Other income in our consolidated statements of comprehensive income on a one month lag. For the year ended December 31, 2014, this amount included amortization related to the equity method intangible assets of $363 and a gain of $1,251 related to the fair value received in excess of the carrying value associated with the redemption of our investment in Sirius XM Canada's 8% convertible unsecured subordinated debentures in February 2014.

(c) Pursuant to the Arrangement Agreement, Sirius XM Canada did not pay any dividends during the second half of the year ended December 31, 2016. Sirius XM Canada paid gross dividends to us of $7,548, $15,645 and $43,492 during the years ended December 31, 2016, 2015 and 2014, respectively. These dividends were first recorded as a reduction to our investment balance in Sirius XM Canada to the extent a balance existed and then as Other income for the remaining portion.

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

(10) Debt

Our debt as of December 31, 2016 and 2015 consisted of the following:

						Carrying value[(a)] at	
Issuer / Borrower	Issued	Debt	Maturity Date	Interest Payable	Principal Amount at December 31, 2016	December 31, 2016	December 31, 2015
Sirius XM (b)	May 2013	4.25% Senior Notes (the "4.25% Notes")	May 15, 2020	semi-annually on May 15 and November15	$ 500,000	$ 497,069	$ 496,282
Sirius XM (b)(f)	September 2013	5.875% Senior Notes (the "5.875% Notes")	October 1, 2020	semi-annually on April 1 and October 1	—	—	644,720
Sirius XM (b)	August 2013	5.75% Senior Notes (the "5.75% Notes")	August 1, 2021	semi-annually on February 1 and August 1	600,000	596,386	595,720
Sirius XM (b)	May 2013	4.625% Senior Notes (the "4.625% Notes")	May 15, 2023	semi-annually on May 15 and November 15	500,000	496,111	495,602
Sirius XM (b)	May 2014	6.00% Senior Notes (the "6.00% Notes")	July 15, 2024	semi-annually on January 15 and July 15	1,500,000	1,486,556	1,485,196
Sirius XM (b)	March 2015	5.375% Senior Notes (the "5.375% Notes due 2025")	April 15, 2025	semi-annually on April 15 and October 15	1,000,000	990,340	989,446
Sirius XM (b)(c)	May 2016	5.375% Senior Notes (the "5.375% Notes due 2026")	July 15, 2026	semi-annually on January 15 and July 15	1,000,000	989,259	—
Sirius XM (b)(d)	August 2012	5.25%Senior Secured Notes (the "5.25% Notes")	August 15, 2022	semi-annually on February 15 and August 15	400,000	396,232	395,675
Sirius XM (e)	December 2012	Senior Secured Revolving Credit Facility (the "Credit Facility")	June 16, 2020	variable fee paid quarterly	1,750,000	390,000	340,000
Sirius XM	Various	Capital leases	Various	n/a	n/a	13,559	12,892
Total Debt						5,855,512	5,455,533
Less: total current maturities						5,485	4,764
Less: total deferred financing costs for Notes						7,263	7,155
Total long-term debt						$ 5,842,764	$ 5,443,614

(a) The carrying value of the obligations is net of any remaining unamortized original issue discount.
(b) Substantially all of our domestic wholly-owned subsidiaries have guaranteed these notes.
(c) In May 2016, we issued $1,000,000 aggregate principal amount of 5.375% Senior Notes due 2026, with an original issuance discount of $11,250.
(d) The liens securing the 5.25% Notes are equal and ratable to the liens granted to secure the Credit Facility.
(e) Our obligations under the Credit Facility are guaranteed by certain of our material domestic subsidiaries and are secured by a lien on substantially all of our assets and the assets of its material domestic subsidiaries. Interest on borrowings is payable on a monthly basis and accrues at a rate based on LIBOR plus an applicable rate. We are 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, 2016. Our 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) On August 25, 2016, we called for the redemption of $650,000 outstanding principal balance of the 5.875% Notes on October 1, 2016 for an aggregate purchase price, including premium and interest, of $669,097. We recognized $24,229 to Loss on extinguishment of debt and credit facilities, net, consisting primarily of unamortized discount, deferred financing fees and repayment premium, as a result of this redemption.

Converted Debt

During the year ended December 31, 2014, $502,370 in principal amount of the Exchangeable Notes were converted, resulting in the issuance of 272,856 shares of Holdings' common stock. No loss was recognized as a result of this conversion.

Covenants and Restrictions

Under the Credit Facility, we 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 our 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 our assets, and (vii) make voluntary prepayments of certain debt, in each case subject to exceptions.

The indentures governing our notes restrict our 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 our ability and the ability of its subsidiaries to create certain liens; enter into sale/leaseback transactions; and merge or consolidate.

Under our 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, 2016 and 2015, we were in compliance with our debt covenants.

(11) Stockholder Equity

Common Stock, par value $0.001 per share

We are authorized to issue up to 9,000,000 shares of common stock. As of December 31, 2016 and 2015, there were one thousand shares of common stock of Sirius XM issued and outstanding, which was owned by Holdings.

Share Lending Arrangements

To facilitate the offering of the Exchangeable Notes, we entered into share lending agreements with Morgan Stanley Capital Services Inc. and UBS AG London Branch in July 2008. All loaned shares were returned to us as of October 2011, and the share lending agreements were terminated.

We recorded interest expense related to the amortization of the costs associated with the share lending arrangement and other issuance costs for our Exchangeable Notes of $12,701 for the year ended December 31, 2014. These costs were fully amortized as of December 31, 2014 as the Exchangeable Notes matured on December 1, 2014.

Preferred Stock, par value $0.001 per share

We are authorized to issue up to 50,000 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, 2016 and 2015.

(12) Benefit Plans

We recognized share-based payment expense of $108,604, $84,310 and $78,212 for the years ended December 31, 2016, 2015 and 2014 respectively.

We account for equity instruments granted to employees 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. Upon adoption of ASU 2016-09 as of January 1, 2016 we recorded actual forfeitures and no longer estimate forfeitures. For the years ended December 31, 2015 and 2014 we estimated forfeitures at the time of the grant. 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 awards and units using the fair market value of the restricted shares of common stock on the day the award is granted. Stock-based awards granted to employees, non-employees and members of Holdings' board of directors include stock options, stock awards and restricted stock units. We apply variable accounting to our non-employee stock-based awards, whereby we remeasure the value of such awards at each balance sheet date.

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, 2016, 2015 and 2014, 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 Holdings' 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, contractual terms are used. Dividend yield is based on the current expected annual dividend per share and Holdings' 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 deem 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, and may include performance requirements. Stock options generally expire ten years from the date of grant. Each restricted stock unit entitles the holder to receive one share of common stock upon vesting. As of December 31, 2016, 181,148 shares of common stock were available for future grants under the 2015 Plan.

During the year ended December 31, 2016, we granted performance-based restricted stock units (“PRSUs”) to certain employees, the vesting of which is subject to the employee's continuing employment and our achievement of certain performance goals. The PRSUs awards cliff vest on the three-year anniversary of the grant date.

Other Plans

We maintain four other share-based benefit plans — the Sirius XM Radio Inc. 2009 Long-Term Stock Incentive Plan, the XM 2007 Stock Incentive Plan, the Amended and Restated Sirius Satellite Radio 2003 Long-Term Stock Incentive Plan and the XM 1998 Shares Award Plan. No further awards may be made under these plans.

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

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

	For the Years Ended December 31,		
	2016	2015	2014
Risk-free interest rate	1.1%	1.4%	1.6%
Expected life of options — years	4.25	4.17	4.72
Expected stock price volatility	22%	26%	33%
Expected dividend yield	0%	0%	0%

The following table summarizes the weighted-average assumptions used to compute the fair value of options granted to third parties, other than non-employee members of our board of directors:

	For the Year Ended December 31,
	2015
Risk-free interest rate	2.0%
Expected life of options — years	7.00
Expected stock price volatility	37%
Expected dividend yield	0%

There were no options granted to third parties during the years ended December 31, 2016 and 2014. Since Holdings has not historically paid dividends on its common stock prior to the fourth quarter of 2016, the dividend yield used in the Black-Scholes-Merton option value was less than one percent for the year ended December 31, 2016 and zero for the years ended December 31, 2015 and 2014.

The following table summarizes stock option activity under our share-based plans for the years ended December 31, 2016, 2015 and 2014:

	Options	Weighted-Average Exercise Price Per Share	Weighted-Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value
Outstanding at the beginning of January 1, 2014	264,239	$ 2.42		
Granted	61,852	$ 3.39		
Exercised	(46,943)	$ 1.63		
Forfeited, cancelled or expired	(11,294)	$ 4.08		
Outstanding as of December 31, 2014	267,854	$ 2.72		
Granted	145,366	$ 3.95		
Exercised	(57,667)	$ 1.88		
Forfeited, cancelled or expired	(17,072)	$ 4.60		
Outstanding as of December 31, 2015	338,481	$ 3.29		
Granted	55,222	$ 4.14		
Exercised	(50,728)	$ 2.66		
Forfeited, cancelled or expired	(10,327)	$ 4.30		
Outstanding as of December 31, 2016	332,648	$ 3.50	7.33	$ 315,874
Exercisable as of December 31, 2016	126,580	$ 2.82	5.99	$ 209,696

The weighted average grant date fair value per share of options granted during the years ended December 31, 2016, 2015 and 2014 was $0.81, $1.11 and $1.05, respectively. The total intrinsic value of stock options exercised during the years ended December 31, 2016, 2015 and 2014 was $81,204, $117,944, and $89,428, respectively.

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

We recognized share-based payment expense associated with stock options of $80,266, $70,084 and $69,754 for the years ended December 31, 2016, 2015 and 2014, respectively.

The following table summarizes the restricted stock unit, including PRSUs, and stock award activity under our share-based plans for the years ended December 31, 2016, 2015 and 2014:

	Shares	Grant Date Fair Value Per Share
Nonvested at the beginning of January 1, 2014	6,984	$ 3.58
Granted	6,108	$ 3.38
Vested	(1,138)	$ 3.62
Forfeited	(379)	$ 3.52
Nonvested as of December 31, 2014	11,575	$ 3.47
Granted	8,961	$ 3.92
Vested	(3,464)	$ 3.44
Forfeited	(984)	$ 3.52
Nonvested as of December 31, 2015	16,088	$ 3.73
Granted	18,523	$ 4.21
Vested	(4,212)	$ 3.68
Forfeited	(506)	$ 3.75
Nonvested as of December 31, 2016	29,893	$ 4.03

The total intrinsic value of restricted stock units and stock awards vesting during the years ended December 31, 2016, 2015 and 2014 was $17,807, $13,720 and $4,044, respectively. During the year ended December 31, 2016, we granted 3,036 PRSUs to certain employees. We believe it is probable that the performance target applicable to these PRSUs will be achieved.

In connection with the cash dividend paid in 2016, we granted 70 incremental restricted stock units, including PRSUs, in accordance with the terms of existing award agreements. This grant did not result in any additional incremental share-based payment expense being recognized in 2016.

We recognized share-based payment expense associated with restricted stock units and stock awards of $28,338, $14,226 and $8,458 for the years ended December 31, 2016, 2015 and 2014, respectively. The year ended December 31, 2016 included $1,859 of compensation expense related to PRSUs.

Total unrecognized compensation costs related to unvested share-based payment awards for stock options and restricted stock units granted to employees, members of our board of directors and third parties at December 31, 2016 and 2015 were $266,045 and $261,628, respectively. The total unrecognized compensation costs at December 31, 2016 are expected to be recognized over a weighted-average period of 2.5 years.

401(k) Savings Plan

Sirius XM sponsors the Sirius XM Radio Inc. 401(k) Savings Plan (the “Sirius XM Plan”) for eligible employees. The Sirius XM Plan allows eligible employees to voluntarily contribute from 1% to 50% of their pre-tax eligible earnings, subject to certain defined limits. We 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 Holdings' common stock on the open market, unless the employee elects Holdings' common stock as their investment option for this contribution. We recognized $7,104, $8,144 and $5,385 in expense during years ended December 31, 2016, 2015 and 2014, respectively.

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

Sirius XM Holdings Inc. Deferred Compensation Plan

In 2015, Holdings' adopted the Sirius XM Holdings Inc. Deferred Compensation Plan (the “DCP”). The DCP allows members of Holdings' 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’ compensation, as applicable. Pursuant to the terms of the DCP, Holdings or any of its subsidiaries may elect to make additional contributions beyond amounts deferred by participants, but is under no obligation to do so. Holdings has established a grantor (or “rabbi”) trust to facilitate the payment of its obligations under the DCP.

As of December 31, 2016, the fair value of the investments held in the trust was $4,854, which is included in Other long-term assets in our consolidated balance sheets and is classified as trading securities. Trading gains and losses associated with these investments are recorded in Other 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 administration expense within our consolidated statements of comprehensive income.

(13) Commitments and Contingencies

The following table summarizes our expected contractual cash commitments as of December 31, 2016:

	2017	2018	2019	2020	2021	Thereafter	Total
Debt obligations	$ 5,485	$ 4,477	$ 3,169	$ 890,428	$ 600,000	$ 4,400,000	$ 5,903,559
Cash interest payments	318,444	310,505	310,406	294,168	276,125	782,563	2,292,211
Satellite and transmission	94,618	67,886	51,675	25,676	19,199	6,933	265,987
Programming and content	312,413	284,915	261,953	223,095	154,239	202,700	1,439,315
Marketing and distribution	21,574	15,619	13,068	7,612	6,784	750	65,407
Satellite incentive payments	12,729	14,302	10,652	9,310	8,448	71,337	126,778
Operating lease obligations	41,360	43,506	39,339	36,820	30,332	150,675	342,032
Other	84,157	9,760	2,290	1,461	527	30	98,225
Total [(1)]	$ 890,780	$ 750,970	$ 692,552	$1,488,570	$ 1,095,654	$ 5,614,988	$10,533,514

(1) The table does not include our reserve for uncertain tax positions, which at December 31, 2016 totaled $303,583, as the specific timing of any cash payments cannot be projected with reasonable certainty.

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

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

Satellite and transmission. We have entered into agreements with third parties to operate and maintain satellite telemetry, tracking and control facilities and certain components of our terrestrial repeater networks. During the year ended December 31, 2016, we entered into an agreement with Space Systems/Loral to design and build two satellites, SXM-7 and SXM-8, for our service.

Programming and content. We have entered into various programming agreements. Under the terms of these agreements, our obligations include fixed payments, advertising commitments and revenue sharing arrangements. Our 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.

Marketing and distribution. We have entered into various marketing, sponsorship and distribution agreements to promote our brand and are obligated to make payments to sponsors, retailers, automakers and radio manufacturers under these agreements. Certain programming and content agreements also require us to purchase advertising on properties owned or controlled by the licensors. We also reimburse automakers for certain costs associated with the incorporation of satellite radios into new vehicles they manufacture.

Satellite incentive payments. Boeing Satellite Systems International, Inc., the manufacturer of certain of our in-orbit satellites, may be entitled to future in-orbit performance payments with respect to XM-3 and XM-4 meeting their fifteen-year design life, which we expect to occur. Boeing may also be entitled to additional incentive payments up to $10,000 if our XM-4 satellite continues to operate above baseline specifications during the five years beyond the satellite's fifteen-year design life.

Space Systems/Loral, the manufacturer of certain of our in-orbit satellites, may be entitled to future in-orbit performance payments with respect to XM-5, FM-5 and FM-6 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, equipment and terrestrial repeaters. 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. The effect of the rent holidays and rent concessions are recognized on a straight-line basis over the lease term, including reasonably assured renewal periods. Total rent recognized in connection with leases for the years ended December 31, 2016, 2015 and 2014 was $46,968, $47,679 and $45,107, respectively.

Other: We have 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 agreements with 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. The cost of Holdings' stock acquired but not paid for as of December 31, 2016 is also included in this category.

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 the following 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 a possible eventual loss, if any.

SoundExchange Royalty Claims. In August 2013, SoundExchange, Inc. filed a complaint in the United States District Court for the District of Columbia alleging that we underpaid royalties for statutory licenses in violation of the regulations established by the Copyright Royalty Board for the 2007-2012 period. SoundExchange principally alleges that we improperly reduced our gross revenues applicable to royalties by improperly deducting revenue attributable to pre-1972 recordings and Premier package revenue that is not "separately charged" as required by the regulations. We believe that we properly applied the gross revenue exclusions contained in the regulations established by the Copyright Royalty Board. SoundExchange is seeking compensatory damages of not less than $50,000 and up to $100,000 or more, payment of late fees and interest, and attorneys' fees and costs.

In August 2014, the United States District Court for the District of Columbia, in response to our motion to dismiss the complaint, stayed the case on the grounds that it properly should be pursued in the first instance before the Copyright Royalty Board rather than the District Court. In its opinion, the District Court concluded that the gross revenue exclusions in the regulations established by the Copyright Royalty Board for the 2007-2012 period were ambiguous and did not, on their face, make clear whether our royalty calculation approaches were permissible under the regulations. In December 2014, SoundExchange filed a petition with the Copyright Royalty Board requesting an order interpreting the applicable regulations.

On January 10, 2017, the Copyright Royalty Board issued a ruling concluding that we correctly interpreted the revenue exclusions applicable to pre-1972 recordings, but in certain cases did not apply those exclusions properly. The ruling further indicated that we improperly claimed a revenue exclusion based on our Premier package upcharge, because, in the Judges' view, the portion of the package that contained programming that did not include sound recordings was not offered for a "separate charge" in accordance with the regulations. The ruling is subject to legal review by the Register of Copyrights, and will be transmitted back to the District Court for further proceedings, such as adjudication claims relating to damages and defenses. We intend to exhaust all available options for review and/or appeal of adverse aspects of the Copyright Royalty Board's ruling, including portions of the ruling which we believe are unclear or inconsistent with the governing law. In addition, we believe we have substantial defenses to those SoundExchange claims that can be asserted before the District Court, and will continue to defend this action vigorously.

This matter is titled SoundExchange, Inc. v. Sirius XM Radio, Inc., No.13-cv-1290-RJL (D.D.C.), and *Determination of Rates and Terms for Preexisting Subscription Services and Satellite Digital Audio Radio Services,* United States Copyright Royalty Board, No. 2006-1 CRB DSTRA. Information concerning the action is publicly available in filings under the docket numbers. This matter is not related to certain claims under state law brought by owners of pre-1972 recording copyrights arising out of our use and performance of those recordings.

At December 31, 2016, we concluded that a loss, in excess of our recorded liabilities, is reasonably possible in connection with the SoundExchange royalty claims. The estimable portion of such possible loss ranges from $0 to $70,000, plus any related interest or late fees. Based on our defenses, such a loss is not considered probable at this time and no liability for such additional loss has been recorded at December 31, 2016. The matters underlying this estimated range and the estimable portion of reasonably possible losses may change from time to time and the actual possible loss may vary from this estimate.

Telephone Consumer Protection Act Suits. We were a defendant in several purported class action suits that alleged that we, or call center vendors acting on our behalf, made calls which violate provisions of the Telephone Consumer Protection Act of 1991 (the "TCPA"). These purported class action cases were titled Erik Knutson v. Sirius XM Radio Inc., No. 12-cv-0418-AJB-NLS (S.D. Cal.), Francis W. Hooker v. Sirius XM Radio Inc., No. 4:13-cv-3 (E.D. Va.), Yefim Elikman v. Sirius XM Radio Inc. and Career Horizons, Inc., No. 1:15-cv-02093 (N.D. Ill.), and Anthony Parker v. Sirius XM Radio Inc., No. 8:15-cv-01710-JSM-EAJ (M.D. Fla).

We have entered into an agreement to settle these purported class action suits. The settlement was approved by the United States District Court for the Eastern District of Virginia in December 2016. The settlement resolves the claims of consumers beginning in February 2008 relating to telemarketing calls to their mobile telephones. Approximately 200 consumers, or less than 0.002% of the consumers who received notice of the settlement, opted-out of this class action settlement. As part of this settlement, we made a $35,000 payment to a settlement fund (from which notice, administration and other costs and attorneys' fees are being paid), and are offering participating class members the option of receiving three months of our Select service for no charge.

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.

(14) Income Taxes

There is no current U.S. federal income tax provision, as all federal taxable income was offset by utilizing U.S. federal net operating loss carryforwards. 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. The current foreign income tax provision is primarily related to foreign withholding taxes on dividends paid by our Canadian affiliate to us. Income tax expense is the sum of current income tax plus the change in deferred tax assets and liabilities.

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

Sirius XM and its wholly-owned subsidiaries are included in the consolidated federal income tax returns of Holdings. Holdings files a consolidated federal income tax return with its wholly-owned subsidiaries, including Sirius XM. Income tax expense consisted of the following:

	For the Years Ended December 31,		
	2016	2015	2014
Current taxes:			
Federal	$ —	$ —	$ —
State	(21,782)	(15,916)	(7,743)
Foreign	(383)	(825)	(2,341)
Total current taxes	(22,165)	(16,741)	(10,084)
Deferred taxes:			
Federal	(304,179)	(318,933)	(302,350)
State	(19,383)	(46,566)	(25,111)
Total deferred taxes	(323,562)	(365,499)	(327,461)
Total income tax expense	$ (345,727)	$ (382,240)	$ (337,545)

Income tax expense for Sirius XM and Holdings was the same for the years ended December 31, 2016, 2015 and 2014. The difference in Income before income taxes in the respective consolidated statements of comprehensive income of Sirius XM and Holdings fully relates to permanent differences recognized for tax purposes. The following table presents a reconciliation of the U.S. federal statutory tax rate and at Sirius XM's effective tax rate:

	For the Years Ended December 31,		
	2016	2015	2014
Federal tax expense, at statutory rate	35.0 %	35.0%	35.0 %
State income tax expense, net of federal benefit	2.8 %	2.9%	3.8 %
Change in valuation allowance	— %	4.9%	— %
Tax credit	(6.1)%	—%	— %
Other, net	— %	0.1%	(0.5)%
Effective tax rate	31.7 %	42.9%	38.3 %

For the year ended December 31, 2016, we recorded a tax credit in the fourth quarter of 2016 under the Protecting Americans from Tax Hikes Act of 2015 related to research and development activities. For the year ended December 31, 2015, we recorded additional tax expense to increase our valuation allowance due to a tax law change in the District of Columbia which will reduce our future tax and thus will limit our ability to use certain net operating losses in the future.

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 thousands, 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,	
	2016	2015
Deferred tax assets:		
Net operating loss carryforwards and tax credits	$ 1,376,012	$ 1,447,159
Deferred revenue	760,774	730,239
Accrued bonus	35,225	31,458
Expensed costs capitalized for tax	19,610	19,584
Investments	44,129	46,857
Stock based compensation	74,544	66,030
Other	31,133	37,226
Total deferred tax assets	2,341,427	2,378,553
Deferred tax liabilities:		
Depreciation of property and equipment	(259,491)	(250,821)
FCC license	(783,822)	(779,145)
Other intangible assets	(172,520)	(190,442)
Total deferred tax liabilities	(1,215,833)	(1,220,408)
Net deferred tax assets before valuation allowance	1,125,594	1,158,145
Valuation allowance	(47,682)	(49,095)
Total net deferred tax asset	$ 1,077,912	$ 1,109,050

Net operating loss carryforwards and tax credits decrease as a result of the utilization of net operating losses related to current year taxable income. For the year ended December 31, 2016, we recognized $293,896 of additional net operating losses related to excess share-based compensation deductions due to our adoption of ASU 2016-09, *Compensation-Stock Compensation (Topic 718)* and we recorded a $66,326 tax credit under the Protecting Americans from Tax Hikes Act of 2015 related to research and development activities. The net deferred tax assets were primarily related to gross federal net operating loss carryforwards of approximately $3,245,207.

As of December 31, 2016 and 2015, we had a valuation allowance related to deferred tax assets of $47,682 and $49,095, respectively, which were not likely to be realized due to certain state net operating loss limitations. During the year ended December 31, 2016, we reduced our valuation allowance primarily related to our ability to utilize additional net operating losses as a result of a state income tax audit. The increase in valuation allowance during the year ended December 31, 2015 was primarily related to the tax law change in the District of Columbia for $44,392. These net operating loss carryforwards expire on various dates through 2035.

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.

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

As of December 31, 2016 and 2015, the gross liability for income taxes associated with uncertain tax positions was $303,583 and $253,277, respectively. If recognized, $198,664 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, 2016 and 2015, were $4,780 and $3,525, respectively. No penalties have been accrued.

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, 2016 will significantly increase or decrease during the twelve month period ending December 31, 2017. 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 $100 and $89 for the years ended December 31, 2016 and 2015, respectively, related to unrecognized tax benefits.

Changes in our uncertain income tax positions, from January 1 through December 31 are presented below:

	2016	2015
Balance, beginning of year	$ 253,277	$ 1,432
Increases in tax positions for prior years	—	251,845
Increases in tax positions for current years	51,738	—
Decreases in tax positions for prior years	(1,432)	—
Balance, end of year	$ 303,583	$ 253,277

(15) Subsequent Events

Holdings' Stock Repurchase Program

For the period from January 1, 2017 to January 31, 2017, we repurchased $122,679 of Holdings' common stock on the open market, including fees and commissions.

On January 24, 2017, Holdings' board of directors also declared a quarterly dividend on Holdings' common stock in the amount of $0.01 per share of common stock payable on February 28, 2017 to Holdings' stockholders of record as of the close of business on February 7, 2017.

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

(16) Quarterly Financial Data--Unaudited

Our quarterly results of operations are summarized below:

	For the Three Months Ended			
	March 31	June 30	September 30	December 31
2016 [(1)]				
Total revenue	$ 1,201,010	$ 1,235,566	$ 1,277,646	$ 1,302,998
Cost of services	$ (467,028)	$ (486,317)	$ (488,659)	$ (551,323)
Income from operations	$ 348,234	$ 362,156	$ 392,179	$ 329,560
Net income [(2)]	$ 172,440	$ 174,965	$ 193,901	$ 204,627
2015 [(1)]				
Total revenue	$ 1,080,990	$ 1,123,210	$ 1,169,712	$ 1,196,146
Cost of services	$ (406,370)	$ (525,463)	$ (440,808)	$ (470,523)
Income from operations	$ 313,806	$ 219,429	$ 351,584	$ 293,869
Net income	$ 105,692	$ 102,849	$ 166,550	$ 134,633

(1) Net income (loss) per share for Sirius XM is not presented since Sirius XM is a wholly-owned subsidiary of Holdings.

(2) These amounts reflect the adoption of ASU 2016-09, *Compensation-Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting*.