

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

Form 10-K

(Mark One)

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

For the fiscal year ended December 31, 2019

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

Commission file Number 001-35066

IMAX Corporation

(Exact name of registrant as specified in its charter)

Canada

(State or other jurisdiction of
incorporation or organization)

2525 Speakman Drive,
Mississauga, Ontario, Canada L5K 1B1
(905) 403-6500

(Address of principal executive offices, zip code, telephone numbers)

98-0140269

(I.R.S. Employer
Identification Number)

902 Broadway, Floor 20
New York, New York, USA 10010
(212) 821-0100

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Shares, no par value	IMAX	The New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act:

None

(Title of class)

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

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

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

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

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

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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

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

The aggregate market value of the common shares of the registrant held by non-affiliates of the registrant, computed by reference to the last sale price of such shares as of the close of trading on June 30, 2019 was \$1,045.9 million.

As of January 31, 2020, there were 61,362,872 common shares of the registrant outstanding.

Document Incorporated by Reference

Portions of the registrant's definitive Proxy Statement to be filed within 120 days of the close of IMAX Corporation's fiscal year ended December 31, 2019, with the Securities and Exchange Commission pursuant to Regulation 14A involving the election of directors and the annual meeting of the stockholders of the registrant (the "Proxy Statement") are incorporated by reference in Part III of this Form 10-K to the extent described therein.

December 31, 2019

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EXCHANGE RATE DATA

Unless otherwise indicated, all dollar amounts in this document are expressed in United States ("U.S.") dollars. The following table sets forth, for the periods indicated, certain exchange rates based on the noon buying rate in the City of New York for cable transfers in foreign currencies as certified for customs purposes by the Bank of Canada (the "Noon Buying Rate"). Such rates quoted are the number of U.S. dollars per one Canadian dollar and are the inverse of rates quoted by the Bank of Canada for Canadian dollars per U.S. \$1.00. The average exchange rate is based on the average of the exchange rates on the last day of each month during such periods. The Noon Buying Rate on December 31, 2019 was U.S. \$0.7699.

	Years Ended December 31,				
	2019	2018	2017	2016	2015
Exchange rate at end of period	0.7699	0.7330	0.7971	0.7448	0.7225
Average exchange rate during period	0.7536	0.7718	0.7712	0.7558	0.7748
High exchange rate during period	0.7699	0.8138	0.8245	0.7972	0.8527
Low exchange rate during period	0.7353	0.7330	0.7276	0.6854	0.7148

SPECIAL NOTE REGARDING FORWARD-LOOKING INFORMATION

Certain statements included in this annual report may constitute "forward-looking statements" within the meaning of the United States Private Securities Litigation Reform Act of 1995. These forward-looking statements include, but are not limited to, references to future capital expenditures (including the amount and nature thereof), business and technology strategies and measures to implement strategies, competitive strengths, goals, expansion and growth of business, operations and technology, plans and references to the future success of IMAX Corporation together with its consolidated subsidiaries (the "Company") and expectations regarding the Company's future operating, financial and technological results. These forward-looking statements are based on certain assumptions and analyses made by the Company in light of its experience and its perception of historical trends, current conditions and expected future developments, as well as other factors it believes are appropriate in the circumstances. However, whether actual results and developments will conform with the expectations and predictions of the Company is subject to a number of risks and uncertainties, including, but not limited to, risks associated with investments and operations in foreign jurisdictions and any future international expansion, including those related to economic, political and regulatory policies of local governments and laws and policies of the United States and Canada; risks related to the Company's growth and operations in China, including the adverse impact of the coronavirus outbreak in China; the performance of IMAX DMR® films; the signing of theater system agreements; conditions, changes and developments in the commercial exhibition industry; risks related to currency fluctuations; the potential impact of increased competition in the markets within which the Company operates; competitive actions by other companies; the failure to respond to change and advancements in digital technology; risks relating to recent consolidation among commercial exhibitors and studios; risks related to new business initiatives; conditions in the in-home and out-of-home entertainment industries; the opportunities (or lack thereof) that may be presented to and pursued by the Company; risks related to cyber-security and data privacy; risks related to the Company's inability to protect the Company's intellectual property; general economic, market or business conditions; the failure to convert theater system backlog into revenue; changes in laws or regulations; the failure to fully realize the projected cost savings and benefits from any of the Company's restructuring initiatives and other factors, many of which are beyond the control of the Company. Consequently, all of the forward-looking statements made in this annual report are qualified by these cautionary statements, and actual results or anticipated developments by the Company may not be realized, and even if substantially realized, may not have the expected consequences to, or effects on, the Company. The Company undertakes no obligation to update publicly or otherwise revise any forward-looking information, whether as a result of new information, future events or otherwise.

IMAX®, IMAX® Dome, IMAX® 3D, IMAX® 3D Dome, Experience It In IMAX®, *The IMAX Experience®*, *An IMAX Experience®*, *An IMAX 3D Experience®*, IMAX DMR®, DMR®, IMAX nXos® and Films To The Fullest™ are trademarks and trade names of the Company or its subsidiaries that are registered or otherwise protected under laws of various jurisdictions.

Item 1. Business

The Company is a Canadian corporation that was formed in March 1994 as a result of an amalgamation between WGIM Acquisition Corp. and the former IMAX Corporation (“Predecessor IMAX”). Predecessor IMAX was incorporated in 1967.

GENERAL

The Company, together with its consolidated subsidiaries, is one of the world’s leading entertainment technology companies, specializing in technological innovations powering the presentation of some of today’s most immersive entertainment experiences. Through its proprietary software, theater architecture, patented intellectual property and specialized equipment, IMAX offers a unique end-to-end cinematic solution to create the highest-quality, most immersive motion picture and other event experiences for which the IMAX® brand has become known globally. Top filmmakers and studios utilize the cutting-edge visual and sound technology of IMAX to connect with audiences in innovative ways, and as a result, IMAX’s network is among the most important and successful distribution platforms for major films and other events around the world.

The Company leverages its innovative technology and engineering in all aspects of its business, which consists of:

- the Digital Re-Mastering (“DMR”) of films and other presentations into the IMAX format by enhancing their image resolution and sound quality for exhibition in the IMAX network in exchange for a certain percentage of contingent box office receipts from studios; and
- the provision of IMAX premium theater systems (“IMAX theater systems”) to exhibitor customers through sales, long-term leases or joint revenue sharing arrangements.

IMAX theater systems are based on proprietary and patented image, audio and other technology developed over the course of the Company’s 52-year history. The Company’s customers who purchase, lease or otherwise acquire the IMAX theater systems through joint revenue sharing arrangements are theater exhibitors that operate commercial theaters (particularly multiplexes), museums, science centers, or destination entertainment sites. The Company generally does not own IMAX theaters, but licenses the use of its trademarks along with the sale, lease or contribution of the IMAX theater system. The Company refers to all theaters using the IMAX theater system as “IMAX theaters.”

IMAX theater systems combine:

- the ability to exhibit content that has undergone IMAX DMR® conversion, which results in higher image and sound fidelity than conventional cinema experiences;
- advanced, high-resolution projectors with specialized equipment and automated theater control systems, which generate significantly more contrast and brightness than conventional theater systems;
- large screens and proprietary theater geometry, which result in a substantially larger field of view so that the screen extends to the edge of a viewer’s peripheral vision and creates more realistic images;
- sound system components, which deliver more expansive sound imagery and pinpointed origination of sound to any specific spot in an IMAX theater;
- specialized theater acoustics, which result in a four-fold reduction in background noise; and
- a license to the globally recognized IMAX brand.

In addition, some IMAX movies are filmed using proprietary IMAX film and IMAX certified digital cameras, which offer filmmakers customized guidance and workflow process to provide further enhanced and differentiated image quality and a film aspect ratio that delivers up to 26% more image onto a movie screen.

Together these components cause audiences in IMAX theaters to feel as if they are a part of the on-screen action, creating a more intense, immersive and exciting experience than in a traditional theater.

As a result of the engineering and scientific achievements that are a hallmark of *The IMAX Experience®*, the Company’s exhibitor customers typically charge a premium for IMAX DMR films over films exhibited in their other auditoriums. The premium pricing, combined with the higher attendance levels associated with IMAX DMR films, generates incremental box office for the Company’s exhibitor customers and for the movie studios releasing their films to the IMAX theater network. The incremental box office generated by IMAX DMR films has helped establish IMAX as a key premium distribution and marketing platform for Hollywood blockbuster films.

As one of the world's leaders in entertainment technology, the Company strives to remain at the forefront of advancements in cinema technology. The Company recently introduced IMAX with Laser, the Company's next-generation laser projection system designed for IMAX theaters in commercial multiplexes, which represents a further evolution of IMAX's proprietary technology. The Company believes that IMAX with Laser delivers increased resolution, sharper and brighter images, deeper contrast as well as the widest range of colors available to filmmakers today. The Company further believes that IMAX with Laser can help facilitate the next major contract renewal and upgrade cycle for the global commercial IMAX network.

To date the Company has signed IMAX with Laser agreements with leading, global exhibitors such as AMC Entertainment Holdings, Inc. ("AMC"), Cineworld Group PLC ("Cineworld"), CGV Holdings Limited ("CGV") and Les Cinémas Pathé Gaumont ("Pathé") (among others) for a total of 139 new theaters, 147 upgrades to existing IMAX theaters, and 52 upgrades to existing backlog arrangements. As at December 31, 2019, the Company's backlog had 144 new IMAX with Laser systems and 92 upgrades to IMAX with Laser systems and has installed 130 IMAX with Laser systems.

The Company is also experimenting with new technologies and new content as a way to deepen consumer engagement and brand loyalty, which includes curating unique, differentiated alternative content to be exhibited in IMAX theaters, particularly during those periods when Hollywood blockbuster film content is not available. In 2019, the Company has piloted filmed events including *Anima*, a one-night only event in June featuring music from Radiohead's Thom Yorke, and *Soundgarden: Live from the Artist's Den: The IMAX Experience*, in July and August, in select IMAX theaters. During the fourth quarter of 2019, IMAX released the Kanye West film *Jesus is King: The IMAX Experience* in select IMAX theaters.

In early 2020, in response to the public health risks associated with an outbreak of coronavirus in Wuhan, China, Chinese exhibitors temporarily closed more than 70,000 movie theaters, including all of the approximately 700 IMAX theaters in mainland China. The theaters have been closed since late January 2020, including over the Lunar New Year holiday, and have not yet reopened as of the date of this report. Chinese movie studios also postponed the release of multiple films, including those originally scheduled to be released over this holiday, five of which were scheduled to be shown in IMAX theaters. See "Risk Factors – The Company's results of operations are expected to be adversely impacted by the recent coronavirus outbreak in China" in Item 1A of this 2019 Form 10-K, "Management's Discussion and Analysis of Financial Condition and Results of Operations – Impact of Coronavirus" in Item 7 of this 2019 Form 10-K and note 29 to the accompanying audited consolidated financial statements in Item 8 of this 2019 Form 10-K.

IMAX THEATER NETWORK

The Company believes the IMAX theater network is one of the most extensive premium theater networks in the world with 1,624 theater systems (1,529 commercial multiplex, 14 commercial destination, 81 institutional) operating in 81 countries and territories as at December 31, 2019.

The Company believes that over time its commercial multiplex theater network could grow to approximately 3,318 IMAX theaters worldwide from the 1,529 commercial multiplex IMAX theaters in operation as at December 31, 2019. While the Company continues to grow in the United States and Canada, it believes that the majority of its future growth will come from international markets. As at December 31, 2019, 71.9% of IMAX theater systems in operation were located within international markets (defined as all countries other than the United States and Canada), up from 70.1% as at December 31, 2018, and approximately 85.7% of the new IMAX theater systems in backlog are scheduled to be installed in international markets, compared to 86.2% as at December 31, 2018. Revenues and gross box office derived from outside the United States and Canada continue to exceed revenues and gross box-office from within the United States and Canada.

Greater China is currently the Company's largest market, measured by revenues, with approximately 31% of overall revenues generated from the Company's China operations in 2019. As at December 31, 2019, the Company had 717 theaters operating in Greater China and an additional 252 new theaters (plus 1 upgrade) in backlog that are scheduled to be installed in Greater China by 2023. The Company's backlog in Greater China represents 47.6% of the Company's current backlog for new and upgraded IMAX theater systems. The Company's largest single international partnership is in China with Wanda Film, formerly Wanda Cinema Line Corporation ("Wanda"). Wanda's total commitment to the Company, including both installed and backlog theaters, is for 359 theater systems, of which 345 theater systems are under the parties' joint revenue sharing arrangement.

The Company indirectly owns approximately 69.74% of IMAX China Holding, Inc. ("IMAX China"), whose shares trade on the Hong Kong Stock Exchange. IMAX China remains a consolidated subsidiary of the Company.

PRINCIPAL PRODUCTS AND SERVICES

The Company believes it is the world's largest designer and manufacturer of specialty premium projection and sound system components for large-format theaters around the world, and it is also a significant distributor of large-format films. The Company's theater systems include specialized IMAX projectors, advanced sound systems and specialty screens.

The Company's principal products and services are as follows:

- **IMAX DMR:** The Digital Re-Mastering of films into the IMAX format for exhibition in the IMAX theater network.
- **IMAX Theater Systems:** The provision of IMAX premium theater systems to exhibitor customers.
- **New Business:** New business initiatives that are in the development, start-up and/or wind-up phases.
- **Other:** The distribution of documentary films, the provision of film post-production, owning and operating certain IMAX theaters, camera rentals and other miscellaneous items.

These product lines do not reflect the nature and sources of revenue, or the manner in which management reviews financial information. The Company's segmented information is provided in Item 7 and note 21 to the accompanying audited consolidated financial statements in Item 8 of this Annual Report on Form 10-K for the Fiscal Year ended December 31, 2019 (this "2019 Form 10-K"), which is incorporated by reference into this Item I.

Digital Re-Mastering (IMAX DMR)

The Company has developed a proprietary technology, known as IMAX DMR, to digitally re-master Hollywood films into IMAX digital cinema package format or 15/70-format film for exhibition in IMAX theaters. IMAX DMR digitally enhances the image resolution of motion picture films for projection on IMAX screens while maintaining or enhancing the visual clarity and sound quality to levels for which *The IMAX Experience* is known. The original soundtrack of a film to be exhibited in the IMAX theater network is re-mastered for the IMAX digital sound systems in connection with the IMAX DMR release. Unlike the soundtracks played in conventional theaters, IMAX re-mastered soundtracks are uncompressed and full fidelity. IMAX sound systems use proprietary loudspeaker systems and proprietary surround sound configurations that ensure every theater seat is in an optimal listening position.

The IMAX DMR process involves the following:

- in certain instances, scanning, at the highest possible resolution, each individual frame of the movie and converting it into a digital image;
- optimizing the image using proprietary image enhancement tools;
- enhancing the digital image using techniques such as sharpening, color correction, grain and noise removal and the elimination of unsteadiness and removal of unwanted artifacts;
- recording the enhanced digital image into an IMAX digital cinema package ("DCP") format or onto IMAX 15/70-format film; and
- specially re-mastering the sound track to take full advantage of the unique sound system of IMAX theater systems.

IMAX films also benefit from enhancements made by individual filmmakers exclusively for the IMAX release, and filmmakers and studios have sought IMAX-specific enhancements in recent years to generate interest in and excitement for their films. Such enhancements include shooting films with IMAX cameras to increase the audience's immersion in the film and taking advantage of the unique dimensions of the IMAX screen by projecting the film in a larger aspect ratio that delivers up to 26% more image onto a movie screen. *Avengers: Endgame*, the highest-grossing film in history, released in April 2019, was shot entirely using IMAX cameras. Collectively, the Company refers to those enhancements as "IMAX DNA". In addition, in 2019 *Alita: Battle Angel*, *Captain Marvel* and Disney's *The Lion King* were all released with select scenes specifically formatted for IMAX screens.

In 2019, 60 films were converted through the IMAX DMR process and released to theaters in the IMAX network by film studios as compared to 70 films in 2018.

To date, the Company has announced the following 22 DMR titles to be released in 2020 to the IMAX theater network. The following dates noted for film release are subject to change and may vary by territory.

- *Invasion: The IMAX Experience* (Art Pictures Studio, January 2020, Russia);
- *1917: The IMAX Experience* (Universal Pictures (domestic) and eOne International (international), January 2020) IMAX expanded aspect ratio;
- *Bad Boys For Life: The IMAX Experience* (Sony Pictures, January 2020);
- *Dolittle: The IMAX Experience* (Universal Pictures, January 2020);
- *Birds of Prey: The IMAX Experience* (Warner Bros. Pictures, February 2020);
- *The Invisible Man: The IMAX Experience* (Universal Pictures, February 2020);
- *Bloodshot: The IMAX Experience* (Sony Pictures, February 2020/Domestic March 2020);
- *Onward: The IMAX Experience* (Walt Disney Studios, March 2020);
- *I Still Believe: The IMAX Experience* (Lionsgate, March 2020);
- *A Quiet Place: Part II: The IMAX Experience* (Paramount Pictures, March 2020);
- *Mulan: The IMAX Experience* (Walt Disney Studios, March 2020);
- *Beastie Boys Story: The IMAX Experience* (Apple, April 2020, select global markets);
- *No Time to Die: The IMAX Experience* (United Artists Releasing (domestic) and Universal Pictures (international), April 2020) filmed with IMAX cameras;
- *Black Widow: The IMAX Experience* (Walt Disney Studios, May 2020);
- *Fast & Furious 9: The IMAX Experience* (Universal Pictures, May 2020);
- *Wonder Woman 1984: The IMAX Experience* (Warner Bros. Pictures, June 2020) filmed with IMAX cameras;
- *Top Gun: Maverick: The IMAX Experience* (Paramount Pictures, June 2020) filmed with IMAX cameras;
- *Tenet: The IMAX Experience* (Warner Bros. Pictures, July 2020) filmed with IMAX cameras;
- *Detective Chinatown 3: The IMAX Experience* (Wanda Studios, TBD 2020, China) filmed with IMAX cameras;
- *The Rescue: The IMAX Experience* (Maoyan, TBD 2020, China);
- *Vanguard: The IMAX Experience* (Tencent, TBD 2020, China); and
- *Leap: The IMAX Experience* (Lian Ray Pictures, TBD 2020, China).

In addition, the Company will be releasing an IMAX original production, *Asteroid Hunters*, in April 2020.

The Company remains in active negotiations with all of the major Hollywood studios for additional films to fill out its short and long-term film slate for the IMAX theater network in 2020.

As noted above, the Company is also engaged in discussions regarding new technologies and new content in connection with bringing unique events outside of films to the global IMAX theater network.

IMAX Systems

The Company's primary products are its theater systems. The Company's digital projection systems include a projector that offers superior image quality and stability and a digital theater control system; a digital audio system delivering up to 12,000 watts of sound; a screen with a proprietary coating technology, and, if applicable, 3D glasses cleaning equipment. IMAX's digital projection system also operates without the need for analog film prints. As part of the arrangement to sell or lease its theater systems, the Company provides extensive advice on theater planning and design and supervision of installation services. Theater systems are also leased or sold with a license for the use of the globally recognized IMAX brand.

The Company's digital projection system provides a premium and differentiated experience to moviegoers that is consistent with what they have come to expect from the IMAX brand, while providing for the compelling economics and flexibility that digital technology affords.

The terms of each arrangement vary according to the configuration of the theater system provided, the cinema market and the film distribution market relevant to the geographic location of the customer.

Revenue from theater business arrangements is recognized at a different time from when cash is collected. See "Critical Accounting Policies and Estimates" in Item 7 and note 20 in Item 8 of this 2019 Form 10-K for further discussion on the Company's revenue recognition policies.

IMAX Theater Backlog and Network

The Company's sales backlog is as follows:

	December 31, 2019		December 31, 2018	
	Number of Systems	Dollar Value (in thousands)	Number of Systems	Dollar Value (in thousands)
Sales and sales-type lease arrangements	178	\$ 218,448	177	\$ 229,027
Joint revenue sharing arrangements				
Hybrid lease arrangements	140	103,296	118	67,176
Traditional arrangements	213 ⁽¹⁾	6,200 ⁽²⁾	269 ⁽³⁾	8,100 ⁽²⁾
	<u>531 ⁽⁴⁾</u>	<u>\$ 327,944</u>	<u>564 ⁽⁵⁾</u>	<u>\$ 304,303</u>

(1) Includes 47 theater systems where the customer has the option to convert from a joint revenue sharing arrangement to a sales arrangement.

(2) Reflects contractual upfront payments. Future contingent payments are not reflected as these are based on negotiated shares of box office results.

(3) Includes 46 theater systems where the customer has the option to convert from a joint revenue sharing arrangement to a sales arrangement.

(4) Includes 153 new laser projection system configurations (144 of which are IMAX with Laser projection system configurations and 9 of which are GT Lasers) and 97 upgrades of existing locations to laser projection system configurations (92 of which are for the IMAX with Laser projection system configurations and 5 of which are GT Lasers).

(5) Includes 83 new laser projection system configurations (73 of which are IMAX with Laser projection system configurations and 10 of which are GT Lasers) and 100 upgrades of existing locations to laser projection system configurations (98 of which are for the IMAX with Laser projection system configurations and 2 of which are GT Lasers).

The number of theater systems in the backlog reflects the minimum number of commitments under signed contracts. The dollar value fluctuates depending on the number of new theater system arrangements signed from year to year, which adds to backlog and the installation and acceptance of theater systems and the settlement of contracts, both of which reduce backlog. Sales backlog typically represents the fixed contracted revenue under signed theater system sale and lease agreements that the Company believes will be recognized as revenue upon installation and acceptance of the associated theater, as well as a variable consideration estimate, however it excludes amounts allocated to maintenance and extended warranty revenues. The value of sales backlog does not include revenue from theaters in which the Company has an equity interest, operating leases or long-term conditional theater commitments. The value of theaters under joint revenue sharing arrangements is excluded from the dollar value of sales backlog, although certain theater systems under joint revenue sharing arrangements provide for contracted upfront payments and therefore carry a backlog value based on those payments. The Company believes that the contractual obligations for theater system installations that are listed in sales backlog are valid and binding commitments.

From time to time, in the normal course of its business, the Company will have customers who are unable to proceed with a theater system installation for a variety of reasons, including the inability to obtain certain consents, approvals or financing. Once the determination is made that the customer will not proceed with installation, the agreement with the customer is terminated or amended. If the agreement is terminated, once the Company and the customer are released from all their future obligations under the agreement, all or a portion of the initial rents or fees that the customer previously made to the Company are recognized as revenue.

The following chart shows the number of the Company's theater systems by configuration, opened theater network and backlog as at December 31:

	2019			2018		
	Theater Network Base	New Backlog	Upgrade Backlog	Theater Network Base	New Backlog	Upgrade Backlog
Flat Screen (2D)	5	—	—	5	—	—
Dome Screen (2D)	34	—	—	37	—	—
IMAX 3D Dome (3D)	1	—	—	2	—	—
IMAX 3D GT (3D)	10	—	—	12	—	—
IMAX 3D SR (3D)	7	—	—	7	—	—
IMAX Digital: Xenon (3D)	1,374	281	—	1,346	381	—
IMAX Digital: GT Laser (3D)	63	9	5	59	10	2
IMAX Digital: IMAX with Laser (3D)	130	144	92	37	73	98
Total	1,624	434	97	1,505	464	100

IMAX theater systems consist of the following configurations:

IMAX Flat Screen and IMAX Dome Theater Systems

IMAX flat screen and IMAX dome systems primarily have been installed in institutions such as museums and science centers. Flat screen IMAX theaters were introduced in 1970, while IMAX dome theaters, which are designed for tilted dome screens, were introduced in 1973. There have been several significant proprietary and patented enhancements to these systems since their introduction. As at December 31, 2019, there were 40 IMAX flat screen and IMAX dome theater systems in the IMAX network, as compared to 44 IMAX flat screen and IMAX dome theater systems as at December 31, 2018. With the introduction of the IMAX digital theater systems, there has been a decrease in the number of IMAX flat screen and IMAX dome theater systems in the network. With the introduction of laser-based digital systems, the Company has been able to create a new Laser Dome solution for its institutional customers. As at December 31, 2019, the Company had installed four IMAX with Laser Domes, which are included in the above numbers.

IMAX 3D GT and IMAX 3D SR Theater Systems

IMAX 3D theaters utilize a flat screen 3D system, which produces realistic 3D images on an IMAX screen. As at December 31, 2019, there were 17 IMAX 3D GT and IMAX 3D SR theater systems in operation compared to 19 IMAX 3D GT and IMAX 3D SR theater systems in operation as at December 31, 2018. The decrease in the number of 3D GT and 3D SR theater systems is largely attributable to the conversion of existing 3D GT and 3D SR theater systems to IMAX digital theater systems.

IMAX Digital: Xenon Theater Systems

The vast majority of the Company's theater system signings have been for the Company's proprietary xenon-based digital systems. The Company believes that its xenon-based digital projection system delivers high quality imagery compared with other xenon systems. Although the Company has introduced a new laser-based digital projection solution, the Company does not believe this will decrease the number of xenon-based digital theater systems installed in the immediate future. As at December 31, 2019, the Company had 1,374 xenon-based digital theater systems in the theater network and has an additional 281 xenon-based digital theater systems in its backlog.

IMAX Digital: Laser Theater Systems

At the end of 2014, the Company introduced its laser-based digital projection system. As a result of continued research and development aimed at creating a solution that is more affordable for its commercial multiplex partners, the Company rolled out IMAX with Laser in 2018, the Company's next-generation laser projection system designed for IMAX theaters in commercial multiplexes. The Company believes IMAX laser-based digital projectors present greater brightness and clarity, higher contrast, a wider color gamut and deeper blacks, consume less power and last longer than other digital projection technologies, and are capable of illuminating the largest screens in the IMAX theater network. As at December 31, 2019, the Company had 63 GT laser-based digital systems as compared to 59 as at December 31, 2018 in the theater network. As at December 31, 2019, the Company had 130 IMAX with Laser systems as compared to 37 as at December 31, 2018 in the theater network.

New Business Initiatives

In recent years, the Company has been exploring several new lines of business and new initiatives to leverage its proprietary innovative technologies, its leadership position in the entertainment technology space and its unique relationship with content creators.

IMAX Enhanced

In September 2018, the Company announced a new home entertainment licensing and certification program called IMAX Enhanced. This initiative was launched along with audio leader DTS (an Xperi subsidiary), capitalizing on the companies' decades of combined expertise in image and sound science. The certification program combines high-end consumer electronics products with IMAX digitally re-mastered 4K high dynamic range (HDR) content and DTS audio technologies to offer consumers immersive sight and sound experiences for the home.

To be accepted into the program, leading consumer electronics manufacturers must design 4K HDR televisions, A/V receivers, sound systems and other home theater equipment to meet a carefully prescribed set of audio and video performance standards, set by a certification committee of IMAX and DTS engineers and some of Hollywood's leading technical specialists.

The program will digitally re-master content to produce more vibrant colors, greater contrast and sharper clarity, and will also deliver an IMAX signature sound experience.

IMAX Enhanced Program currently includes device partners such as Sony Electronics, Denon, Marantz, Pioneer, TCL (among others), studio partners such as Sony Pictures and Paramount Pictures and streaming platforms such as Fandango Now, Rakuten TV and Sony.

Connected Theaters

The Company is currently exploring new technologies and forms of content as a way to deepen consumer engagement and brand loyalty. As such, the Company is currently engaged in discussions regarding new technologies to further connect the IMAX theater network and to facilitate bringing more unique content, including broadcasts of live events, to IMAX theater audiences. The Company believes such additional connectivity can provide more innovative content to the IMAX theater network and in turn permit the Company to engage audiences in new ways.

The Company continues to believe that the IMAX network serves as a valuable platform to launch and distribute original content, especially during shoulder periods.

Original Content

The Company has created two film funds to help finance the production of original content. The Company formed the IMAX China Film Fund (the “China Film Fund”), with its subsidiary IMAX China as General Partner, to help fund Mandarin language commercial films. No investments in Mandarin language films were made in 2019.

In addition, the Company’s IMAX Original Film Fund (the “Original Film Fund”) was established in 2014 to co-finance a portfolio of 10 original large format films. The initial investment in the Film Fund was committed to by a third party in the amount of \$25.0 million, with the possibility of contributing additional funds. The Company has contributed \$9.0 million to the Original Film Fund since 2014, and has reached its maximum contribution. The Company sees the Original Film Fund as a vehicle designed to generate a continuous, steady flow of high-quality documentary content. As at December 31, 2019, the Original Film Fund has invested \$22.3 million toward the development of original films. The related production, financing and distribution agreement includes put and call rights relating to change of control of the rights, title and interest in the co-financed pictures.

The Company continues to believe that the IMAX network serves as a valuable platform to launch and distribute a broad variety of original content, especially during shoulder periods.

Virtual Reality

In 2017, the Company piloted a virtual reality (“VR”) initiative which included several pilot IMAX VR Centers located in a number of multiplexes, as well as a stand-alone venue, each outfitted with proprietary VR pods that permitted interactive, moveable VR experiences.

The Company also established its VR Fund among the Company, its subsidiary IMAX China and other strategic investors to help finance the creation of interactive VR content experiences for use across all VR platforms, including in the pilot IMAX VR Centers.

In December 2018, the Company announced, in connection with its strategic review of its VR pilot initiative, that it had decided to close its remaining VR locations and write-off certain VR content investments. In January 2019, the Company decided to dissolve the VR Fund. For the year ended December 31, 2018, the Company has recognized asset impairment and exit costs related to its VR investments of \$7.2 million. No such charge was recorded in the year ended December 31, 2019. For additional information refer to note 26 in Item 8 of this 2019 Form 10-K.

Other

The Company is also a distributor of large-format films, primarily for its institutional theater partners. The Company generally distributes films which it produces or for which it has acquired distribution rights from independent producers. The Company receives either a percentage of the theater box office receipts or a fixed amount as a distribution fee.

The ownership rights to such films may be held by the film sponsors, the film investors and/or the Company. As at December 31, 2019, the Company currently has distribution rights with respect to 48 of such films, which cover subjects such as space, wildlife, music, history and natural wonders.

Several more recent large-format films that have been distributed by the Company include: *Superpower Dogs*, which was released in March 2019 and has grossed over \$9.0 million as at the end of 2019; *Pandas*, which was released in April 2018 and has grossed over \$9.4 million as at the end of 2019; *A Beautiful Planet*, which was released in April 2016 and has grossed over \$25.5 million as at the end of 2019; *Island of Lemurs: Madagascar*, which was released in April 2014 and has grossed over \$14.1 million as at the end of 2019; *Journey to the South Pacific*, which was released in 2013 and has grossed \$14.4 million as at the end of 2019. Large-format films have significantly longer exhibition periods than conventional commercial films and many of the films in the large-format library have remained popular for many decades, including the films *SPACE STATION*, *Hubble 3D* and *T-REX: Back to the Cretaceous*.

In addition, the Company also provides film post-production and quality control services for large-format films (whether produced internally or externally), and digital post-production services. The Company derives a small portion of its revenues from other sources including: one owned and operated IMAX theater; a commercial arrangement with one theater resulting in the sharing of profits and losses; the provision of management services to four other theaters; renting its proprietary 2D and 3D large-format film and digital cameras to third-party production companies; and also offering production advice and technical assistance to both documentary and Hollywood filmmakers. In January 2019, the Company closed its owned and operated theater in Minneapolis, Minnesota to better focus on other parts of its business. The Company now has one remaining owned and operated theater in Sacramento, California.

MARKETING AND CUSTOMERS

The Company markets its theater systems through a direct sales force and marketing staff located in offices in Canada, the United States, Greater China, Europe and Asia. In addition, the Company has agreements with consultants, business brokers and real estate professionals to locate potential customers and theater sites for the Company on a commission basis.

The commercial multiplex theater segment of the IMAX theater network is the Company's largest segment, comprising 1,529 IMAX theaters, or 94.2%, of the 1,624 IMAX theaters open or operational as at December 31, 2019. The Company's institutional customers include science and natural history museums, zoos, aquaria and other educational and cultural centers. The Company also sells or leases its theater systems to theme parks, private home theaters, tourist destination sites, fairs and expositions (the Commercial Destination segment). At December 31, 2019, approximately 71.9% of all opened IMAX theaters were in locations outside of the United States and Canada.

The following table outlines the breakdown of the theater network by type and geographic location as at December 31:

	2019 Theater Network Base				2018 Theater Network Base			
	Commercial Multiplex	Commercial Destination	Institutional	Total	Commercial Multiplex	Commercial Destination	Institutional	Total
United States	371	4	33	408	365	4	33	402
Canada	39	2	7	48	39	2	7	48
Greater China ⁽¹⁾	702	—	15	717	624	—	15	639
Western Europe	115	4	10	129	101	4	10	115
Asia (excluding Greater China)	119	2	2	123	112	2	3	117
Russia & the CIS	68	—	—	68	62	—	—	62
Latin America ⁽²⁾	50	1	12	63	47	1	12	60
Rest of the World	65	1	2	68	59	1	2	62
Total	1,529	14	81	1,624	1,409	14	82	1,505

(1) Greater China includes the People's Republic of China, Hong Kong, Taiwan and Macau.

(2) Latin America includes South America, Central America and Mexico.

For information on revenue breakdown by geographic area, see note 21 to the accompanying audited consolidated financial statements in Item 8 of this 2019 Form 10-K. The Company's foreign operations are subject to certain risks. See "Risk Factors – The Company conducts business internationally, which exposes it to uncertainties and risks that could negatively affect its operations, sales and future growth prospects" and "Risk Factors – The Company faces risks in connection with the continued expansion of its business in China" in Item 1A. The Company's largest customer, Wanda, as at December 31, 2019, represents 33.9% of the Company's network of theaters, 25.6% of the Company's theater system backlog and 16.5% of revenues.

INDUSTRY OVERVIEW

Competition

The out-of-home entertainment industry is very competitive, and the Company faces a number of competitive challenges. In recent years, for instance, exhibitors and entertainment technology companies have introduced their own branded, large-screen 3D auditoriums or other proprietary theater systems, some of which include laser-based projectors, and in many cases, have marketed those auditoriums or theater systems as having similar quality or attributes as an IMAX theater. The Company believes that all of these alternative formats deliver images and experiences that are inferior to *The IMAX Experience*.

The Company may continue to face competition in the future from companies in the entertainment industry with new technologies and/or substantially greater capital resources to develop and support them. The Company also faces in-home competition from a number of alternative motion picture distribution channels such as home video, pay-per-view, streaming services, video-on-demand, Blu-ray Disc, Internet and syndicated and broadcast television. The Company further competes for the public's leisure time and disposable income with other forms of entertainment, including gaming, sporting events, concerts, live theater, social media and restaurants.

The Company believes that its competitive strengths include the value of the IMAX brand name, the premium IMAX consumer experience, the design, quality and historic reliability rate of IMAX theater systems, the return on investment of an IMAX theater, the number and quality of IMAX films that it distributes, the relationships the Company maintains with prominent Hollywood and international filmmakers, a number of whom desire to film their movies with IMAX cameras, the quality of the sound system components included with the IMAX theater, the availability of Hollywood and international event films to IMAX theaters through IMAX DMR technology, consumer loyalty and the level of the Company's service and maintenance and extended warranty efforts. The Company believes that its laser-based projection system increases further the technological superiority of the consumer experience it delivers. As a result, the Company believes that virtually all of the best performing premium theaters in the world are IMAX theaters.

Exhibitor Consolidation

The Company's primary customers are commercial multiplex exhibitors. The commercial exhibition industry has undergone significant consolidation in recent years, with Dalian Wanda's acquisitions of AMC and Hoyts Group in 2012 and 2015, respectively, and AMC's acquisition of Carmike Cinemas and Odeon & UCI Cinemas Group ("Odeon"), which includes Nordic Cinema Group ("Nordic"), in 2016. In recent years, the industry has continued to consolidate, as evidenced by Cineworld Group's acquisition of Regal Entertainment Group ("Regal"), the Company's second largest customer, and Cineworld's planned acquisition of Cineplex Inc. announced late in 2019.

The Company believes that recent exhibitor consolidation has helped facilitate the growth of the Company's theater network. The Company has historically enjoyed strong relationships with large commercial exhibitor chains, which have greater capital to purchase, lease or otherwise acquire IMAX theater systems. As larger commercial chains such as AMC have purchased smaller chains, those smaller chains have in turn become part of the IMAX theater network. For instance, following AMC's acquisition of Odeon and Nordic, the Company and AMC entered into an agreement for 25 new IMAX theater systems across the Odeon and Nordic theater network. The Company believes that continued consolidation could facilitate further signings and other strategic benefits going forward.

However, exhibitor consolidation has also resulted in individual exhibitor chains constituting a material portion of the Company's revenue and network. Continued industry consolidation (as well as consolidation in the movie studio industry) may present risks to the Company. See "Risk Factors - Recent consolidation among commercial exhibitors and studios reduces the breadth of the Company's customer base, and could result in a narrower market for the Company's products and reduced negotiating leverage. A deterioration in the Company's relationship with key partners could materially, adversely affect the Company's business, financial condition or results of operation. In addition, an adverse economic impact on a significant customer's business operations could have a corresponding material adverse effect on the Company" in Item 1A of this 2019 Form 10-K.

THE IMAX BRAND

IMAX is a world leader in entertainment technology. The Company relies on its brand to communicate its leadership and singular goal of creating entertainment experiences that exceed all expectations. Top filmmakers and studios use the IMAX brand to message that a film will connect with audiences in unique and extraordinary ways. The IMAX brand is a promise to deliver what today's movie audiences crave — a memorable, more emotionally engaging, more thrilling and shareable experience. Consumer research conducted in six countries worldwide by a leading third-party research firm shows that the IMAX brand has near universal awareness, creates a special experience and is one of the most differentiated movie-going brands. On a standardized measure of brand equity, the IMAX brand ranged from two to 10 times more powerful than other entertainment technology brands. The Company believes that its strong brand equity supports consumers' predisposition to choose IMAX over competing brands and to pay a premium for *The IMAX Experience* now and into the future.

RESEARCH AND DEVELOPMENT

The Company believes that it is one of the world's leading entertainment technology companies with significant proprietary expertise in digital and film-based projection and sound system component design, engineering and imaging technology, particularly in laser-based technology. The Company increased its level of research and development in order to develop laser-based projection systems. The Company rolled out its laser-based projection system at the end of 2014, which is capable of illuminating the largest screens in the Company's network. The laser-based projection system provides greater brightness and clarity, higher contrast, a wider color gamut and deeper blacks, while consuming less power and lasting longer than existing digital technology, to ensure that the Company continues to provide the highest quality, premier movie going experience available to consumers. In 2018, the Company rolled-out IMAX with Laser, the Company's next generation laser-based projection system, which is targeted primarily for screens in commercial multiplexes. With most of the laser development completed, the related research and development spending has declined in recent years.

The Company plans to continue research and development activity in the future in other areas considered important to the Company's continued commercial success, including further improving the reliability of its projectors; enhancing its image quality; expanding the applicability of its digital technology in both theater and home entertainment; developing IMAX theater systems' capabilities; and improving its proprietary DMR process. Furthermore, due to the increasing success major Hollywood filmmakers have experienced with IMAX cameras, the Company has identified the development and manufacture of additional IMAX cameras as an important research and development project and is working with other parties on this initiative. The Company expects their research and development efforts to center around innovation projects and DMR enhancements in 2020.

As at December 31, 2019, 52 of the Company's employees were connected with research and development projects, compared to 86 employees as at December 31, 2018.

MANUFACTURING AND SERVICE

Projector Component Manufacturing

The Company assembles the projector of its theater systems at its office in Mississauga, Ontario, Canada (near Toronto). The Company develops and designs all of the key elements of the proprietary technology involved in this component. Fabrication of a majority of parts and sub-assemblies is subcontracted to a group of carefully pre-qualified third-party suppliers. Manufacture and supply contracts are signed for the delivery of the component on an order-by-order basis. The Company believes its significant suppliers will continue to supply quality products in quantities sufficient to satisfy its needs. The Company inspects all parts and sub-assemblies, completes the final assembly and then subjects the projector to comprehensive testing individually and as a system prior to shipment. In 2019, these projectors, including both the Company's xenon and laser-based projection systems, had reliability rates based on scheduled shows of approximately 99.8%.

Sound System Component Manufacturing

The Company develops, designs and assembles the key elements of its theater sound system component. The standard IMAX theater sound system component comprises parts from a variety of sources, with approximately 50% of the materials of each sound system attributable to proprietary parts provided under original equipment manufacturers agreements with outside vendors. These proprietary parts include custom loudspeaker enclosures and horns, specialized amplifiers, and signal processing and control equipment. The Company inspects all parts and sub-assemblies, completes the final assembly and then subjects the sound system to comprehensive testing as a system.

Screen and Other Components

The Company purchases its screen component and glasses cleaning equipment from third parties. The standard screen system component is comprised of a projection screen manufactured to IMAX specifications and a frame to hang the projection screen. The proprietary glasses cleaning machine is a stand-alone unit that is connected to the theater's water and electrical supply to automate the cleaning of 3D glasses.

Maintenance and Extended Warranty Services

The Company also provides ongoing maintenance and extended warranty services to IMAX theater systems. These arrangements are usually for a separate fee, although the Company often includes free service in the initial year of an arrangement. The maintenance and extended warranty arrangements include service, maintenance and replacement parts for theater systems.

To support the IMAX theater network, the Company has personnel stationed in major markets throughout the world who provide periodic and emergency maintenance and extended warranty services on existing theater systems. The Company provides various levels of maintenance and warranty services, which are priced accordingly. Under full service programs, Company personnel typically visit each theater every six months to provide preventative maintenance, cleaning and inspection services and emergency visits to resolve problems and issues with the theater system. Under some arrangements, customers can elect to participate in a service partnership program whereby the Company trains a customer's technician to carry out certain aspects of maintenance. Under such shared maintenance arrangements, the Company participates in certain of the customer's maintenance checks each year, provides a specified number of emergency visits and provides spare parts, as necessary. For both xenon and laser-based digital systems, the Company provides pre-emptive maintenance, remote system monitoring and a network operations center that provides continuous access to product experts.

PATENTS AND TRADEMARKS

The Company's inventions cover various aspects of its proprietary technology and many of these inventions are protected by Letters of Patent or applications filed throughout the world, most significantly in the United States, Canada, China, Belgium, Japan, France, Germany and the United Kingdom. The subject matter covered by these patents, applications and other licenses encompasses theater design and geometry, electronic circuitry and mechanisms employed in projectors and projection equipment (including 3D projection equipment), a method for synchronizing digital data, a method of generating stereoscopic (3D) imaging data from a monoscope (2D) source, a process for digitally re-mastering 35mm films into large-format, a method for increasing the dynamic range and contrast of projectors, a method for visibly seaming or superimposing images from multiple projectors and other inventions relating to digital projectors. The Company has secured the exclusive license rights from The Eastman Kodak Company ("Kodak") to a portfolio of more than 50 patent families covering laser projection technology as well as certain exclusive rights to a broad range of Kodak patents in the field of digital cinema. The Company has been and will continue to be diligent in the protection of its proprietary interests.

As at December 31, 2019, the Company holds 107 patents, has 9 patents pending in the United States and has corresponding patents or filed applications in many countries throughout the world. While the Company considers its patents to be important to the overall conduct of its business, it does not consider any particular patent essential to its operations. Certain of the Company's patents for improvements to the IMAX projection system components expire between 2020 and 2038.

The Company owns or otherwise has rights to trademarks and trade names used in conjunction with the sale of its products, systems and services. The following trademarks are considered significant in terms of the current and contemplated operations of the Company: IMAX®, IMAX® Dome, IMAX® 3D, IMAX® 3D Dome, Experience It In IMAX®, *The IMAX Experience*®, *An IMAX Experience*®, *An IMAX 3D Experience*®, IMAX DMR®, DMR®, IMAX nXos® and Films To The Fullest™. These trademarks are widely protected by registration or common law throughout the world.

EMPLOYEES

The Company had 673 employees as at December 31, 2019, compared to 660 employees as at December 31, 2018. Both employee counts exclude hourly employees at the Company's owned and operated theaters and certain other new business initiatives.

AVAILABLE INFORMATION

The Company makes available, free of charge, its Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, and any amendments to such reports, as soon as reasonably practicable after such filings have been made with the United States Securities and Exchange Commission (the “SEC”). Reports may be obtained free of charge through the SEC’s website at www.sec.gov and through the Company’s website at www.imax.com or by calling the Company’s Investor Relations Department at 212-821-0100. No information included on the Company’s website shall be deemed included or otherwise incorporated into this 2019 Form 10-K, except where expressly indicated.

Item 1A. Risk Factors

If any of the risks described below occurs, the Company’s business, operating results and financial condition could be materially adversely affected.

The risks described below are not the only ones the Company faces. Additional risks not presently known to the Company or that it deems immaterial, may also impair its business or operations.

The Company conducts business internationally, which exposes it to uncertainties and risks that could negatively affect its operations, sales and future growth prospects.

A significant portion of the Company’s revenues and gross box office are generated by customers located outside the United States and Canada. Approximately 66%, 66% and 61% of the Company’s revenues were derived outside of the United States and Canada in 2019, 2018 and 2017, respectively. As at December 31, 2019, approximately 73.6% of IMAX theater systems arrangements in backlog are scheduled to be installed in international markets. The Company’s network spanned 81 different countries as at December 31, 2019, and the Company expects its international operations to continue to account for an increasingly significant portion of its revenues in the future. There are a number of risks associated with operating in international markets that could negatively affect the Company’s operations, sales and future growth prospects. These risks include:

- new restrictions on access to markets, both for theater systems and films;
- unusual or burdensome foreign laws or regulatory requirements or unexpected changes to those laws or requirements, including censorship of content that may restrict what films our theaters can present;
- fluctuations in the value of foreign currency versus the U.S. dollar and potential currency devaluations;
- new tariffs, trade protection measures, import or export licensing requirements, trade embargoes, sanctions and other trade barriers;
- difficulties in obtaining competitively priced key commodities, raw materials and component parts from various international sources that are needed to manufacture quality products on a timely basis;
- imposition of foreign exchange controls in such foreign jurisdictions;
- dependence on foreign distributors and their sales channels;
- reliance on local partners, including in connection with joint revenue sharing arrangements;
- difficulties in staffing and managing foreign operations;
- inability to complete installations of or collect full payment on installations of theater systems;
- local business practices that can present challenges to compliance with applicable anti-corruption and bribery laws;
- difficulties in establishing market-appropriate pricing;
- less accurate and/or less reliable box office reporting;
- adverse changes in monetary and/or tax policies, and/or difficulties in repatriating cash from foreign jurisdictions (including with respect to China, where approval of the State Administration of Foreign Exchange is required);
- poor recognition of intellectual property rights;
- difficulties in enforcing contractual rights;
- inflation;
- requirements to provide performance bonds and letters of credit to international customers to secure system component deliveries;
- harm to the IMAX brand from operating in countries with records of controversial government action, including human rights abuses; and
- political, economic and social instability.

In addition, changes in United States or Canadian foreign policy can present additional risks or uncertainties as the Company continues to expand its international operations. The Company recently entered into an agreement with AMC and the sovereign wealth fund of Saudi Arabia for a 12-theater deal. The Company previously announced a partnership with VOX Cinemas to open at least four theaters in Saudi Arabia. Opening and operating theaters in markets that have experienced geopolitical or sociopolitical unrest or controversy, including through partnerships with local entities, exposes the Company to the risks listed above as well as additional risks of operating in a volatile region. Such risks may negatively impact our business operations in such regions and may also harm our brand. Moreover, a deterioration of the diplomatic relations between the United States or Canada and a given country may impede our ability to operate theaters in such countries and have a negative impact on our financial condition and future growth prospects.

The Company faces risks in connection with the continued expansion of its business in China.

At present, Greater China is the Company's largest market, by revenue. In recent years, the Company's Greater China operations have accounted for an increasingly significant portion of its overall revenues, with nearly 31% of overall revenues generated from the Company's China operations in 2019. As at December 31, 2019, the Company had 717 theaters operating in Greater China with an additional 253 theaters in backlog, which represent 47.6% of the Company's current backlog and which are scheduled to be installed in Greater China by 2023. Of the systems currently scheduled to be installed in Greater China, 71.5% are under joint revenue sharing arrangements, which further increase the Company's ongoing exposure to box office performance in this market.

The China market faces a number of risks, including changes in laws and regulations, currency fluctuations, increased competition and changes in economic conditions, including the risk of an economic downturn or recession, trade embargoes, restrictions or other barriers, as well as other conditions that may impact the Company's exhibitor and studio partners, as well as consumer spending. Adverse developments in any of these areas could impact the Company's future revenues and cash flows and could cause the Company to fail to achieve anticipated growth.

Moreover, certain risks and uncertainties of doing business in China are solely within the control of the Chinese government, and Chinese law regulates both the scope of the Company's continued expansion in China and the business conducted by it within China. For instance, the Chinese government regulates both the number and timing or terms of Hollywood films released to the China market. The Company cannot provide assurance that the Chinese government will continue to permit the release of IMAX films in China or that the timing or number of IMAX releases will be favorable to the Company. There are also uncertainties regarding the interpretation and application of laws and regulations and the enforceability of intellectual property and contract rights in China. If the Company were unable to navigate China's regulatory environment, or if the Company were unable to enforce its intellectual property or contract rights in China, the Company's business could be adversely impacted.

The Company's results of operations are expected to be adversely impacted by the recent coronavirus outbreak in China.

In early 2020, in response to the public health risks associated with an outbreak of coronavirus in Wuhan, China, Chinese exhibitors temporarily closed more than 70,000 movie theaters, including all of the approximately 700 IMAX theaters in mainland China. The theaters have been closed since late January 2020, including over the Lunar New Year holiday and have not yet reopened as of the date of this report. Chinese movie studios also postponed the release of multiple films, including those originally scheduled to be released over this holiday, five of which were scheduled to be shown in IMAX theaters. The repercussions of this health crisis in China will have a material adverse impact on the revenues generated by IMAX theater systems in the first quarter of 2020 and could impact other areas of the Company's business in China, including but not limited to the timely installation of theater systems in our backlog in China. Given the dynamic nature of the circumstances, it is difficult to predict whether the impact of the coronavirus outbreak on the Company's financial condition in future reporting periods may also be material as this will depend on future developments, including but not limited to the timing of theaters reopening, if and when delayed films are released, consumer behaviour and any potential construction or installation delays involving our exhibitor partners which are highly uncertain and cannot be accurately forecast.

The success of the IMAX theater network is directly related to the availability and success of IMAX DMR films for which there can be no guarantee.

An important factor affecting the growth and success of the IMAX theater network is the availability and strategic selection of films for IMAX theaters and the box office performance of such films. The Company itself produces only a small number of such films and, as a result, the Company relies principally on films produced by third party filmmakers and studios, including both Hollywood and local language features converted into the Company's large format using the Company's IMAX DMR technology. In 2019, 60 IMAX DMR films were released by studios to the worldwide IMAX theater network. There is no guarantee that filmmakers and studios will continue to release films to the IMAX theater network, or that the films selected for release to the IMAX theater network will be commercially successful. The Company is directly impacted by the box office results for the films released to the IMAX network

through its joint revenue sharing arrangements as well as through the percentage of the box office receipts the Company receives from the studios releasing IMAX DMR films, and the Company's continued ability to secure films, find suitable partners for joint revenue share arrangements and to sell IMAX theater systems also depends on the number and commercial success of films released to its network. The commercial success of films released to IMAX theaters depends on a number of factors outside of the Company's control, including whether the film receives critical acclaim, the timing of its release, the success of the marketing efforts of the studio releasing the film, consumer preferences and trends in cinema attendance. Moreover, films can be subject to delays in production or changes in release schedule, which can negatively impact the number, timing and quality of IMAX DMR and IMAX original films released to the IMAX theater network.

In addition, as the Company's international network has expanded, the Company has signed deals with studios in other countries to convert their films to the Company's large format and release them to IMAX theaters. The Company may be unable to select films which will be successful in international markets or may be unsuccessful in selecting the right mix of Hollywood and local DMR films for a particular country or region, notably Greater China, the Company's largest market. Also, conflicts in international release schedules may make it difficult to release every IMAX film in certain markets.

The Company depends principally on commercial movie exhibitors to purchase or lease IMAX theater systems, to supply box office revenue under joint revenue sharing arrangements and under its sales and sales-type lease agreements and to supply venues in which to exhibit IMAX DMR films. The Company can make no assurances that exhibitors will continue to do any of these things.

The Company is unable to predict the pace at which exhibitors will purchase or lease IMAX theater systems or enter into joint revenue sharing arrangements with the Company, or whether any of the Company's existing exhibitor customers will continue to do any of the foregoing. If exhibitors choose to reduce their levels of expansion, negotiate less favorable economic terms, or decide not to enter into transactions with the Company, the Company's revenues would not increase at an anticipated rate and motion picture studios may be less willing to convert their films into the Company's format for exhibition in commercial IMAX theaters. As a result, the Company's future revenues and cash flows could be adversely affected.

Recent consolidation among commercial exhibitors and studios reduces the breadth of the Company's customer base, and could result in a narrower market for the Company's products and reduced negotiating leverage. A deterioration in the Company's relationship with key partners could materially, adversely affect the Company's business, financial condition or results of operation. In addition, an adverse economic impact on a significant customer's business operations could have a corresponding material adverse effect on the Company.

The Company's primary customers are commercial multiplex exhibitors. The commercial exhibition industry has undergone significant consolidation in recent years, with Dalian Wanda's acquisitions of AMC and Hoyts Group in 2012 and 2015, respectively, and AMC's acquisition of Carmike Cinemas and Odeon & UCI Cinemas Group, which includes Nordic Cinema Group, in 2016. In recent years, the industry has continued to consolidate, as evidenced by Cineworld Group's acquisition of Regal Entertainment Group in 2018 and its planned acquisition of Cineplex Inc. announced late in 2019. Exhibitor concentration has resulted in individual exhibitor chains constituting a material portion of the Company's network and revenue. For instance, Wanda and AMC continue to be the Company's largest exhibitor customer, representing approximately, 16.5%, 17.1% and 16.4% of the Company's total revenues in 2019, 2018 and 2017, respectively. Wanda's current commitment to the Company stands at 359 IMAX theater systems, and Wanda and AMC together represented approximately 33.9% of the commercial network and 25.6% of the Company's backlog as at December 31, 2019. The share of the Company's revenue that is generated by Wanda and AMC is expected to continue to grow as the number of Wanda theater systems currently in backlog are opened. No assurance can be given that significant customers such as Wanda and/or AMC will continue to purchase theater systems and/or enter into joint revenue sharing arrangements with the Company and if so, whether contractual terms will be affected. If the Company does business with either Wanda and/or AMC or other large exhibitor chains less frequently or on less favorable terms than currently, the Company's business, financial condition or results of operations may be adversely affected. In addition, an adverse economic impact on a significant customer's business operations could have a corresponding material adverse effect on the Company.

The Company also receives revenues from studios releasing IMAX DMR films. Hollywood studios have also experienced recent consolidation, as evidenced by the Walt Disney Company's acquisition of certain studio assets from Twenty First Century Fox in 2019. Studio consolidation could result in individual studios comprising a greater percentage of the Company's film slate and overall DMR revenue, and could expose the Company to the same risks described above in connection with exhibitor consolidation.

General political, social and economic conditions can affect the Company's business by reducing both revenue generated from existing IMAX theater systems and the demand for new IMAX theater systems.

The Company's success depends in part on general political, social and economic conditions and the willingness of consumers to purchase tickets to IMAX movies. If movie-going becomes less popular globally, the Company's business could be adversely affected, especially if such a decline occurs in Greater China. In addition, the Company's operations could be adversely affected if consumers' discretionary income falls as a result of an economic downturn. In recent years, the majority of the Company's revenue has been directly derived from the box office revenues of its films. Accordingly, a decline in attendance at commercial IMAX theaters could materially and adversely affect several sources of key revenue streams for the Company.

The Company also depends on the sale and lease of IMAX theater systems to commercial movie exhibitors to generate revenue. Commercial movie exhibitors generate revenues from consumer attendance at their theaters, which depends on the willingness of consumers to visit movie theaters and spend discretionary income at movie theaters. In the event of declining box office and concession revenues, commercial exhibitors may be less willing to invest capital in new IMAX theaters. In addition, a significant portion of theaters in the Company's backlog are expected to be installed in newly built multiplexes. An economic downturn could impact developers' ability to secure financing and complete the buildout of these locations, thereby negatively impacting the Company's ability to grow its theater network.

The Company may experience adverse effects due to exchange rate fluctuations.

A substantial portion of the Company's revenues are denominated in U.S. dollars, while a substantial portion of its expenses are denominated in Canadian dollars. The Company also generates revenues in Chinese Yuan Renminbi, Euros and Japanese Yen. While the Company periodically enters into forward contracts to hedge its exposure to exchange rate fluctuations between the U.S. and the Canadian dollar, the Company may not be successful in reducing its exposure to these fluctuations. The use of derivative contracts is intended to mitigate or reduce transactional level volatility in the results of foreign operations, but does not completely eliminate volatility. Even in jurisdictions in which the Company does not accept local currency or requires minimum payments in U.S. dollars, significant local currency issues may impact the profitability of the Company's arrangements for the Company's customers, which ultimately affect the Company's ability to negotiate cost-effective arrangements and, therefore, the Company's results of operations. In addition, because IMAX films generate box office in 81 different countries, unfavorable exchange rates between applicable local currencies and the U.S. dollar could affect the Company's reported gross box office and revenues, further impacting the Company's results of operations.

The Company may not be able to adequately protect its intellectual property, and competitors could misappropriate its technology or brand, which could weaken its competitive position.

The Company depends on its proprietary knowledge regarding IMAX theater systems and digital and film technology. The Company relies principally upon a combination of copyright, trademark, patent and trade secret laws, restrictions on disclosures and contractual provisions to protect its proprietary and intellectual property rights. These laws and procedures may not be adequate to prevent unauthorized parties from attempting to copy or otherwise obtain the Company's processes and technology or deter others from developing similar processes or technology, which could weaken the Company's competitive position and require the Company to incur costs to secure enforcement of its intellectual property rights. The protection provided to the Company's proprietary technology by the laws of foreign jurisdictions may not protect it as fully as the laws of Canada or the United States. The lack of protection afforded to intellectual property rights in certain international jurisdictions may be increasingly problematic given the extent to which future growth of the Company is anticipated to come from foreign jurisdictions. Finally, some of the underlying technologies of the Company's products and system components are not covered by patents or patent applications.

The Company owns patents issued and patent applications pending, including those covering its digital projector, digital conversion technology and laser illumination technology. The Company's patents are filed in the United States, often with corresponding patents or filed applications in other jurisdictions, such as Canada, China, Belgium, Japan, France, Germany and the United Kingdom. The patent applications pending may not be issued or the patents may not provide the Company with any competitive advantage. The patent applications may also be challenged by third parties. Several of the Company's issued patents for improvements to IMAX projection system components expire between 2020 and 2038. Any claims or litigation initiated by the Company to protect its proprietary technology could be time consuming, costly and divert the attention of its technical and management resources.

The IMAX brand stands for the highest quality and most immersive motion picture entertainment. Protecting the IMAX brand is a critical element in maintaining the Company's relationships with studios and its exhibitor clients. Though the Company relies on a combination of trademark and copyright law as well as its contractual provisions to protect the IMAX brand, those protections may not be adequate to prevent erosion of the brand over time, particularly in foreign jurisdictions. Erosion of the brand could threaten the demand for the Company's products and services and impair its ability to grow future revenue streams.

The Company faces cyber-security and similar risks, which could result in the disclosure, theft or loss of confidential or other proprietary information, including intellectual property, damage to the Company's brand and reputation, legal exposure and financial losses. The Company must also comply with a variety of data privacy regulations and failure to comply with such regulations may affect the Company's financial performance.

The nature of the Company's business involves access to and storage of confidential and proprietary content and other information, including its own intellectual property and the intellectual property of certain movie studios or partners it may work with, as well as certain information regarding the Company's customers, employees, licensees and suppliers. Although the Company maintains robust procedures, internal policies and technological security measures to safeguard such content and information, as well as a cyber-security insurance policy, the Company's information technology systems could be penetrated by internal or external parties intent on extracting information, corrupting information, stealing intellectual property or trade secrets, or disrupting business processes. Information security risks have increased in recent years because of the proliferation of new technologies and the increased sophistication and activities of perpetrators of cyber-attacks. The Company's information technology infrastructure may be vulnerable to such attacks, including through the use of malware, software bugs, computer viruses, ransomware, social engineering and denial of service. It is possible that such attacks could compromise the Company's security measures or the security measures of parties with whom the Company does business, and thereby could result in obtaining the confidential or proprietary information of the Company or its customers, employees, licensees and suppliers. Because the techniques that may be used to circumvent the Company's safeguards change frequently and may be difficult to detect, the Company may be unable to anticipate any new techniques or implement sufficient preventive security measures. The Company seeks to monitor such attempts and incidents and to prevent their recurrence through modifications to the Company's internal procedures and information technology infrastructure, but in some cases preventive action might not be successful. Moreover, the development and maintenance of these security measures may be costly and will require ongoing updates as technologies evolve and techniques to overcome the Company's security measures become more sophisticated. Any such breach or unauthorized access could result in a disruption of the Company's operations, the theft, unauthorized use or publication of the Company's intellectual property, other proprietary information or the personal information of customers, employees, licensees or suppliers, a reduction of the revenues the Company is able to generate from its operations, damage to the Company's brand and reputation, a loss of confidence in the security of the Company's business and products, and significant legal and financial exposure, each of which could potentially have an adverse effect on the Company's business.

In addition, a variety of laws and regulations at the international, national and state level govern the Company's collection, use, protection and processing of personal data. These laws, including the General Data Protection Regulation and the California Consumer Privacy Act, are constantly evolving and may result in increasing regulatory oversight and public scrutiny in the future. The Company's actual or perceived failure to comply with such regulations could result in fines, investigations, enforcement actions, penalties, sanctions, claims for damages by affected individuals, and damage to the Company's reputation, among other negative consequences, any of which could have a material adverse effect on its financial performance.

The introduction of new, competing products and technologies could harm the Company's business.

The out-of-home entertainment industry is very competitive, and the Company faces a number of competitive challenges. According to the National Association of Theater Owners, as at December 31, 2019, there were approximately 44,000 conventional-sized screens in North American multiplexes. The Company faces competition both in the form of technological advances in in-home entertainment as well as those within the theater-going experience. In recent years, for instance, exhibitors and entertainment technology companies have introduced their own branded, large-screen 3D auditoriums or other proprietary theater systems, and in many cases have marketed those auditoriums or theater systems as having similar quality or attributes as an IMAX theater. The Company may continue to face competition in the future from companies in the entertainment industry with new technologies and/or substantially greater capital resources to develop and support them. If the Company is unable to continue to deliver a premium movie-going experience, or if other technologies surpass those of the Company, the Company may be unable to continue to produce theater systems which are premium to, or differentiated from, other theater systems.

As noted above, the Company faces in-home competition from a number of alternative motion picture distribution channels such as home video, pay-per-view, streaming services, video-on-demand, Blu-ray Disc, Internet and syndicated and broadcast television. The Company further competes for the public's leisure time and disposable income with other forms of entertainment, including gaming, sporting events, concerts, live theater, social media and restaurants.

If the Company is unable to continue to produce a differentiated theater experience, consumers may be unwilling to pay the price premiums associated with the cost of IMAX theater tickets and box office performance of IMAX films may decline. Declining box-office performance of IMAX films could materially and adversely harm the Company's business and prospects.

The Company is undertaking new lines of business and these new business initiatives may not be successful.

The Company is undertaking new lines of business. These initiatives represent new areas of growth for the Company and could include the offering of new products and services that may not be accepted by the market. The Company has recently explored initiatives in the fields of original content and in-home entertainment technology, both of which are intensively competitive businesses and which are dependent on consumer demand, over which the Company has no control. The Company is also exploring new technologies to connect the IMAX theater network to facilitate bringing more unique content, including broadcasts of live events, to IMAX theater audiences. If any new business in which the Company invests or attempts to develop does not progress as planned, the Company may be adversely affected by investment expenses that have not led to the anticipated results, by write-downs of its equity investments, by the distraction of management from its core business or by damage to its brand or reputation.

In addition, these initiatives may involve the formation of joint ventures and business alliances. While the Company seeks to employ the optimal structure for each such business alliance, the alliance may require a high level of cooperation with and reliance on the Company's partners and there is a possibility that the Company may have disagreements with its relevant partner with respect to financing, technological management, product development, management strategies or otherwise. Any such disagreement may cause the joint venture or business alliance to be terminated.

The Company's revenues from existing customers are derived in part from financial reporting provided by its customers, which may be inaccurate or incomplete, resulting in lost or delayed revenues.

The Company's revenue under its joint revenue sharing arrangements, a portion of the Company's payments under lease or sales arrangements and its film distribution fees are based upon financial reporting provided by its customers. If such reporting is inaccurate, incomplete or withheld, the Company's ability to receive the appropriate payments in a timely fashion that are due to it may be impaired. The Company's contractual ability to audit IMAX theaters may not rectify payments lost or delayed as a result of customers not fulfilling their contractual obligations with respect to financial reporting.

There is collection risk associated with payments to be received over the terms of the Company's theater system agreements.

The Company is dependent in part on the viability of its exhibitors for collections under long-term leases, sales financing agreements and joint revenue sharing arrangements. Exhibitors or other operators may experience financial difficulties that could cause them to be unable to fulfill their contractual payment obligations to the Company. As a result, the Company's future revenues and cash flows could be adversely affected.

The Company may not convert all of its backlog into revenue and cash flows.

At December 31, 2019, the Company's sales backlog included 531 theater systems, consisting of 178 systems under sales or lease arrangements and 353 theater systems under joint revenue sharing arrangements. The Company lists signed contracts for theater systems for which revenue has not been recognized as sales backlog prior to the time of revenue recognition. The total value of the sales backlog represents all signed theater system sale or lease agreements that are expected to be recognized as revenue in the future and includes initial fees along with the estimated present value of contractual ongoing fees due over the term, and a variable consideration estimate for the theater systems under sales arrangements, but it excludes amounts allocated to maintenance and extended warranty revenues. Notwithstanding the legal obligation to do so, some of the Company's customers with which it has signed contracts may not accept delivery of theater systems that are included in the Company's backlog. An economic downturn may further exacerbate the risk of customers not accepting delivery of theater systems, especially in places such as Greater China that represent a large portion of the Company's backlog. Any reduction in backlog could adversely affect the Company's future revenues and cash flows. In addition, customers with theater system obligations in backlog sometimes request that the Company agree to modify or reduce such obligations, which the Company has agreed to in the past under certain circumstances. Customer-requested delays in the installation of theater systems in backlog remain a recurring and unpredictable part of the Company's business.

The Company's operating results and cash flow can vary substantially from period to period and could increase the volatility of its share price.

The Company's operating results and cash flow can fluctuate substantially from period to period. In particular, fluctuations in theater system installations and gross box office performance of IMAX DMR content can materially affect operating results. Factors that have affected the Company's operating results and cash flow in the past, and are likely to affect its operating results and cash flow in the future, include, among other things:

- the timing of signing and installation of new theater systems (particularly for installations in newly-built multiplexes, which can result in delays that are beyond the Company's control);
- the timing and commercial success of films distributed to the Company's theater network;
- the demand for, and acceptance of, its products and services;
- the recognition of revenue of sales and sales-type leases;
- the classification of leases as sales-type versus operating leases;
- the volume of orders received and that can be filled in the quarter;
- the level of its sales backlog;
- the signing of film distribution agreements;
- the financial performance of IMAX theaters operated by the Company's customers;
- financial difficulties faced by customers, particularly customers in the commercial exhibition industry;
- the magnitude and timing of spending in relation to the Company's research and development efforts and related investments as well as new business initiatives; and
- the number and timing of joint revenue sharing arrangement installations, related capital expenditures and timing of related cash receipts.

Most of the Company's operating expenses are fixed in the short term. The Company may be unable to rapidly adjust its spending to compensate for any unexpected shortfall in sales, joint revenue sharing arrangements revenue or IMAX DMR revenue which would harm operating results for a particular period, although the results of any particular period are not necessarily indicative of the Company's results for any other period.

The Company's theater system revenue can vary significantly from its cash flows under theater system sales or lease agreements.

The Company's theater systems revenue can vary significantly from the associated cash flows. The Company often provides financing to customers for theater systems on a long-term basis through long-term leases or notes receivables. The terms of leases or notes receivable are typically 10 to 12 years. The Company's sale and lease-type agreements typically provide for three major sources of cash flow related to theater systems:

- initial fees, which are paid in installments generally commencing upon the signing of the agreement until installation of the theater systems;
- ongoing fees, which are paid monthly after all theater systems have been installed and are generally equal to the greater of a fixed minimum amount per annum and a percentage of box office receipts; and
- ongoing annual maintenance and extended warranty fees, which are generally payable commencing in the second year of theater operations.

Initial fees generally make up the vast majority of cash received under theater system sales or lease agreements for a theater arrangement.

For sales and sales-type leases, the revenue recorded is generally equal to the sum of initial fees and the present value of any future initial payments, fixed minimum ongoing payments and sales arrangements also include an estimate of future variable consideration due under the agreement. Cash received from initial fees in advance of meeting the revenue recognition criteria for the theater systems is recorded as deferred revenue.

Leases that do not transfer substantially all of the benefits and risks of ownership to the customer are classified as operating leases. For these leases, initial fees and fixed minimum ongoing payments are recognized as revenue on a straight-line basis over the lease term. Contingent payments in excess of fixed minimum ongoing payments are recognized as revenue when reported by theater operators, provided collectability is reasonably assured.

As a result of the above, the revenue set forth in the Company's financial statements does not necessarily correlate with the Company's cash flow or cash position. Revenues include the present value of future contracted cash payments and there is no guarantee that the Company will receive such payments under its lease and sale agreements if its customers default on their payment obligations.

The Company's stock price has historically been volatile and declines in market price, including as a result of a market downturn, may negatively affect its ability to raise capital, issue debt, secure customer business and retain employees.

The Company is listed on the New York Stock Exchange ("NYSE") and its publicly traded shares have in the past experienced, and may continue to experience, significant price and volume fluctuations. This market volatility could reduce the market price of its common stock, regardless of the Company's operating performance. A decline in the capital markets generally, or an adjustment in the market price or trading volumes of the Company's publicly traded securities, may negatively affect its ability to raise capital, issue debt, secure customer business or retain employees. These factors, as well as general economic and geopolitical conditions, may have a material adverse effect on the market price of the Company's publicly traded securities.

The credit agreement governing the Company's senior secured credit facility contains significant restrictions that limit its operating and financial flexibility.

The credit agreement governing the Company's senior secured credit facility contains certain restrictive covenants that, among other things, limit its ability to:

- incur additional indebtedness;
- pay dividends and make distributions;
- repurchase stock;
- make certain investments;
- transfer or sell assets;
- create liens;
- enter into transactions with affiliates;
- issue or sell stock of subsidiaries;
- create dividend or other payment restrictions affecting restricted subsidiaries; and
- merge, consolidate, amalgamate or sell all or substantially all of its assets to another person.

These restrictive covenants impose operating and financial restrictions on the Company that limit the Company's ability to engage in acts that may be in the Company's long-term best interests.

The Company may be subject to impairment losses on its film assets if such assets do not meet management's estimates of total revenues.

The Company amortizes its film assets, including IMAX DMR costs capitalized using the individual film forecast method, whereby the costs of film assets are amortized and participation costs are accrued for each film in the ratio of revenues earned in the current period to management's estimate of total revenues ultimately expected to be received for that title. Management regularly reviews, and revises when necessary, its estimates of ultimate revenues on a title-by-title basis, which may result in a change in the rate of amortization of the film assets and write-downs or impairments of film assets. Results of operations in future years include the amortization of the Company's film assets and may be significantly affected by periodic adjustments in amortization rates.

The Company may be subject to impairment losses on its inventories if they become obsolete.

The Company records write-downs for excess and obsolete inventory based upon current estimates of future events and conditions, including the anticipated installation dates for the current backlog of theater system contracts, technological developments, signings in negotiation and anticipated market acceptance of the Company's current and pending theater systems.

If the Company's goodwill or long-lived assets become impaired, the Company may be required to record a significant charge to earnings.

Under United States Generally Accepted Accounting Principles ("U.S. GAAP"), the Company reviews its long-lived assets for impairment when events or changes in circumstances indicate the carrying value may not be recoverable. Goodwill is required to be qualitatively assessed at least annually and when events or changes in circumstances arise or can be quantitatively tested for impairment. Factors that may be considered a change in circumstances include (but are not limited to) a decline in stock price and market capitalization, declines in future cash flows, and slower growth rates in the Company's industry. The Company may be required to record a significant charge to earnings in its financial statements during the period in which any impairment of its goodwill or long-lived assets is determined.

Changes in accounting and changes in management's estimates may affect the Company's reported earnings and operating income.

U.S. GAAP and accompanying accounting pronouncements, implementation guidelines and interpretations for many aspects of the Company's business, such as revenue recognition, film accounting, accounting for pensions and other postretirement benefits, accounting for income taxes, and treatment of goodwill or long-lived assets, are highly complex and involve many subjective judgments. Changes in these rules, their interpretation, management's estimates, or changes in the Company's products or business could significantly change its reported future earnings and operating income and could add significant volatility to those measures, without a comparable underlying change in cash flow from operations. See "Critical Accounting Policies and Estimates" in Item 7.

Failure to respond adequately or in a timely fashion to changes and advancements in digital technology could negatively affect the Company's business.

There have been a number of advancements in the digital cinema field in recent years. In order to keep pace with these changes and in order to continue to provide an experience which is premium to and differentiated from conventional cinema experiences, the Company has made, and expects to continue to make, significant investments in digital technology in the form of research and development and the acquisition of third party intellectual property and/or proprietary technology. In recent years, the Company has made significant investments in laser technology as part of the development of its next-generation laser-based digital projection system, which it began rolling out to the largest theaters in the IMAX network at the end of 2014. The Company continued research and development throughout 2018 to support the further development and roll-out of IMAX with Laser projection system, which is targeted primarily for screens in commercial multiplexes. The process of developing new technologies is inherently uncertain and subject to certain factors that are outside of the Company's control, including reliance on third party partners and suppliers, and the Company can provide no assurance its investments will result in commercially viable advancements to the Company's existing products or in commercially successful new products, or that any such advancements or products will improve upon existing technology or will be developed within the timeframe expected.

The Company may not realize cost savings or other benefits from any of its restructuring initiatives and the failure to do so may have an adverse impact on its business, financial condition or results of operations.

In connection with the ongoing analysis and evaluation of its business operations, the Company has implemented, and may from time to time implement, initiatives that it believes will position the Company for future success and long-term sustainable growth, including the elimination of certain business ventures, consolidation of properties, staff reductions and the realignment of resources. Although the Company expects its restructuring initiatives to result in cost savings aimed at increasing efficiency, profitability, operating leverage and free cash flow, there can be no assurances that these benefits will be realized to the full extent projected. Some of these initiatives may also result in unintended consequences, such as additional employee attrition, business disruptions and distraction of management. If the Company does not achieve projected savings as a result of these initiatives or incurs higher than expected or unanticipated costs in implementing these initiatives, its business, financial condition or results of operations could be adversely impacted.

The Company relies on its key personnel, and the loss of one or more of those personnel could harm its ability to carry out its business strategy.

The Company's operations and prospects depend in large part on the performance and continued service of its senior management team. The Company may not find qualified replacements for any of these individuals if their services are no longer available. The loss of the services of one or more members of the Company's senior management team could adversely affect its ability to effectively pursue its business strategy.

Because the Company is incorporated in Canada, it may be difficult for plaintiffs to enforce against the Company liabilities based solely upon U.S. federal securities laws.

The Company is incorporated under the federal laws of Canada, some of its directors and officers are residents of Canada and a substantial portion of its assets and the assets of such directors and officers are located outside the United States. As a result, it may be difficult for U.S. plaintiffs to effect service within the United States upon those directors or officers who are not residents of the United States, or to realize against them or the Company in the United States upon judgments of courts of the United States predicated solely upon the civil liability under the U.S. federal securities laws. In addition, it may be difficult for plaintiffs to bring an original action outside of the United States against the Company to enforce liabilities based solely on U.S. federal securities laws.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

The Company's principal executive offices are located in Mississauga, Ontario, Canada, New York, New York, and Playa Vista, California. The Company's principal facilities are as follows:

	Operation	Own/Lease	Expiration
Mississauga, Ontario ⁽¹⁾	Headquarters, Administrative, Assembly and Research and Development	Own	N/A
Playa Vista, California	Sales, Marketing, Film Production and Post-Production	Own	N/A
New York, New York	Executive	Lease	2029
Tokyo, Japan	Sales, Marketing and Maintenance	Lease	2021
Shanghai, China	Sales, Marketing, Maintenance and Administrative	Lease	2022
Dublin, Ireland	Sales, Marketing, Administrative and Research and Development	Lease	2026
Moscow, Russia	Sales	Lease	2020
London, United Kingdom	Sales	Lease	2020

(1) This facility is subject to a charge in favor of Wells Fargo Bank in connection with a secured term and revolving credit facility (see note 13 to the accompanying audited consolidated financial statements in Item 8 of this 2019 Form 10-K).

The Company believes that its existing facilities and equipment are in good operating condition and are suitable for the conduct of its business.

Item 3. Legal Proceedings

See note 15 to the accompanying audited consolidated financial statements in Item 8 of this 2019 Form 10-K.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters, and Issuer Purchases of Equity Securities

The Company's common shares are listed for trading under the trading symbol "IMAX" on the New York Stock Exchange.

As at January 31, 2020, the Company had approximately 221 registered holders of record of the Company's common shares.

Over the last two years, the Company has not paid, nor does the Company have any current plans to pay, cash dividends on its common shares. The payment of dividends by the Company is subject to certain restrictions under the terms of the Company's indebtedness (see note 13 to the accompanying audited consolidated financial statements in Item 8 and "Liquidity and Capital Resources" in Item 7 of this 2019 Form 10-K). The payment of any future dividends will be determined by the Board of Directors in light of conditions then existing, including the Company's financial condition and requirements, future prospects, restrictions in financing agreements, business conditions and other factors deemed relevant by the Board of Directors.

In 2020, the Company expanded its stock-based compensation program to include the issuance of performance share units ("PSUs"). Performance share units vest only if certain profitability and market targets are achieved. The amount of compensation expense recognized for such performance-based share awards is dependent upon an assessment of the likelihood of achieving these defined future profitability or market targets. These assessments could result in a change to the number of PSUs that will ultimately vest as compared to the units granted.

Equity Compensation Plans

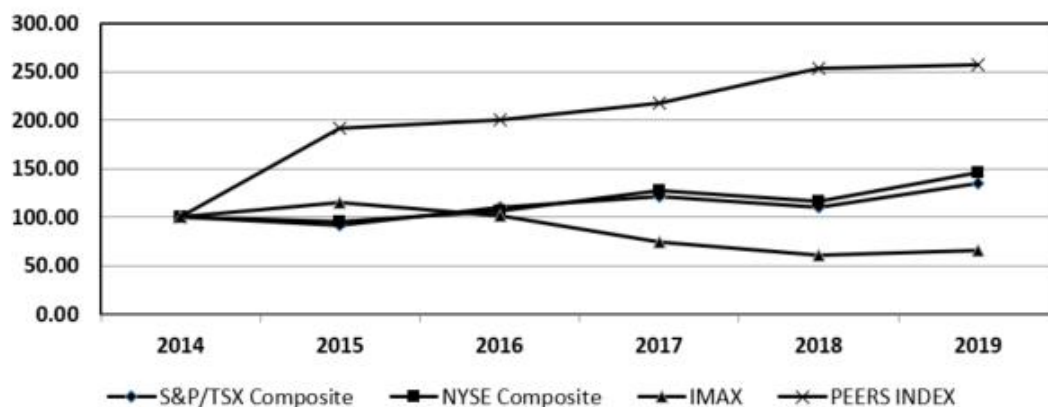
The following table sets forth information regarding the Company's Equity Compensation Plan as at December 31, 2019:

<u>Plan Category</u>	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights (a)	Weighted Average Exercise Price of Outstanding Options, Warrants and Rights (b)	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a)) (c)
Equity compensation plans approved by security holders	6,797,556	\$ 22.62	2,147,443
Equity compensation plans not approved by security holders	nil	nil	nil
Total	6,797,556	\$ 22.62	2,147,443

Performance Graph

The following graph compares the total cumulative shareholder return for \$100 invested on December 31, 2014 (assuming that all dividends were reinvested) in common shares of the Company against the cumulative total return of the NYSE Composite Index, the S&P/TSX Composite Index and the IMAX Peer Group to the end of the most recently completed fiscal year. The IMAX Peer Group consists of Ambarella, Inc., Avid Technologies, Inc., Cinemark Holdings, Inc., Cineplex Inc., Dolby Laboratories, Inc., Glu Mobile Inc., Harmonic Inc., Lions Gate Entertainment Corp., The Marcus Corporation, TiVo Corporation, World Wrestling Entertainment, Inc., and Zynga Inc.

CUMULATIVE VALUE OF \$100 INVESTMENT



	<u>31-Dec-14</u>	<u>31-Dec-15</u>	<u>31-Dec-16</u>	<u>31-Dec-17</u>	<u>31-Dec-18</u>	<u>31-Dec-19</u>
IMAX	100.00	115.02	101.62	74.92	60.87	66.12
NYSE Composite	100.00	95.91	107.36	127.46	116.06	145.66
S&P/TSX Composite	100.00	91.68	111.01	121.11	110.34	135.59
PEERS INDEX	100.00	191.37	200.93	217.36	253.37	257.70

Issuer Purchases of Equity Securities

In 2017, the Company's Board of Directors approved a new \$200.0 million share repurchase program for shares of the Company's common stock. The share repurchase program expires on June 30, 2020. The repurchases may be made either in the open market or through private transactions, subject to market conditions, applicable legal requirements and other relevant factors. The Company has no obligation to repurchase shares and the share repurchase program may be suspended or discontinued by the Company at any time. In 2019, the Company repurchased 134,384 common shares at an average price of \$19.76 per share, excluding commissions. As at December 31, 2019, the Company has \$125.9 million available under its approved repurchase program.

The Company's common stock repurchase program activity for the three months ended December 31, 2019 was as follows:

	Total number of shares purchased	Average price paid per share	Total number of shares purchased as part of publicly announced program	Maximum value of shares that may yet be purchased under the program
October 1 through October 31, 2019	—	\$ —	—	\$ 125,935,013
November 1 through November 30, 2019	—	—	—	125,935,013
December 1 through December 31, 2019	—	—	—	125,935,013
Total	—	\$ —	—	—

In 2018, IMAX China announced that its shareholders granted its Board of Directors a general mandate authorizing the Board, subject to applicable laws, to buy back shares of IMAX China in an amount not to exceed 10% of the total number of issued shares of IMAX China as at May 3, 2018 (35,818,112 shares). The share repurchase program expired on June 6, 2019. In 2019, IMAX China announced that its shareholders granted its Board of Directors a general mandate authorizing the Board, subject to applicable laws, to repurchase shares of IMAX China in an amount not to exceed 10% of the total number of issued shares of IMAX China as at June 6, 2019 (35,605,560 shares). The share repurchase program expires on the date of the 2020 annual general meeting of IMAX China. The repurchases may be made in the open market or through other means permitted by applicable laws. IMAX China has no obligation to repurchase its shares and the share repurchase program may be suspended or discontinued by IMAX China at any time. In 2019, IMAX China repurchased 8,051,500 common shares at an average price of HKD \$18.63 per share (U.S. \$2.38).

The total number of shares purchased during the twelve months ended December 31, 2019, under both the Company and IMAX China's repurchase plans, does not include any shares received in the administration of employee share-based compensation plans.

CERTAIN INCOME TAX CONSIDERATIONS

United States Federal Income Tax Considerations

The following discussion is a general summary of the material U.S. federal income tax consequences of the ownership and disposition of the common shares by a holder of common shares that is an individual resident of the United States or a United States corporation (a "U.S. Holder"). This discussion does not discuss all aspects of U.S. federal income taxation that may be relevant to investors subject to special treatment under U.S. federal income tax law (including, for example, owners of 10.0% or more of the voting shares of the Company).

Distributions on Common Shares

In general, distributions (without reduction for Canadian withholding taxes) paid by the Company with respect to the common shares will be taxed to a U.S. Holder as dividend income to the extent that such distributions do not exceed the current and accumulated earnings and profits of the Company (as determined for U.S. federal income tax purposes). Subject to certain limitations, under current law dividends paid to non-corporate U.S. Holders may be eligible for a reduced rate of taxation as long as the Company is considered to be a "qualified foreign corporation". A qualified foreign corporation includes a foreign corporation that is eligible for the benefits of an income tax treaty with the United States or a foreign corporation the stock of which is regularly tradable on an established securities market in the United States. The amount of a distribution that exceeds the current and accumulated earnings and profits of the Company will be treated first as a non-taxable return of capital to the extent of the U.S. Holder's tax basis in the common shares and thereafter as taxable capital gain. Corporate holders generally will not be allowed a deduction for dividends received in respect of distributions on common shares. Subject to the limitations set forth in the U.S. Internal Revenue Code of 1986, as amended, as modified by the U.S.-Canada Income Tax Treaty, U.S. Holders may elect to claim a foreign tax credit against their U.S. federal income tax liability for Canadian income tax withheld from dividends. Alternatively, U.S. Holders may claim a deduction for such amounts of Canadian tax withheld.

Disposition of Common Shares

Upon the sale or other disposition of common shares, a U.S. Holder generally will recognize capital gain or loss equal to the difference between the amount realized on the sale or other disposition and such holder's tax basis in the common shares. Gain or loss upon the sale or other disposition of the common shares will be long-term if, at the time of the sale or other disposition, the common shares have been held for more than one year. Long-term capital gains of non-corporate U.S. Holders may be eligible for a reduced rate of taxation. The deduction of capital losses is subject to limitations for U.S. federal income tax purposes.

Canadian Federal Income Tax Considerations

This summary is applicable to a holder or prospective purchaser of common shares who, for the purposes of the *Income Tax Act* (Canada) and any applicable treaty and at all relevant times, is not (and is not deemed to be) resident in Canada, does not (and is not deemed to) use or hold the common shares in, or in the course of, carrying on a business in Canada, and is not an insurer that carries on an insurance business in Canada and elsewhere.

This summary is based on the current provisions of the *Income Tax Act* (Canada), the regulations thereunder, all specific proposals to amend such Act and regulations publicly announced by or on behalf of the Minister of Finance (Canada) prior to the date hereof and the Company's understanding of the administrative policies and assessing practices published in writing by the Canada Revenue Agency prior to the date hereof. This summary does not otherwise take into account any change in law or administrative policy or assessing practice, whether by judicial, governmental, legislative or administrative decision or action, nor does it take into account other federal or provincial, territorial or foreign tax consequences, which may vary from the Canadian federal income tax considerations described herein.

Dividends on Common Shares

Canadian withholding tax at a rate of 25.0% (subject to reduction under the provisions of any applicable tax treaty) will be payable on dividends (or amounts paid or credited on account or in lieu of payment of, or in satisfaction of, dividends) paid or credited to a holder of common shares. Under the Canada-U.S. Income Tax Convention (1980), as amended (the "Canada - U.S. Income Tax Treaty") the withholding tax rate is generally reduced to 15.0% for a holder entitled to the benefits of the Canada - U.S. Income Tax Treaty who is the beneficial owner of the dividends (or 5.0% if the holder is a company that owns at least 10.0% of the common shares).

Capital Gains and Losses

Subject to the provisions of any relevant tax treaty, capital gains realized by a holder on the disposition or deemed disposition of common shares held as capital property will not be subject to Canadian tax unless the common shares are taxable Canadian property (as defined in the *Income Tax Act* (Canada)), in which case the capital gains will be subject to Canadian tax at rates which will approximate those payable by a Canadian resident. Common shares generally will not be taxable Canadian property to a holder provided that, at the time of the disposition or deemed disposition, the common shares are listed on a designated stock exchange (which currently includes the NYSE) unless at any time within the 60 month period immediately preceding such time (a) any combination of (i) such holder, (ii) persons with whom such holder did not deal at arm's length or (iii) a partnership in which such holder or any such persons holds a membership interest either directly or indirectly through one or more partnerships, owned 25.0% or more of the issued shares of any class or series of shares of the Company and (b) more than 50% of the fair market value of the common shares was derived directly or indirectly from one or any combination of (i) real or immovable property situated in Canada, (ii) Canadian resource properties, (iii) timber resource properties, and (iv) options in respect of, or interests in, or for civil law rights in, property described in any of paragraphs (i) to (iii), whether or not the property exists. In certain circumstances set out in the *Income Tax Act* (Canada), the common shares may be deemed to be taxable Canadian property. Under the Canada-U.S. Income Tax Treaty, a holder entitled to the benefits of the Canada - U.S. Income Tax Treaty and to whom the common shares are taxable Canadian property will not be subject to Canadian tax on the disposition or deemed disposition of the common shares unless at the time of disposition or deemed disposition, the value of the common shares is derived principally from real property situated in Canada.

Item 6. Selected Financial Data

The selected financial data set forth below is derived from the consolidated financial statements of the Company which has been prepared in accordance with U.S. GAAP. All financial information referred to herein is expressed in U.S. dollars unless otherwise noted.

(In thousands of U.S. dollars, except per share amounts)	Years Ended December 31,				
	2019	2018	2017	2016	2015
Statements of Operations Data:					
Revenue	\$ 395,664	\$ 374,401	\$ 380,767	\$ 377,334	\$ 373,805
Costs and expenses applicable to revenues	181,492	166,472	195,521	174,656	154,517
Gross margin	\$ 214,172	\$ 207,929	\$ 185,246	\$ 202,678	\$ 219,288
Net income	\$ 58,571	\$ 33,595	\$ 12,518	\$ 39,320	\$ 64,624
Net income attributable to common shareholders	\$ 46,866	\$ 22,844	\$ 2,344	\$ 28,788	\$ 55,844
Net income per share attributable to common shareholders					
Net income per share – basic & diluted	\$ 0.76	\$ 0.36	\$ 0.04	\$ 0.43	\$ 0.79

(in thousands of U.S. dollars)	As at December 31,				
	2019 (1)	2018 (2)	2017 (3)	2016	2015
Balance Sheet Data					
Cash and cash equivalents	\$ 109,484	\$ 141,590	\$ 158,725	\$ 204,759	\$ 317,449
Total assets	\$ 889,069	\$ 873,600	\$ 866,612	\$ 857,334	\$ 930,629
Total bank indebtedness	\$ 18,229	\$ 37,753	\$ 25,357	\$ 27,316	\$ 29,276
Total shareholders' equity	\$ 637,187	\$ 592,918	\$ 602,257	\$ 621,574	\$ 673,850

- (1) On January 1, 2019, the Company adopted ASC Topic 842 “Leases”. The standard was issued to help investors and other financial statements users better understand the amount, timing and uncertainty of cash flows arising from leases. The impact from the adoption was reflected in the Company’s consolidated financial statements on a modified retrospective basis resulting in an increase to Property, plant and equipment of \$17.5 million, a decrease to Prepaid expenses of \$0.1 million and an increase to Accrued and other liabilities of \$17.4 million.
- (2) On January 1, 2018, the Company adopted ASU 2014-09, “Revenue from Contracts with Customers (Topic 606)”. The standard outlines a five-step model whereby revenue is recognized as performance obligations within a contract are satisfied. The standard also requires new, expanded disclosures regarding revenue recognition. The impact from the adoption was reflected in the Company’s consolidated financial statements on a modified retrospective basis resulting in an increase to opening retained earnings of \$27.2 million, net of tax, as at January 1, 2018, with the impact primarily related to revenue from its theater system business.
- (3) On January 1, 2017, the Company adopted ASU No. 2016-16, “Income Taxes (Topic 740)”. The purpose of ASU 2016-16 is to eliminate the exception for an intra-entity transfer of an asset other than inventory. The amendments require the recognition of the income tax consequences of an intra-entity transfer of an asset, other than inventory, when the transfer occurs. The Company elected to early adopt ASU 2016-16 during the first quarter of 2017. The impact from the adoption was reflected in the Company’s consolidated financial statements on a modified retrospective basis resulting in an increase to Accumulated deficit of \$8.3 million, a decrease to Other assets of \$14.8 million, an increase to Deferred taxes of \$7.9 million and an increase to Accrued and other liabilities of \$1.4 million.

OVERVIEW

IMAX Corporation, together with its consolidated subsidiaries (the “Company”), is one of the world’s leading entertainment technology companies, specializing in technological innovations powering the presentation of some of today’s most immersive entertainment experiences. Through its proprietary software, theater architecture, patented intellectual property and specialized equipment, IMAX offers a unique end-to-end cinematic solution to create the highest quality, most immersive motion picture and other event experiences for which the IMAX® brand has become known globally. Top filmmakers and studios utilize the cutting-edge visual and sound technology of IMAX to connect with audiences in innovative ways, and, as a result, IMAX’s network is among the most important and successful distribution platforms for major films and other events around the world. The Company refers to all theaters using the IMAX theater system as “IMAX theaters”. There were 1,624 IMAX theater systems (1,529 commercial multiplexes, 14 commercial destinations, 81 institutional) operating in 81 countries and territories as at December 31, 2019. This compares to 1,505 theater systems (1,409 commercial multiplexes, 14 commercial destinations, 82 institutional) operating in 80 countries and territories as at December 31, 2018.

The Company leverages its innovative technology and engineering in all aspects of its core business, which consists of:

- the Digital Re-Mastering (“DMR”) of films and other presentations into the IMAX format by enhancing their image resolution and sound quality for exhibition in the IMAX network in exchange for a certain percentage of contingent box office receipts from studios; and
- the provision of IMAX premium theater systems (“IMAX theater systems”) to exhibitor customers through sales, long-term leases or joint revenue sharing arrangements.

IMAX theater systems are based on proprietary and patented image, audio and other technology developed over the course of the Company’s 52-year history and combine:

- the ability to exhibit content that has undergone IMAX DMR® conversion, which results in higher image and sound fidelity than conventional cinema experiences;
- advanced, high-resolution projectors with specialized equipment and automated theater control systems, which generate significantly more contrast and brightness than conventional theater systems;
- large screens and proprietary theater geometry, which result in a substantially larger field of view so that the screen extends to the edge of a viewer’s peripheral vision and creates more realistic images;
- sound system components, which deliver more expansive sound imagery and pinpointed origination of sound to any specific spot in an IMAX theater;
- specialized theater acoustics, which result in a four-fold reduction in background noise; and
- a license to the globally recognized IMAX brand.

In addition, some IMAX movies are filmed using proprietary IMAX film and IMAX certified digital cameras, which offer filmmakers customized guidance and workflow process to provide further enhanced and differentiated image quality and a film aspect ratio that delivers up to 26% more image onto a movie screen.

Together these components cause audiences in IMAX theaters to feel as if they are a part of the on-screen action, creating a more intense, immersive and exciting experience than in a traditional theater.

As a result of the engineering and scientific achievements that are a hallmark of *The IMAX Experience*®, the Company’s exhibitor customers typically charge a premium for IMAX DMR films over films exhibited in their other auditoriums. The premium pricing, combined with the higher attendance levels associated with IMAX DMR films, generates incremental box office for the Company’s exhibitor customers and for the movie studios releasing their films to the IMAX theater network. The incremental box office generated by IMAX DMR films has helped establish IMAX as a key premium distribution and marketing platform for Hollywood blockbuster films.

As one of the world's leaders in entertainment technology, the Company strives to remain at the forefront of advancements in cinema technology. The Company recently introduced IMAX with Laser, the Company's next-generation laser projection system designed for IMAX theaters in commercial multiplexes, which represents a further evolution of IMAX's proprietary technology. The Company believes that IMAX with Laser delivers increased resolution, sharper and brighter images, deeper contrast as well as the widest range of colors available to filmmakers today. The Company further believes that IMAX with Laser can help facilitate the next major lease renewal and upgrade cycle for the global commercial IMAX network.

To date the Company has signed IMAX with Laser agreements with leading, global exhibitors such as AMC Entertainment Holdings, Inc. ("AMC"), Cineworld Group PLC ("Cineworld"), CGV Holdings Limited ("CGV") and Les Cinémas Pathé Gaumont ("Pathé") (among others) for a total of 139 new theaters, 147 upgrades to existing IMAX theaters, and 52 upgrades to existing backlog arrangements. As at December 31, 2019, the Company's backlog had 144 new IMAX with Laser systems and 92 upgrades to IMAX with Laser systems and has installed 130 IMAX with Laser systems.

The Company is also experimenting with new technologies and new content as a way to deepen consumer engagement and brand loyalty, which includes curating unique, differentiated alternative content to be exhibited in IMAX theaters, particularly during those periods when Hollywood blockbuster film content is not available. In 2019, the Company has piloted filmed events including *Anima*, a one-night only event in June featuring music from Radiohead's Thom Yorke, and *Soundgarden: Live from the Artist's Den: The IMAX Experience*, in July and August, in select IMAX theaters. During the fourth quarter of 2019, IMAX released the Kanye West film *Jesus is King: The IMAX Experience* in select IMAX theaters.

SOURCES OF REVENUE

The primary revenue sources for the Company can be categorized into four main groups: network business, theater business, new business and other.

The network business includes variable revenues that are primarily derived from film studios and exhibitors. Under the Company's DMR arrangements, the Company provides DMR services to studios in exchange for a percentage of contingent box office receipts. Under joint revenue sharing arrangements, the Company provides IMAX theater systems to exhibitors and also receives a percentage of contingent box office receipts.

The theater business includes revenues that are primarily derived from theater exhibitors through either a sale or sales-type lease arrangement for IMAX theater systems. Sales and sales-type lease arrangements typically require fixed upfront and annual minimum payments. The theater business side also includes fixed revenues that are required under the Company's hybrid theater systems from the joint revenue sharing arrangements segment. The arrangements for the sale of projection systems include indexed minimum payment increases over the term of the arrangement, as well as provision for additional payments in excess of the minimum agreed payments in situations where the theater exceeds certain box office thresholds. In addition, theater exhibitors also pay for associated maintenance, extended warranty services and the provision of aftermarket parts of its system components, and these revenues are included in the theater business.

New business includes revenue from content licensing and distribution fees associated with the Company's original content investments, virtual reality initiatives, IMAX Home Entertainment and other business initiatives that are in the development and/or start-up phase.

The Company is currently exploring new technologies and forms of content as a way to deepen consumer engagement and brand loyalty. As such, the Company is currently engaged in discussions regarding new technologies to further connect the IMAX theater network and to facilitate bringing more unique content, including live events, to IMAX theater audiences. The Company believes such additional connectivity can provide more innovative content to the IMAX theater network and in turn permit the Company to engage audiences in new ways.

The Company also derives a small portion of other revenues from the film studios for provision of film production services, operation of its owned and operated theaters and camera rentals.

The Company believes that separating the fixed price revenues from the variable sources of revenue, as well as isolating its non-core new business initiatives, provides greater transparency into the Company's performance.

Digital Re-Mastering (IMAX DMR)

The Company has developed a proprietary technology, known as IMAX DMR, to digitally re-master Hollywood films into IMAX digital cinema package format or 15/70-format film for exhibition in IMAX theaters. IMAX DMR digitally enhances the image resolution of motion picture films for projection on IMAX screens while maintaining or enhancing the visual clarity and sound quality to levels for which *The IMAX Experience* is known. The original soundtrack of a film to be exhibited in the IMAX theater network is re-mastered for the IMAX digital sound systems in connection with the IMAX DMR release. Unlike the soundtracks played in conventional theaters, IMAX re-mastered soundtracks are uncompressed and full fidelity. IMAX sound systems use proprietary loudspeaker systems and proprietary surround sound configurations that ensure every theater seat is in an optimal listening position. In a typical IMAX DMR film arrangement, the Company receives a percentage, which in recent years has averaged approximately 12.5%, of net box office receipts, defined as gross box office receipts less applicable sales taxes, of any commercial films released outside of Greater China in return for converting them to the IMAX DMR format and distributing them through the IMAX theater network. Within Greater China, the Company receives a lower percentage of box office receipts for certain Hollywood films.

IMAX films also benefit from enhancements made by individual filmmakers exclusively for the IMAX release, and filmmakers and studios have sought IMAX-specific enhancements in recent years to generate interest in and excitement for their films. Such enhancements include shooting films with IMAX cameras to increase the audience's immersion in the film and taking advantage of the unique dimensions of the IMAX screen by projecting the film in a larger aspect ratio that delivers up to 26% more image onto a movie screen. *Avengers: Endgame*, the highest-grossing film in history, released in April 2019, was shot entirely using IMAX cameras. Collectively, the Company refers to those enhancements as "IMAX DNA". In addition, in 2019 *Alita: Battle Angel*, *Captain Marvel* and Disney's *The Lion King* were all released with select scenes specifically formatted for IMAX screens.

The Company believes that the growth in international box office remains an important driver of future growth for the Company. During the year ended December 31, 2019, 67.2% of the Company's gross box office from IMAX DMR films was generated in international markets, as compared to 65.0% in the year ended December 31, 2018. To support continued growth in international markets, the Company has sought to bolster its international film strategy, supplementing the Company's film slate of Hollywood DMR titles with appealing local IMAX DMR releases in select markets (particularly in China). During 2019, 18 local language IMAX DMR films including 14 in China and one in each of Japan, South Korea, India and Russia, were released to the IMAX theater network. The blockbuster *Ne Zha: the IMAX experience* was released in China in July 2019 and it is the Company's first Chinese animated local language film title. The Company expects to announce additional local language IMAX DMR films to be released to the IMAX theater network in 2020 and beyond. In March 2019, the Company released an IMAX original production, *Superpower Dogs*.

To date, the Company has announced the following 22 DMR titles to be released in 2020 to the IMAX theater network. The following dates noted for film release are subject to change and may vary by territory.

- *Invasion: The IMAX Experience* (Art Pictures Studio, January 2020, Russia);
- *1917: The IMAX Experience* (Universal Pictures (domestic) and eOne International (international), January 2020) IMAX expanded aspect ratio;
- *Bad Boys For Life: The IMAX Experience* (Sony Pictures, January 2020);
- *Dolittle: The IMAX Experience* (Universal Pictures, January 2020);
- *Birds of Prey: The IMAX Experience* (Warner Bros. Pictures, February 2020);
- *The Invisible Man: The IMAX Experience* (Universal Pictures, February 2020);
- *Bloodshot: The IMAX Experience* (Sony Pictures, February 2020/Domestic March 2020);
- *Onward: The IMAX Experience* (Walt Disney Studios, March 2020);
- *I Still Believe: The IMAX Experience* (Lionsgate, March 2020);
- *A Quiet Place: Part II: The IMAX Experience* (Paramount Pictures, March 2020);
- *Mulan: The IMAX Experience* (Walt Disney Studios, March 2020);
- *Beastie Boys Story: The IMAX Experience* (Apple, April 2020, select global markets);
- *No Time to Die: The IMAX Experience* (United Artists Releasing (domestic) and Universal Pictures (international), April 2020) filmed with IMAX cameras;
- *Black Widow: The IMAX Experience* (Walt Disney Studios, May 2020);
- *Fast & Furious 9: The IMAX Experience* (Universal Pictures, May 2020);

- *Wonder Woman 1984: The IMAX Experience* (Warner Bros. Pictures, June 2020) filmed with IMAX cameras;
- *Top Gun: Maverick: The IMAX Experience* (Paramount Pictures, June 2020) filmed with IMAX cameras;
- *Tenet: The IMAX Experience* (Warner Bros. Pictures, July 2020) filmed with IMAX cameras;
- *Detective Chinatown 3: The IMAX Experience* (Wanda Studios, TBD 2020, China) filmed with IMAX cameras;
- *The Rescue: The IMAX Experience* (Maoyan, TBD 2020, China);
- *Vanguard: The IMAX Experience* (Tencent, TBD 2020, China); and
- *Leap: The IMAX Experience* (Lian Ray Pictures, TBD 2020, China).

In addition, the Company will be releasing an IMAX original production, *Asteroid Hunters*, in April 2020.

The Company remains in active negotiations with all of the major Hollywood studios for additional films to fill out its short and long-term film slate for the IMAX theater network in 2020.

As noted above, the Company is also engaged in discussions regarding new technologies and new content in connection with bringing unique events outside of movies to the global IMAX theater network.

Joint Revenue Sharing Arrangements – Contingent Rent

The Company provides IMAX theater systems to certain of its exhibitor customers under joint revenue sharing arrangements (“JRSA”). The Company has two basic types of joint revenue sharing arrangements: traditional and hybrid.

Under a traditional joint revenue sharing arrangement, the Company provides an IMAX theater system to a customer in return for a portion of the customer’s IMAX box office receipts and, in some cases, concession revenues, rather than requiring the customer to pay a fixed upfront payment or annual minimum payments, as would be required under a sales or sales-type lease arrangement (which is discussed below under “Theater Business”). Payments, which are based on box office receipts, are required throughout the term of the arrangement and are due either monthly or quarterly. Certain maintenance and extended warranty services are provided to the customer for a separate fixed annual fee. The Company retains title to the theater system equipment components, and the equipment is returned to the Company at the conclusion of the arrangement.

Under a hybrid joint revenue sharing arrangement, by contrast, the customer is responsible for making upfront payments prior to the delivery and installation of the IMAX theater system in an amount that is typically half of what the Company would receive from a straight sale transaction. As with a traditional joint revenue sharing arrangement, the customer also pays the Company a portion of the customer’s IMAX box office receipts over the term of the arrangement, although the percentage of box office receipts owing to the Company is typically half that of a traditional joint revenue sharing arrangement.

Hybrid joint revenue sharing arrangements that take the form of leases report their fixed revenues in the Company’s theater business operations, while the contingent box office receipts are included in the Company’s network business operations in the period they are earned. Hybrid joint revenue sharing arrangements that take the form of sales arrangements, which occur when title is transferred to the customer at transfer of control of the system, record their fixed revenues and an estimate of the ongoing contingent box office revenue in the Company’s theater business operations at the point of revenue recognition. Adjustments to the estimated contingent rent flow through theater business operations as they occur over the life of the contracts.

Under the majority of joint revenue sharing arrangements (both traditional and hybrid), the initial non-cancellable term of IMAX theater systems is 10 years or longer, and is renewable by the customer for one to two additional terms of between three to five years. The Company has the right to remove the equipment for non-payment or other defaults by the customer. The contracts are non-cancellable by the customer unless the Company fails to perform its obligations.

The introduction of joint revenue sharing arrangements has been an important factor in the expansion of the Company’s commercial theater network. Joint revenue sharing arrangements allow commercial theater exhibitors to install IMAX theater systems without the significant initial capital investment required in a sale or sales-type lease arrangement. Joint revenue sharing arrangements drive recurring cash flows and earnings for the Company, as customers under joint revenue sharing arrangements pay the Company a portion of their ongoing box office. The Company funds its joint revenue sharing arrangements through cash flows from operations. As at December 31, 2019, the Company had 870 theaters in operation under joint revenue sharing arrangements, a 9.0% increase as compared to the 798 theaters in operations under joint revenue sharing arrangements as at December 31, 2018. The Company also had contracts in backlog for 353 theaters under joint revenue sharing arrangements as at December 31, 2019, including 87 upgrades to existing theater locations and 266 new theater locations.

The revenue earned from customers under the Company’s joint revenue sharing arrangements can vary from quarter to quarter and year to year based on a number of factors including film performance, the mix of theater system configurations, the timing of installation of these theater systems, the nature of the arrangement, the location, size and management of the theater and other factors specific to individual arrangements.

IMAX Systems – Contingent Rent

Certain sales-type lease arrangements include contingent rent in excess of fixed minimum ongoing payments. This contingent rent, which is included in the Company’s network business operations, is recognized after the fixed minimum amount per annum is exceeded as driven by box office performance. Contingent payments in excess of fixed minimum ongoing payments of sales or sales-type lease arrangements are recognized as revenue when reported by theater operators, provided collectability is reasonably assured. In addition, contingent rent includes amounts realized for changes in rent and maintenance payments which are indexed to a local consumer price index.

Theater Business: IMAX Systems, Theater System Maintenance and Fixed Fees from Joint Revenue Sharing Arrangements

IMAX Systems

The Company also provides IMAX theater systems to customers on a sales or long-term lease (sales-type lease) basis, typically with an initial 10-year term. These agreements typically require the payment of initial fees and ongoing fees (which can include a fixed minimum amount per annum and contingent fees in excess of the minimum payments), as well as maintenance and extended warranty fees. The initial fees vary depending on the system configuration and location of the theater. Initial fees are paid to the Company in installments between the time of system signing and the time of system installation, which is when the total of these fees, in addition to the present value of future annual minimum payments, are recognized as revenue. Ongoing fees are paid over the term of the contract, commencing after the theater system has been installed, and is a fixed minimum amount per annum. Finance income is derived over the term of a financed sale or sales-type lease arrangement as the unearned income on that financed sale or sales-type lease is earned. Certain maintenance and extended warranty services are provided to the customer for a separate fixed annual fee.

Sales of IMAX theater systems, which include the proprietary IMAX technology embedded in its projectors, patented software, specialized equipment and automated theater control systems, represent another segment of the Company’s business. Under the Company’s sales agreements, title to the theater system equipment components passes to the customer. In certain instances, however, the Company retains title or a security interest in the equipment until the customer has made all payments required under the agreement. Under the terms of a sales-type lease agreement, title to the theater system equipment components remains with the Company. The Company has the right to remove the equipment for non-payment or other defaults by the customer.

The revenue earned from customers under the Company’s theater system sales or lease agreements varies from quarter to quarter and year to year based on a number of factors, including the number and mix of theater system configurations sold or leased, the timing of installation of the theater systems, the nature of the arrangement and other factors specific to individual contracts.

Under hybrid joint revenue sharing arrangements that take the form of sales arrangements, title and control of the projection system transfer to the customer at the point of revenue recognition, which is the earlier of client acceptance of the theater installation, including projectionist training, and theater opening to the public. Under the new revenue recognition standard, the percentage payment is considered variable consideration that must be estimated and recognized at the time of initial revenue recognition. Using box office projections and the Company’s history with theater and box office experience in different territories, the Company estimates the amount of percentage payment earned over the life of the arrangement, subject to sufficient constraint such that there is not a risk of significant revenue reversal. Under the previous recognition standard, these amounts were recognized as reported by exhibitors (or customers) in future periods. As a result, the Company’s hybrid sales arrangements are grouped with the traditional sales segment since the total consideration received and the revenue recognition timing at transfer of control of the assets now resemble those of the traditional sale arrangements.

Joint Revenue Sharing Arrangements – Fixed Fees

As discussed in joint revenue sharing arrangements above, under a hybrid joint revenue sharing arrangement that takes the form of a lease arrangement, the customer is responsible for making upfront payments prior to the delivery and installation of the IMAX theater system for an amount that is typically half of what the Company would receive from a straight sale transaction. These fixed upfront payments are included in the Company's theater business operations.

Theater System Maintenance

For all IMAX theaters, theater owners or operators are also responsible for paying the Company an annual maintenance and extended warranty fee. Under these arrangements, the Company provides proactive and emergency maintenance services to every theater in its network to ensure that each presentation is up to the highest IMAX quality standard. Annual maintenance fees are paid throughout the duration of the term of the theater agreements.

Other Theater Revenues

Additionally, the Company generates revenues from the sale of after-market parts and 3D glasses.

Revenues from theater business arrangements are recognized at a different time from when cash is collected. See note 2 in Item 8 of this 2019 Form 10-K for further discussion on the Company's revenue recognition policies.

New Business

In recent years, the Company has been exploring several new lines of business and new initiatives outside of its core business to leverage its proprietary, innovative technologies, its leadership position in the entertainment technology space and its unique relationship with content creators.

IMAX Enhanced

In September 2018, the Company announced a new home entertainment licensing and certification program called IMAX Enhanced. This initiative was launched along with audio leader DTS (an Xperi subsidiary), capitalizing on the companies' decades of combined expertise in image and sound science. The certification program combines high-end consumer electronics products with IMAX digitally re-mastered 4K high dynamic range (HDR) content and DTS audio technologies to offer consumers immersive sight and sound experiences for the home.

To be accepted into the program, leading consumer electronics manufacturers must design 4K HDR televisions, A/V receivers, sound systems and other home theater equipment to meet a carefully prescribed set of audio and video performance standards, set by a certification committee of IMAX and DTS engineers and some of Hollywood's leading technical specialists.

The program will digitally re-master content to produce more vibrant colors, greater contrast and sharper clarity, and will also deliver an IMAX signature sound experience.

IMAX Enhanced Program device partners include Sony Electronics, Denon, Marantz, Pioneer, TCL (among others) and studio partners include Sony Pictures and Paramount Pictures.

Connected Theaters

The Company is currently exploring new technologies and forms of content as a way to deepen consumer engagement and brand loyalty. As such, the Company is currently engaged in discussions regarding new technologies to further connect the IMAX theater network and to facilitate bringing more unique content, including live events, to IMAX theater audiences. The Company believes such additional connectivity can provide more innovative content to the IMAX theater network and in turn permit the Company to engage audiences in new ways.

The Company continues to believe that the IMAX network serves as a valuable platform to launch and distribute original content, especially during shoulder periods.

Other

The Company is also a distributor of large-format films, primarily for its institutional theater partners. The Company generally distributes films which it produces or for which it has acquired distribution rights from independent producers. The Company receives either a percentage of the theater box office receipts or a fixed amount as a distribution fee.

In addition, the Company also provides film post-production and quality control services for large-format films (whether produced internally or externally), and digital post-production services. The Company derives a small portion of its revenues from other sources including: one owned and operated IMAX theater; a commercial arrangement with one theater resulting in the sharing of profits and losses; the provision of management services to four other theaters; renting its proprietary 2D and 3D large-format film and digital cameras to third-party production companies; and also offering production advice and technical assistance to both documentary and Hollywood filmmakers. In January 2019, the Company closed its owned and operated theater in Minneapolis, Minnesota to better focus on other parts of its business. The Company now has one remaining owned and operated theater in Sacramento, California.

IMAX Theater Network and Backlog

IMAX Theater Network

The following table outlines the breakdown of the IMAX theater network by type and geographic location as at December 31:

	2019 Theater Network Base				2018 Theater Network Base			
	Commercial Multiplex	Commercial Destination	Institutional	Total	Commercial Multiplex	Commercial Destination	Institutional	Total
United States	371	4	33	408	365	4	33	402
Canada	39	2	7	48	39	2	7	48
Greater China ⁽¹⁾	702	—	15	717	624	—	15	639
Western Europe	115	4	10	129	101	4	10	115
Asia (excluding Greater China)	119	2	2	123	112	2	3	117
Russia & the CIS	68	—	—	68	62	—	—	62
Latin America ⁽²⁾	50	1	12	63	47	1	12	60
Rest of the World	65	1	2	68	59	1	2	62
Total	1,529	14	81	1,624	1,409	14	82	1,505

(1) Greater China includes China, Hong Kong, Taiwan and Macau.

(2) Latin America includes South America, Central America and Mexico.

The Company currently believes that over time its commercial multiplex theater network could grow to approximately 3,318 IMAX theaters worldwide from 1,529 commercial multiplex IMAX theaters operating as at December 31, 2019. The Company believes that the majority of its future growth will come from international markets. As at December 31, 2019, 71.9% of IMAX theater systems in operation were located within international markets (defined as all countries other than the United States and Canada), up from 70.1% as at December 31, 2018. Revenues and gross box office derived from outside the United States and Canada continue to exceed revenues and gross box office from the United States and Canada. Risks associated with the Company's international business are outlined in "Risk Factors – The Company conducts business internationally, which exposes it to uncertainties and risks that could negatively affect its operations, sales and future growth prospects" in Item 1A of Part I of this 2019 Form 10-K.

Greater China is currently the Company's largest market, measured by revenues, with approximately 31% of overall revenues generated from the Company's China operations in 2019. As at December 31, 2019, the Company had 717 theaters operating in Greater China with an additional 253 theaters in backlog that are scheduled to be installed by 2023. The Company's backlog in Greater China represents 47.6% of the Company's current backlog including upgrades. The Company's largest single international partnership is in China with Wanda Film ("Wanda"). Wanda's total, commitment to the Company is for 359 theater systems in Greater China (of which 345 theater systems are under the parties' joint revenue sharing arrangement). See "Risk Factors – The Company faces risks in connection with the continued expansion of its business in China" and "Risk Factors – General political, social and economic conditions can affect the Company's business by reducing both revenue generated from existing IMAX theater systems and the demand for new IMAX theater systems" in Item 1A of Part I of this 2019 Form 10-K.

The following table outlines the breakdown of the Commercial Multiplex theater network by arrangement type and geographic location as at December 31:

2019				
IMAX Commercial Multiplex Theater Network				
	Traditional JRSA	Hybrid JRSA	Sale / Sales-type lease	Total
Domestic Total (United States & Canada)	277	5	128	410
International:				
Greater China	357	106	239	702
Asia (excluding Greater China)	34	1	84	119
Western Europe	46	27	42	115
Russia & the CIS	—	—	68	68
Latin America	2	—	48	50
Rest of the World	15	—	50	65
International Total	454	134	531	1,119
Worldwide Total	731	139	659	1,529

2018				
IMAX Commercial Multiplex Theater Network				
	Traditional JRSA	Hybrid JRSA	Sale / Sales-type lease	Total
Domestic Total (United States & Canada)	273	5	126	404
International:				
Greater China	316	94	214	624
Asia (excluding Greater China)	30	1	81	112
Western Europe	40	24	37	101
Russia & the CIS	—	—	62	62
Latin America	1	—	46	47
Rest of the World	14	—	45	59
International Total	401	119	485	1,005
Worldwide Total	674	124	611	1,409

As at December 31, 2019, 277 (2018 — 273) of the 731 (2018 — 674) theaters under traditional joint revenue sharing arrangements in operation, or 37.9% (2018 — 40.5%) were located in the United States and Canada, with the remaining 454 (2018 — 401) or 62.1% (2018 — 59.5%) of arrangements being located in international markets.

Sales Backlog

The Company's current sales backlog is as follows:

	December 31, 2019		December 31, 2018	
	Number of Systems	Dollar Value (in thousands)	Number of Systems	Dollar Value (in thousands)
Sales and sales-type lease arrangements	178	\$ 218,448	177	\$ 229,027
Joint revenue sharing arrangements				
Hybrid lease arrangements	140	103,296	118	67,176
Traditional arrangements	213 ⁽¹⁾	6,200 ⁽²⁾	269 ⁽³⁾	8,100 ⁽²⁾
	<u>531 ⁽⁴⁾</u>	<u>\$ 327,944</u>	<u>564 ⁽⁵⁾</u>	<u>\$ 304,303</u>

- (1) Includes 47 theater systems where the customer has the option to convert from a joint revenue sharing arrangement to a sales arrangement.
- (2) Reflects contractual upfront payments. Future contingent payments are not reflected as these are based on negotiated shares of box office results.
- (3) Includes 46 theater systems where the customer has the option to convert from a joint revenue sharing arrangement to a sales arrangement.
- (4) Includes 153 new laser projection system configurations (144 of which are IMAX with Laser projection system configurations and 9 of which are GT Lasers) and 97 upgrades of existing locations to laser projection system configurations (92 of which are for the IMAX with Laser projection system configurations and 5 of which are GT Lasers).
- (5) Includes 83 new laser projection system configurations (73 of which are IMAX with Laser projection system configurations and 10 of which are GT Lasers) and 100 upgrades of existing locations to laser projection system configurations (98 of which are for the IMAX with Laser projection system configurations and 2 of which are GT Lasers).

The number of theater systems in the backlog reflects the minimum number of commitments under signed contracts. The dollar value fluctuates depending on the number of new theater system arrangements signed from year to year, which adds to backlog and the installation and acceptance of theater systems and the settlement of contracts, both of which reduce backlog. Sales backlog typically represents the fixed contracted revenue under signed theater system sale and lease agreements that the Company believes will be recognized as revenue upon installation and acceptance of the associated theater, as well as a variable consideration estimate, however it excludes amounts allocated to maintenance and extended warranty revenues. The value of sales backlog does not include revenue from theaters in which the Company has an equity interest, operating leases or long-term conditional theater commitments. The value of theaters under joint revenue sharing arrangements is excluded from the dollar value of sales backlog, although certain theater systems under joint revenue sharing arrangements provide for contracted upfront payments and therefore carry a backlog value based on those payments. The Company believes that the contractual obligations for theater system installations that are listed in sales backlog are valid and binding commitments.

From time to time, in the normal course of its business, the Company will have customers who are unable to proceed with a theater system installation for a variety of reasons, including the inability to obtain certain consents, approvals or financing. Once the determination is made that the customer will not proceed with installation, the agreement with the customer is terminated or amended. If the agreement is terminated, once the Company and the customer are released from all their future obligations under the agreement, all or a portion of the initial rents or fees that the customer previously made to the Company are recognized as revenue.

Certain of the Company's contracts contain options for the customer to elect to upgrade system type during the term or to alter the contract structure (for example, from JRSA to sale model) after signing but before installation. Current backlog information reflects all known elections.

The following table outlines the breakdown of the total backlog by arrangement type and geographic location as at December 31:

	2019			
	IMAX Theater Backlog			
	Traditional JRSA	Hybrid JRSA	Sale / Lease	Total
Domestic Total (United States & Canada)	128	3	9	140
International:				
Greater China	58	124	71	253
Asia (excluding Greater China)	9	—	35	44
Western Europe	11	13	7	31
Russia & the CIS	—	—	12	12
Latin America	3	—	11	14
Rest of the World	4	—	33	37
International Total	85	137	169	391
Worldwide Total	213	140	178	531 ⁽¹⁾
	2018			
	IMAX Theater Backlog			
	Traditional JRSA	Hybrid JRSA	Sale / Lease	Total
Domestic Total (United States & Canada)	145	3	7	155
International:				
Greater China	98	98	76	272
Asia (excluding Greater China)	4	—	38	42
Western Europe	17	17	9	43
Russia & the CIS	—	—	17	17
Latin America	1	—	10	11
Rest of the World	4	—	20	24
International Total	124	115	170	409
Worldwide Total	269	118	177	564 ⁽²⁾

(1) Includes 144 new IMAX with Laser projection system configurations and 92 upgrades of existing locations to IMAX with Laser projection system configurations.

(2) Includes 73 new IMAX with Laser projection system configurations and 98 upgrades of existing locations to IMAX with Laser projection system configurations.

Approximately 73.6% of IMAX theater system arrangements in backlog as at December 31, 2019 are scheduled to be installed in international markets (2018 — 72.5%).

The following reflects the Company's theater system signings and installations:

	Years Ended December 31,	
	2019	2018
Theater System Signings:		
Full new sales and sales-type lease arrangements	49	57
New traditional joint revenue sharing arrangements	7	55
New hybrid joint revenue sharing lease arrangements	48	10
Total new theaters	104	122
Upgrades of IMAX theater systems	39	112 (1)
Total theater signings	143	234
	Years Ended December 31,	
	2019	2018
Theater System Installations:		
Full new sales and sales-type lease arrangements	55 (2)	63
New traditional joint revenue sharing arrangements	54	72
New hybrid joint revenue sharing lease arrangement	20	14
Total new theaters	129	149
Upgrades of IMAX theater systems	57	23
Total theater installations	186	172

(1) Includes 105 theater systems related to existing AMC, Regal and Pathé theaters to be upgraded to IMAX with Laser projection systems on new lease terms ranging from 10 to 12 years.

(2) Includes one IMAX digital theater system that was relocated from a previous location. This installation is incremental to the IMAX theater network but full revenue for the digital theater system was not received.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

The Company prepares its consolidated financial statements in accordance with U.S. GAAP.

The preparation of these consolidated financial statements requires management to make estimates and judgments under its accounting policies that affect the financial results. The precision of these estimates and the likelihood of future changes depend on a number of underlying variables and a range of possible outcomes.

Management bases its estimates on historical experience, future expectations and other assumptions that are believed to be reasonable at the date of the consolidated financial statements. Actual results may differ from these estimates due to uncertainty involved in measuring, at a specific point in time, events which are continuous in nature, and differences may be material. The Company's significant accounting policies are discussed in note 2 to its audited consolidated financial statements in Item 8 of this 2019 Form 10-K. Management considers an accounting policy to be critical if it is important to its financial condition and results, and requires significant judgments and estimates.

The Company considers the following significant estimates, assumptions and judgments to have the most significant effect on its results:

Revenue Recognition

Application of the various accounting principles under U.S. GAAP related to the measurement and recognition of revenue requires the Company to make judgments and estimates. Contract arrangements with nonstandard terms and conditions may require significant contract interpretation to determine the appropriate accounting. The Company believes that revenue recognition is critical for its financial statements because consolidated net income is directly affected by the timing of revenue recognition.

On January 1, 2018, the Company adopted ASC Topic 606, utilizing the modified retrospective transition method with a cumulative catch-up adjustment. The Company applied the new revenue standard only to contracts not completed as at the date of initial application, referred to as open contracts. All system sales and maintenance contracts with the existing network of IMAX theaters and the backlog of sales contracts make up a significant majority of the Company's open contracts at any point in time. DMR arrangements where the film continues to be shown by the Company's exhibitor partners, film distribution arrangements with remaining terms, aftermarket sales orders that have been received but for which control of the assets has not yet transferred to the customer are all also considered open contracts.

The Company's revenues from the sales of projection systems, provision of maintenance services, sale of aftermarket 3D glasses and parts, conversion of film content into the IMAX DMR format, distribution of documentary film content and the provision of post- production services are within the scope of the standard. The Company's joint revenue sharing revenue arrangements, with the exception of those where the title transfers to the customer prior to recognition of the system revenue (hybrid sales arrangements), are not in scope of the standard due to their classification as leases. Similarly, any system revenue transactions classified as sales-type leases are excluded from the provisions of the new standard.

The Company's "System Obligation" consists of a theater system (projector, sound system, screen system and, if applicable, 3D glasses cleaning machine); services associated with the theater system including theater design support, supervision of installation services, and projectionist training; a license to use the IMAX brand to market the theater; 3D glasses; maintenance and extended warranty services; and potentially the licensing of films. The Company evaluates all of the performance obligations in an arrangement to determine which are considered distinct, either individually or in a group, for accounting purposes and which of the deliverables represent separate units of accounting based on the applicable accounting guidance in ASC Topic 842 "Leases"; ASC Topic 460 "Guarantees"; and ASC Topic 606 "Revenue from Contracts with Customers". If separate units of accounting are either required under the relevant accounting standards or determined to be applicable under the Revenue Recognition Topic, the total transaction price received or receivable in the arrangement is allocated based on the applicable guidance in the above noted standards.

The Company estimates the transaction price, including an estimate of future variable consideration, received in exchange for the goods delivered or services rendered. The arrangements for the sale of projection systems include indexed minimum payment increases over the term of the arrangement, as well as provision for additional payments in excess of the minimum agreed payments in situations where the theater exceeds certain box office thresholds. Both of these contract provisions constitute variable consideration that, subject to constraints to ensure reversal of revenues do not occur, require estimation and recognition upon transfer of control of the System Obligation to the customer, when control transfers, which is at the earlier of client acceptance of the installation of the system, including projectionist training, and the theater's opening to the public. As this variable consideration extends through the entire term of the arrangement, which typically last 10 years, the Company applies constraints to its estimates and recognizes the variable consideration on a discounted present value basis at recognition.

In certain joint revenue sharing arrangements, specifically the Company's hybrid sales arrangements, the Company's arrangements call for sufficient upfront revenues to cover the cost of the arrangement, with monthly payments calculated based on the theater's net box office earned. Title and control of the projection system transfer to the customer at the earlier of client acceptance of the theater installation, including projectionist training, and theater opening to the public. The percentage payment is considered variable consideration that must be estimated and recognized at the time of initial revenue recognition. Using box office projections and the Company's history with theater and box office experience in different territories, the Company estimates the amount of percentage payment earned over the life of the arrangement, subject to sufficient constraint such that there is not a risk of significant revenue reversal. The Company includes the hybrid sales arrangements with the traditional sales segment since the transaction price received and the revenue recognition timing at transfer of control of the assets now very closely resemble those of the traditional sale arrangements.

The Company's arrangements include a requirement for the provision of maintenance services over the life of the arrangement, subject to a consumer price index increase on renewal each year. The Company has included the future consideration from the provision of maintenance services in the allocation of the transaction price to separate performance obligations at the inception of the arrangement. As the maintenance services are a stand ready obligation, revenue is recognized evenly over the contract term.

The Company's DMR and Film Distribution revenue streams fall under the variable consideration exemption for sales- or usage-based royalties. While the Company does not hold rights to the intellectual property in the form of the DMR film content, the Company is being reimbursed for the application of its intellectual property in the form of its patented DMR processes used in the creation of new intellectual property in the form of an IMAX DMR version of film. The Company's Film Distribution revenues are strictly from the license of its intellectual property in the form of documentary film content to which the Company holds distribution rights.

The Company's remaining revenue streams do not call for variable consideration and recognition of revenues transfer at the time of provision of service or transfer of control of goods as appropriate.

Constraints on the Recognition of Variable Consideration

The recognition of variable consideration involves a significant amount of judgment. Variable consideration is to be recognized subject to appropriate constraints to avoid a significant reversal of revenue in future periods. The Company will review the variable consideration receivable on an ongoing basis. ASC Topic 606 requires variable consideration to be recognized subject to appropriate constraints to avoid a significant reversal of revenue in future periods. The standard identifies several examples of situations where constraining variable consideration would be appropriate:

- The amount of consideration is highly susceptible to factors outside the entity's influence;
- The uncertainty about the amount of consideration is not expected to be resolved for a long period of time;
- The Company's experience (or other evidence) with similar types of contracts is limited, or that experience has limited predictive value; and
- The entity has a practice of either offering a broad range of price concessions or changing the payment terms and conditions of similar contracts in similar circumstances.

The Company's significant streams of variable consideration relate to indexed increases to its sales arrangements' minimum payments and additional payments in excess of the minimum payments, and to its hybrid sales arrangements' percentage payment of box office over the term of the arrangement.

Increases to payments indexed to a consumer price index are outside of the Company's control, but the movement in the rates are historically well documented and economic trends in inflation are easily accessible. The Company has applied a most likely amount estimate to each of the contracts subject to an indexed increase. These estimated amounts are present valued back to the recognition date, or date of transition as appropriate, using the customer's implied borrowing rate.

Additional payments in excess of minimum payments and payments based on a percentage of box office over the term are driven by the acceptance of film content in future periods that is outside of the Company's direct influence. The Company tracks numerous performance statistics for theater performance in regions worldwide and applies its understanding of theater markets to develop a most likely amount estimate for each theater impacted by these provisions. Performance projections are discounted by reducing projections by a percentage factor for theaters with no or limited historical experience. In cases where direct historical experience can be observed, average experience, eliminating significant outliers, is used. Amounts are then discounted back to the recognition date, or date of transition, as appropriate using a risk-weighted rate.

Arrangements with Multiple Performance Obligations

The Company's revenue arrangements with certain customers may involve performance obligations consisting of the delivery of a theater system (projector, sound system, screen system and, if applicable, 3D glasses cleaning machine); services associated with the theater system including theater design support, supervision of installation, and projectionist training; a license to use the IMAX brand; 3D glasses; maintenance and extended warranty services; and licensing of films. The Company evaluates all of the performance obligations in an arrangement to determine which are considered distinct, either individually or in a group, for accounting purposes and which of the deliverables represent separate units of accounting based on the applicable accounting guidance in ASC Topic 842 "Leases"; ASC Topic 460 "Guarantees"; and ASC Topic 606 "Revenue from Contracts with Customers". If separate units of accounting are either required under the relevant accounting standards or determined to be applicable under the Revenue Recognition Topic, the total consideration received or receivable in the arrangement is allocated based on the applicable guidance in the above noted standards.

Theater Systems

The Company has identified the projection system, sound system, screen system and, if applicable, 3D glasses cleaning machine, theater design support, supervision of installation, projectionist training and the use of the IMAX brand to be, as a group, a distinct performance obligation, and a single unit of accounting (the "System Obligation"). When an arrangement does not include all the performance obligations of a System Obligation, the performance obligations of the System Obligation included in the arrangement are considered by the Company to be a grouped distinct performance obligation and a single unit of accounting. The Company is not responsible for the physical installation of the equipment in the customer's facility; however, the Company supervises the installation by the customer. The customer has the right to use the IMAX brand from the date the Company and the customer enter into an arrangement.

The Company's System Obligation arrangements involve either a lease or a sale of the theater system. The transaction price for the System Obligation, other than for those delivered pursuant to joint revenue sharing arrangements, consist of upfront or initial payments made before and after the final installation of the theater system equipment and ongoing payments throughout the term of the lease or over a period of time, as specified in the arrangement. The ongoing payments are the greater of an annual fixed minimum amount or a certain percentage of the theater box-office. Amounts received in excess of the annual fixed minimum amounts are considered contingent payments. The Company's arrangements are non-cancellable, unless the Company fails to perform its obligations. In the absence of a material default by the Company, there is no right to any remedy for the customer under the Company's arrangements. If a material default by the Company exists, the customer has the right to terminate the arrangement and seek a refund only if the customer provides notice to the Company of a material default and only if the Company does not cure the default within a specified period.

Transaction price is allocated to each separate performance obligation for each good or service based on estimated standalone selling prices. The Company uses observable prices when the Company sells the deliverable separately and is the price actually charged by the Company for that deliverable. Standalone prices are established for the Company's System Obligation, maintenance and extended warranty services and film license arrangements. The Company uses an adjusted market assessment approach for separate performance obligations that do not have standalone selling prices or third-party evidence of estimated standalone selling price. The Company considers multiple factors including the Company's historical pricing practices, product class, market competition and geography.

Film Production and IMAX DMR Services

In certain film arrangements, the Company produces a film financed by third parties whereby the third party retains the copyright and the Company obtains exclusive distribution rights. Under these arrangements, the Company is entitled to receive a fixed fee or to retain as a fee the excess of funding over cost of production (the "production fee"). The third parties receive a portion of the revenues received by the Company from distributing the film, which is charged to costs and expenses applicable to revenues-services. The production fees are deferred and recognized as a reduction in the cost of the film based on the ratio of the Company's distribution revenues recognized in the current period to the ultimate distribution revenues expected from the film. Film exploitation costs, including advertising and marketing are recorded in costs and expenses applicable to revenues-services as incurred.

Revenues from digitally re-mastering ("IMAX DMR") films where third parties own or hold the copyrights and the rights to distribute the film are derived in the form of processing fees for the application of the Company's patented processes calculated as a percentage of box-office receipts generated from the re-mastered films. Since these fees are subject to the sales-based royalty exception, they are recognized as Services revenues when box office receipts are reported by the third party that owns or holds the related film rights.

Losses on film production and IMAX DMR services are recognized as costs and expenses applicable to revenues-services in the period when it is determined that the Company's estimate of total revenues to be realized by the Company will not exceed estimated total production costs to be expended on the film production and the cost of IMAX DMR services.

Allowances for Accounts Receivable and Financing Receivables

Allowances for doubtful accounts receivable are based on the Company's assessment of the collectability of specific customer balances, which is based upon a review of the customer's credit worthiness, past collection history and the underlying asset value of the equipment, where applicable. Interest on overdue accounts receivable is recognized as income as the amounts are collected.

The Company monitors the performance of the theaters to which it has leased or sold theater systems which are subject to ongoing payments. When facts and circumstances indicate that there is a potential impairment in the accounts receivable, net investment in lease or a financing receivable, the Company will evaluate the potential outcome of either a renegotiation involving changes in the terms of the receivable or defaults on the existing lease or financed sale agreements. The Company will record a provision if it is considered probable that the Company will be unable to collect all amounts due under the contractual terms of the arrangement or a renegotiated lease amount will cause a reclassification of the sales-type lease to an operating lease.

These provisions are adjusted when there is a significant change in the amount or timing of the expected future cash flows or when actual cash flows differ from cash flow previously expected. While such credit losses have historically been within the Company's expectations and the provisions established, the Company cannot guarantee that it will continue to experience the same credit loss rates that it has in the past. Changes in the underlying financial condition of its customers could result in a material impact on the Company's consolidated results of operation and financial position.

Inventories

The Company records write-downs for excess and obsolete inventory based upon current estimates of future events and conditions, including the anticipated installation dates for the current backlog of theater system contracts, technological developments, signings in negotiation, growth prospects within the customers' ultimate marketplace and anticipated market acceptance of the Company's current and pending theater systems.

Asset Impairments

The Company performs a qualitative, and when necessary quantitative, impairment test on its goodwill on an annual basis, coincident with the year-end, as well as in quarters where events or changes in circumstances suggest that the carrying amount may not be recoverable.

Goodwill impairment is assessed at the reporting unit level by comparing the unit's carrying value, including goodwill, to the fair value of the unit. The carrying values of each unit are subject to allocations of certain assets and liabilities that the Company has applied in a systematic and rational manner. The fair value of the Company's units is assessed using a discounted cash flow model. The model is constructed using the Company's budget and long-range plan as a base. The Company performs a qualitative assessment of its reporting units and certain select quantitative calculations against its current long range plan to determine whether it is more likely than not (that is, a likelihood of more than 50 percent) that the fair value of a reporting unit is less than its carrying amount (Step 0).

Long-lived asset impairment testing is performed at the lowest level of an asset group at which identifiable cash flows are largely independent. In performing its review for recoverability, the Company estimates the future cash flows expected to result from the use of the asset or asset group and its eventual disposition. If the sum of the expected future cash flows is less than the carrying amount of the asset or asset group, an impairment loss is recognized in the consolidated statement of operations. Measurement of the impairment loss is based on the excess of the carrying amount of the asset or asset group over the fair value calculated using discounted expected future cash flows.

The recoverability of film assets is dependent upon commercial acceptance of the films. If events or circumstances indicate that the recoverable amount of a film asset is less than the unamortized film costs, the film asset is written down to its fair value. The Company determines the fair value of its film assets using a discounted cash flow model.

The Company's estimates of future cash flows involve anticipating future revenue streams, which contain many assumptions that are subject to variability, as well as estimates for future cash outlays, the amounts of which, and the timing of which are both uncertain. Actual results that differ from the Company's budget and long-range plan could result in a significantly different result to an impairment test, which could impact earnings.

The Company's investment in debt securities classified as an available-for-sale investment has unrealized holding gains and losses which is excluded from earnings and reported in other comprehensive income until realized. Realization occurs upon the sale of a portion of or the entire investment. The investment is impaired if the value is not expected to recover based on the length of time and extent to which the market value has been less than cost. Furthermore, when the Company intends to sell a specifically identified beneficial interest, a write-down for other-than-temporary impairment shall be recognized in earnings.

Pension Plan Assumptions

The Company's pension plan obligations and related costs are calculated using actuarial concepts, within the framework of the Compensation – Retirement Benefits Topic of the FASB ASC. A critical assumption to this accounting is the discount rate. The Company evaluates this critical assumption annually or when otherwise required to by accounting standards. Other assumptions include factors such as expected retirement date, mortality rate, rate of compensation increase, and estimates of inflation.

The discount rate enables the Company to state expected future cash payments for benefits as a present value on the measurement date. The guideline for setting this rate is a high-quality long-term corporate bond rate. A lower discount rate increases the present value of benefit obligations and increases pension expense. The Company's discount rate was determined by considering the average of pension yield curves constructed from a large population of high-quality corporate bonds. The resulting discount rate reflects the matching of plan liability cash flows to the yield curves.

The discount rate used to present value the pension plan obligation is a key assumption in the determination of the pension benefit obligation and expense. A 1.0% change in the discount rate used would result in a \$0.6 million reduction or a \$0.7 million increase in the pension benefit obligation with a corresponding benefit or charge recognized in the consolidated statement of operations.

Deferred Tax Asset Valuation

As at December 31, 2019, the Company had net deferred income tax assets of \$23.9 million. The Company's management assesses realization of its deferred tax assets based on all available evidence in order to conclude whether it is more likely than not that the deferred tax assets will be realized. Available evidence considered by the Company includes, but is not limited to, the Company's historical operating results, projected future operating results, reversing temporary differences, contracted sales backlog at December 31, 2019, changing business circumstances, and the ability to realize certain deferred tax assets through loss and tax credit carry-back and carry-forward strategies.

When there is a change in circumstances that causes a change in judgment about the realizability of the deferred tax assets, the Company would adjust the applicable valuation allowance in the period when such change occurs.

Tax Exposures

The Company is subject to ongoing tax exposures, examinations and assessments in various jurisdictions. Accordingly, the Company may incur additional tax expense based upon the outcomes of such matters. In addition, when applicable, the Company adjusts tax expense to reflect the Company's ongoing assessments of such matters which require judgment and can materially increase or decrease its effective rate as well as impact operating results. The Company provides for such exposures in accordance with Income Taxes Topic of the FASB ASC.

Stock-Based Compensation

The Company's stock-based compensation generally includes stock options, restricted share units ("RSUs") and performance share units ("PSUs"). Stock-based compensation is recognized in accordance with the FASB ASC Topic 505, "Equity" and Topic 718, "Compensation-Stock Compensation." The Company measures stock-based compensation cost based on the grant date fair value of the award, which is recognized as an expense in the Consolidated Statement of Operations on a straight-line basis over the requisite service period. Stock-based compensation expense is not adjusted for estimated forfeitures, but is instead adjusted upon the actual forfeiture of the award.

Stock-based compensation expense includes compensation cost for employee stock-based payment awards granted and all modified, repurchased or cancelled employee awards. In addition, compensation expense includes the compensation cost, based on the grant-date fair value calculated for pro forma disclosures under ASC 718-10-55, for the portion of awards for which required service had not been rendered that were outstanding. Compensation expense for these employee awards is recognized using the straight-line single-option method. The Company utilizes the market yield on U.S. treasury securities (also known as nominal rate) over the contractual term of the instrument being issued.

Stock Options

The Company utilizes a lattice-binomial option-pricing model ("Binomial Model") to determine the fair value of stock option awards on the grant date. The fair value determined by the Binomial Model is affected by the Company's stock price as well as assumptions regarding a number of highly complex and subjective variables. These variables include, but are not limited to, the Company's expected stock price volatility over the term of the award, and actual and projected employee stock option exercise behaviors. The Binomial Model also considers the expected exercise multiple which is the multiple of exercise price to grant price. Option-pricing models were developed for use in estimating the value of traded options that have no vesting or hedging restrictions and are fully transferable. Because the Company's employee stock options have certain characteristics that are significantly different from traded options, and because changes in the subjective assumptions can materially affect the estimated value, in management's opinion, the Binomial Model best provides a fair measure of the fair value of the Company's employee stock options. See note 16(c) for the assumptions used to determine the fair value of stock-based payment awards.

As the Company stratifies its employees into homogeneous groups in order to calculate the grant date fair value of options using the Binomial Model, ranges of assumptions used are presented for the expected life of the option. The Company uses historical data to estimate option exercise behavior within the valuation model; various groups of employees that have similar historical exercise behavior are grouped together for valuation purposes. The expected volatility rate is estimated based on a blended volatility method which takes into consideration the Company's historical share price volatility, the Company's implied volatility which is implied by the observed current market prices of the Company's traded options and the Company's peer group volatility. The Company utilizes the Binomial Model to determine expected option life based on such data as vesting periods of awards, historical data that includes past exercise and post-vesting cancellations and stock price history.

The Company's policy is to issue new common shares from treasury or shares purchased in the open market to satisfy stock options which are exercised.

Restricted Share Units

The fair value of RSU awards is equal to the closing price of the Company's common stock on the date of grant. The value of the portion of the award that is ultimately expected to vest is recognized as compensation expense over the requisite service periods in the Company's Consolidated Statements of Operations.

The Company's RSUs have been classified as equity in accordance with Topic 505.

Performance Share Units

The Company grants two types of PSU awards, one which vests based on a combination of employee service and the achievement of certain EBITDA-based targets and one which vests based on a combination of employee service and the achievement of certain stock-price targets. The fair value of the PSUs with EBITDA-based targets is equal to the closing price of the Company's common stock on the date of grant. The fair value of the PSUs with stock-price targets is determined on the grant date using a Monte Carlo simulation, which is a valuation model which takes into account the likelihood of achieving the stock-price targets embedded in the award ("Monte Carlo Model"). The compensation expense attributable to each type of PSU is recognized on a straight-line basis over the requisite service period.

The fair value determined by the Monte Carlo Model is affected by the Company's stock price as well as assumptions regarding a number of highly complex and subjective variables. These variables include, but are not limited to, the Company's expected stock price volatility over the term of the awards, and actual and projected employee stock option exercise behaviors.

The amount and timing of compensation expense recognized for PSUs with EBITDA-based targets is dependent upon management's quarterly assessment of the likelihood and timing of achieving these targets. If, as a result of management's assessment, it is projected that a greater number of PSUs will vest than previously anticipated, a life-to-date adjustment to increase compensation expense is recorded in the period such determination is made. Conversely, if, as a result of management's assessment, it is projected that a lower number of PSUs will vest than previously anticipated, a life-to-date adjustment to decrease compensation expense is recorded in the period such determination is made.

The Company's PSUs have been classified as equity in accordance with Topic 505.

Awards to Non-Employees

Stock-based awards for services provided by non-employees within the scope of ASC Topic 718 are measured at grant date fair value of the equity instruments that the Company is obligated to issue when service has been rendered and any other conditions necessary to earn the right to benefit from the instruments have been satisfied. The grant date is the date which the Company and the non-employees reach a mutual understanding of the key terms and conditions of stock-based awards. When there are performance conditions related to the vesting of the stock-based awards, the Company assesses the probability of vesting at each reporting date and adjusts the compensation costs based on the probability assessment.

Impact of Recently Issued Accounting Pronouncements

Please see note 3 to the audited consolidated financial statements in Item 8 of this 2019 Form 10-K for information regarding the Company's recent changes in accounting policies and recently issued accounting pronouncements impacting the Company.

ASSET IMPAIRMENTS AND OTHER CHARGES

The following table identifies the Company's charges (recoveries) relating to the impairment of assets:

<i>(in thousands of U.S. dollars)</i>	Years Ended December 31,	
	2019	2018
Asset impairments		
Property, plant and equipment	\$ 96	\$ 3,725
Other assets	—	2,565
Prepaid expenses	—	121
Other intangible assets	—	66
Impairment of investments	—	—
Film assets	1,379	—
Other charges:		
Accounts receivable (net of recoveries)	2,354	3,030
Financing receivables	76	100
Inventories	446	250
Property, plant and equipment	2,360	1,762
Other intangible assets	95	151
Other assets	—	—
Total asset impairments and other charges	<u>\$ 6,806</u>	<u>\$ 11,770</u>

Asset Impairments

In 2019, the Company reviewed the carrying value of certain documentary film assets as a result of lower than expected revenue being generated during the period and revised expectations for future revenues based on the latest information available. An impairment of \$1.4 million was recorded based on the carrying value of these documentary films as compared to the related estimated future box office and revenues that would ultimately be generated by these films. No such charge was recorded in the year ended 2018.

In 2018, in connection with the strategic review of the Company's VR initiative, the Company has decided to close its remaining VR locations and as a result record a one-time impairment charge of \$3.7 million in property, plant and equipment, \$2.6 million in other assets which includes a \$2.5 million impairment of the VR content asset, and \$0.1 million in intangible assets. The VR fund is consolidated by the Company and has a third party non-controlling interest. The Company's share of this impairment after non-controlling interest is \$0.8 million. No such charge was recorded in 2019. Additional details of the Company's restructuring activities are discussed in note 26 to its audited consolidated financial statements in Item 8 of this 2019 Form 10-K.

The Company records asset impairment charges for property, plant and equipment after an assessment of the carrying value of certain asset groups in light of their future expected cash flows. During 2019, the Company recorded asset impairment charges of \$0.1 million (2018 — less than \$0.1 million) as the Company recognized that the carrying values for the assets exceeded the expected undiscounted future cash flows.

Other Charges

The Company recorded a net provision of \$2.4 million in 2019 (2018 — \$3.0 million) in accounts receivable. The current year charges include a provision of \$3.2 million based on the Company's ongoing assessment of the collectability of specific customer balances, offset by recoveries of previously provisioned amounts of \$0.8 million.

In 2019, the Company recorded a net provision of \$0.1 million in financing receivables (2018 —\$0.1 million). Provisions of the Company's financing receivables is recorded when the collectability associated with certain financing receivables is uncertain. These provisions are adjusted when there is a significant change in the amount or timing of the expected future cash flows or when actual cash flows differ from cash flows previously expected.

The Company recorded a \$0.4 million provision (2018 —\$0.3 million) in costs and expenses applicable to revenues due to a reduction in the net realizable value of its inventories. These charges primarily resulted from a reduction in the net realizable value of its theater system equipment inventories and certain service part inventories due to normal operational activity.

In 2019, the Company recorded a charge of \$0.2 million (2018 — \$0.8 million) reflecting property, plant and equipment that were no longer in use. In 2019, the Company recorded a charge of \$2.2 million (2018 — \$0.6 million) in cost of sales applicable to Rentals upon the upgrade of xenon-based digital systems under joint revenue sharing arrangements to laser-based digital systems.

In 2019, the Company recorded a charge of \$0.1 million (2018 — \$0.2 million) reflecting other intangible assets that were no longer in use.

NON-GAAP FINANCIAL MEASURES

In this report, the Company presents certain data which are not recognized under U.S. GAAP and are considered “non-GAAP financial measures” under U.S. Securities and Exchange Commission rules. Specifically, the Company presents the following non-GAAP financial measures as supplemental measures of its performance:

- Adjusted net income;
- Adjusted net income per diluted share;
- Adjusted net income attributable to common shareholders;
- Adjusted net income attributable to common shareholders per diluted share; and
- EBITDA and Adjusted EBITDA per Credit Facility.

The Company presents adjusted net income and adjusted net income per diluted share, which excludes stock-based compensation, exit costs, restructuring charges and associated impairments, legal arbitration award, executive transition costs and the related tax impact of these adjustments, because it believes that they are important supplemental measures of the Company’s comparable controllable operating performance. Although stock-based compensation is an important aspect of the Company’s employee and executive compensation packages, it is mostly a non-cash expense and is excluded from certain internal business performance measures, and the Company wants to ensure that its investors fully understand the impact of its stock-based compensation (net of any related tax impact) and other one-time charges on net income.

In addition, the Company presents adjusted net income attributable to common shareholders and adjusted net income attributable to common shareholders per diluted share because it believes that they are important supplemental measures of its comparable financial results. The Company believes by adjusting certain items that impact trends in business performance it helps ensure that its investors fully understand the impact of net income attributable to non-controlling interests, its stock-based compensation, exit costs, restructuring charges and associated impairments and legal arbitration award and executive transition costs (net of any related tax impact) in determining net income attributable to common shareholders.

Management uses these measures for internal reporting and forecasting purposes in order to review operating performance on a comparable basis from period to period. However, these non-GAAP measures may not be comparable to similarly titled amounts reported by other companies. The Company’s non-GAAP measures should be considered in addition to, and not as a substitute for, or superior to, net income and net income attributable to common shareholders and other measures of financial performance reported in accordance with U.S. GAAP.

In addition, management uses “EBITDA”, as such term is defined in the Company’s credit agreement (and which is referred to herein as “Adjusted EBITDA per Credit Facility”, as the credit agreement includes additional adjustments beyond interest, taxes, depreciation and amortization) to evaluate, assess and benchmark the Company’s operational results. The Company believes that Adjusted EBITDA per Credit Facility presents relevant and useful information widely used by analysts, investors and other interested parties in the Company’s industry. Accordingly, the Company is disclosing this information to provide additional information with respect to the Company’s ability to comply with its credit agreement requirements. EBITDA is defined as net income with adjustments for depreciation and amortization, interest income (expense)-net, and income tax provision (benefit). Adjusted EBITDA per Credit Facility is defined as EBITDA plus adjustments for loss from equity accounted investments, stock and other non-cash compensation, exit costs, restructuring charges and associated impairments, legal arbitration award, executive transition costs and adjusted EBITDA attributable to non-controlling interests.

RESULTS OF OPERATIONS

Important factors that the Company's Chief Executive Officer ("CEO") Richard L. Gelfond uses in assessing the Company's business and prospects include:

- the signing, installation and financial performance of theater system arrangements (particularly its joint revenue sharing arrangements and new laser-based projection systems);
- film performance and the securing of new film projects (particularly IMAX DMR films);
- the continuing ability to invest in and improve the Company's technology to enhance its differentiation of presentation versus other cinematic experiences;
- revenue and gross margins from the Company's segments;
- earnings from operations as adjusted for unusual items;
- the overall execution, reliability and consumer acceptance of *The IMAX Experience*;
- the success of new business initiatives; and
- short- and long-term cash flow projections.

Management, including the Company's CEO, who is the Company's Chief Operating Decision Maker ("CODM") (as defined in the Segment Reporting Topic of the FASB ASC), assesses segment performance based on segment revenues, gross margins. Selling, general and administrative expenses, research and development costs, amortization of intangibles, receivables provisions (recoveries), write-downs net of recoveries, interest income, interest expense and tax (provision) recovery are not allocated to the segments. The Company has the following eight reportable segments: IMAX DMR; joint revenue sharing arrangements; IMAX systems; theater system maintenance; other theater; new business; film distribution; and film post-production. The Company organizes its reportable segments into the following four primary groups: Network Business, Theater Business, New Business and Other. The Company is presenting the following information at a disaggregated level to provide more relevant information to readers, as permitted by the standard, and adjusted for the adoption of the new revenue recognition standard:

- **Network Business**
 - The IMAX DMR segment consists of variable revenues from studios for the conversion of films into the IMAX DMR format generated by the box office results from the exhibition of those films in the IMAX theater network.
 - Joint revenue sharing arrangements – contingent rent, consists of variable rent revenues from box office exhibited in IMAX theaters in exchange for the provision of IMAX theater projection system equipment to exhibitors. This excludes fixed hybrid revenues and upfront installation costs from the Company's hybrid joint revenue sharing arrangements, which are included in theater business. Effective January 1, 2018, the Company no longer includes hybrid joint revenue sharing arrangements which take the form of a sale under the joint revenue sharing arrangement reportable segment. These arrangements are now reflected under the IMAX systems segment of Theater Business.
 - IMAX systems – contingent rent, consists of variable payments from the Company's sales-type leases in excess of certain fixed minimum ongoing payments, under arrangements in the IMAX systems segment, which are recognized when reported by theater operators, provided collectability is reasonably assured.
- **Theater Business**
 - The IMAX systems segment consists of the design, manufacture and installation of IMAX theater projection system equipment under sales or sales-type lease arrangements for fixed upfront and ongoing consideration (including ongoing fees and finance income) and contingent rent on sales arrangements.
 - Joint revenue sharing arrangements – fixed fee, consists of fixed hybrid revenues and upfront installation costs from the joint revenue sharing arrangements segment for all arrangements which take the form of a lease.
 - The theater system maintenance segment consists of the provision of IMAX theater projection system equipment maintenance services to the IMAX theater network and the associated costs of those services.
 - Other theater includes after-market sales of IMAX theater projection system parts and 3D glasses from the other segment.
- **New Business**
 - The new business segment consists of content licensing and distribution fees associated with the Company's IMAX Home Entertainment, and other new business initiatives that are in the development, start-up and/or wind-up phases.

- **Other**
 - The film distribution segment consists of revenues and costs associated with the distribution of documentary films for which the Company has distribution rights.
 - The film post-production segment consists of the provision of film post-production, and their associated costs.
 - The other segment consists of certain IMAX theaters that the Company owns and operates, camera rentals and other miscellaneous items.

The Company's Management's Discussion and Analysis ("MD&A") of Financial Condition and Results of Operations has been organized by the Company into four primary groups – Network Business, Theater Business, New Business and Other. Each of the Company's reportable segments, as identified above, has been classified into one of these broader groups for purposes of MD&A discussion. The Company believes that this approach is consistent with how the CODM reviews the financial performance of the business and makes strategic decisions regarding resource allocation and investments to meet long-term business goals. Management believes that a discussion and analysis based on these groups is significantly more relevant and useful to readers, as the Company's consolidated statements of operations captions combine results from several segments.

The following table sets forth the breakdown of revenue and gross margin by segment:

(In thousands of U.S. dollars)

	Revenue		Gross Margin	
	2019	2018	2019	2018
Network business				
IMAX DMR	\$ 120,765	\$ 110,793	\$ 78,592	\$ 72,773
Joint revenue sharing arrangements – contingent rent	75,932	73,371	47,935	48,856
IMAX systems – contingent rent ⁽¹⁾	139	—	139	—
	<u>196,836</u>	<u>184,164</u>	<u>126,666</u>	<u>121,629</u>
Theater business				
IMAX systems				
Sales and sales-type leases ⁽¹⁾	96,310	88,432	47,118	47,986
Ongoing fees and finance income ⁽²⁾	11,613	12,224	11,422	12,033
Joint revenue sharing arrangements – fixed fees	11,014	9,706	2,613	1,982
Theater system maintenance	53,151	49,684	23,010	21,991
Other theater	8,390	8,358	2,624	1,806
	<u>180,478</u>	<u>168,404</u>	<u>86,787</u>	<u>85,798</u>
New business	<u>2,754</u>	<u>5,769</u>	<u>2,106</u>	<u>(350)</u>
Other				
Film distribution and post-production	12,210	12,962	(1,262)	1,763
Other	3,386	3,102	(125)	(911)
	<u>15,596</u>	<u>16,064</u>	<u>(1,387)</u>	<u>852</u>
	<u>\$ 395,664</u>	<u>\$ 374,401</u>	<u>\$ 214,172</u>	<u>\$ 207,929</u>

(1) Includes initial payments and the present value of fixed minimum payments from equipment, sales and sales-type lease transactions and the present value of estimates of variable consideration from equipment sales transactions.

(2) Includes rental income from operating leases and finance income.

Results of Operations Discussion for the Two Years Ended December 31, 2019

Securities and Exchange Commission amended Regulation S-K Item 303 to allow the elimination of discussion of the earliest of the three-year period presented in the MD&A if such discussion is already included in the prior filings. The results of operations discussion below is for fiscal 2019 compared with fiscal 2018. See Item 7 of the Annual Report on Form 10-K for the Fiscal Year ended December 31, 2018 for the results of operations discussion for fiscal 2018 compared with fiscal 2017.

Overview

The Company reported net income of \$58.6 million, or \$0.95 per basic and diluted share, for the year ended December 31, 2019, as compared to net income of \$33.6 million, or \$0.53 per basic and diluted share, for the year ended December 31, 2018.

Net income for the year ended December 31, 2019 includes a \$22.8 million charge, or \$0.37 per diluted share (2018 — \$22.2 million, or \$0.35 per diluted share) for stock-based compensation, a \$0.9 million charge, or \$0.01 per diluted share for exit costs, restructuring charges and associated impairments (2018 — \$9.5 million, or \$0.15 per diluted share) and a \$0.5 million charge, or \$0.01 per diluted share (2018 — \$nil) for the change in fair value of equity securities. In 2018, the Company also recognized a \$11.7 million or \$0.19 per diluted share, for a legal arbitration award related to one of the Company's litigation matters from 2006 and a \$3.0 million charge, or \$0.05 per diluted share, for executive transition costs.

Adjusted net income, which consists of net income excluding the impact of stock-based compensation, exit costs, restructuring charges and associated impairments, the legal arbitration award, executive transition costs, the change in fair value of equity securities, the related tax impact of these adjustments, and tax charge from the provisional re-measurement of U.S. deferred tax assets and liabilities given changes enacted by the Tax Act, was \$77.2 million, or \$1.25 per diluted share, for the year ended December 31, 2019 as compared to adjusted net income of \$70.2 million, or \$1.11 per diluted share, for the year ended December 31, 2018.

The Company reported net income attributable to common shareholders of \$46.9 million, or \$0.76 per basic share and diluted share for the year ended December 31, 2019 (2018 — \$22.8 million, or \$0.36 per basic share and diluted share).

Adjusted net income attributable to common shareholders, which consists of net income attributable to common shareholders excluding the impact attributable to common shareholders of stock-based compensation, exit costs, restructuring charges and associated impairments, the legal arbitration award, executive transition costs, the change in fair value of equity securities, the related tax impact of these adjustments, and tax charge from the provisional re-measurement of U.S. deferred tax assets and liabilities given changes enacted by the Tax Act, was \$64.8 million, or \$1.05 per diluted share, for the year ended December 31, 2019 as compared to adjusted net income attributable to common shareholders of \$57.8 million, or \$0.91 per diluted share, for the year ended December 31, 2018.

Impact of Coronavirus

In early 2020, in response to the public health risks associated with an outbreak of coronavirus in Wuhan, China, Chinese exhibitors temporarily closed more than 70,000 movie theaters, including all of the approximately 700 IMAX theaters in mainland China. The theaters have been closed since late January 2020, including over the Lunar New Year holiday and have not yet reopened as of the date of this report. Chinese movie studios also postponed the release of multiple films, including those originally scheduled to be released over this holiday, five of which were scheduled to be shown in IMAX theaters. The repercussions of this health crisis in China will have a material adverse impact on the revenues generated by IMAX theater systems in the first quarter of 2020. Given the dynamic nature of the circumstances, it is difficult to predict whether the impact of the coronavirus outbreak on the Company's financial condition in future reporting periods may also be material as this will depend on future developments, including but not limited to the timing of theaters reopening, if and when delayed films are released, consumer behaviour and any potential construction or installation delays involving our exhibitor partners which are highly uncertain and cannot be accurately forecast. However, assuming the resumption of business in the near future, we believe that a portion of these revenues may be recovered later in 2020 when we anticipate the films are scheduled to ultimately be released, although there can be no guarantees of the timing or extent of such recovery. See "Risk Factors – The Company's results of operations are expected to be adversely impacted by the recent coronavirus outbreak in China" in Item 1A of this 2019 Form 10-K and note 29 to the accompanying audited consolidated financial statements in Item 8 of this 2019 Form 10-K.

Reconciliation of non-GAAP financial measures

A reconciliation of net income and net income attributable to common shareholders, the most directly comparable U.S. GAAP measure, to adjusted net income, adjusted net income per diluted share, adjusted net income attributable to common shareholders and adjusted net income attributable to common shareholders per diluted share is presented in the table below:

(In thousands of U.S. dollars, except per share amounts)

	Years Ended December 31,			
	2019		2018	
	Net Income	Diluted EPS	Net Income	Diluted EPS
Reported net income	\$ 58,571	\$ 0.95	\$ 33,595	\$ 0.53
Adjustments:				
Stock-based compensation	22,830	0.37	22,211	0.35
Exit costs, restructuring charges and associated impairments	850	0.01	9,542	0.15
Legal arbitration award	—	—	11,737	0.19
Executive transition costs	—	—	2,994	0.05
Change in fair value of equity investment	517	0.01	—	—
Impact of enactment of U.S Tax Cut and Jobs Act	—	—	—	—
Tax impact on items listed above	(5,614)	(0.09)	(9,873)	(0.16)
Adjusted net income	77,154	1.25	70,206	1.11
Net income attributable to non-controlling interests ⁽¹⁾	(11,705)	(0.19)	(10,751)	(0.17)
Stock-based compensation (net of tax of \$0.1 million and \$0.1 million, respectively) ⁽¹⁾	(480)	(0.01)	(394)	(0.01)
Exit costs, restructuring charges and associated impairments (net of tax of \$nil and \$0.4 million, respectively) ⁽¹⁾	—	—	(1,262)	(0.02)
Change in fair value of equity investment	(184)	—	—	—
Adjusted net income attributable to common shareholders	<u>\$ 64,785</u>	<u>\$ 1.05</u>	<u>\$ 57,799</u>	<u>\$ 0.91</u>
Weighted average diluted shares outstanding		<u>61,489</u>		<u>63,207</u>

(1) Reflects amounts attributable to non-controlling interests.

Revenues and Gross Margin

The Company's revenues for the year ended December 31, 2019 increased 5.7% to \$395.7 million from \$374.4 million in 2018, primarily due to an increase in revenue from the Company's network and theater business segments, partially offset by a decrease in the new business and other segments. The gross margin across all segments in 2019 was \$214.2 million, or 54.1% of total revenue, compared to \$207.9 million, or 55.5% of total revenue in 2018.

Network Business

Gross box office generated by IMAX DMR films increased 7.4% to \$1,108.5 million in 2019 from \$1,032.1 million in 2018. In 2019, gross box office was generated primarily from the exhibition of 72 films (60 new and 12 carryover), as compared to 80 films (70 new and 10 carryover) exhibited in 2018.

Network business revenue increased by 6.9% to \$196.8 million in the year ended December 31, 2019 from \$184.2 million in the year ended December 31, 2018. In 2019, the Company had stronger film performance and an increase in number of theaters in the network compared to the prior year. The gross margin experienced by the Company's network business in 2019 was \$126.7 million, or 64.4% of network business revenue, compared to \$121.6 million, or 66.0% in 2018. The Company's network business performance is impacted by box office performance, as well as other factors including the timing of a film release to the IMAX theater network, the commercial success of the film, the Company's take rates under its DMR and joint revenue sharing arrangements, and the distribution window for the exhibition of films in the IMAX theater network. Other factors impacting performance include fluctuations in the value of foreign currencies versus the U.S. dollar and potential currency devaluations.

IMAX DMR revenues increased 9.0% to \$120.8 million in the year ended December 31, 2019 from \$110.8 million in the year ended December 31, 2018, due to stronger film performances in 2019. The gross margin from the IMAX DMR segment was \$78.6 million, \$72.8 million in the years ended December 31, 2019 and 2018, respectively. Margin is a function of the costs associated with the respective films exhibited in the period and can vary particularly with respect to marketing expenses.

Contingent rent revenues from joint revenue sharing arrangements increased to \$75.9 million in the year ended December 31, 2019 from \$73.4 million in the year ended December 31, 2018, largely due to stronger box-office performance and continued network growth. The Company ended 2019 with 870 theaters operating under total joint revenue sharing arrangements (traditional and hybrid), an increase of 9.0%, as compared to 798 theaters at the end of 2018. Gross box office generated by the joint revenue sharing arrangements was 4.2% higher at \$560.3 million in the year ended December 31, 2019 from \$537.8 million in the year ended December 31, 2018.

The gross margin from joint revenue sharing arrangements decreased to \$47.9 million in the year ended December 31, 2019 from \$48.9 million in the year ended December 31, 2018. Included in the calculation of gross margin for the year ended December 31, 2019 were certain advertising, marketing and commission costs primarily associated with new theater launches of \$3.3 million, as compared to \$3.0 million in 2018.

Contingent rent revenue from IMAX systems consists of variable payments received in excess of the fixed minimum ongoing payments which are primarily driven by box office performance reported by theater operators. The Company expects this revenue stream to be minimal on a go-forward basis and was \$0.1 million and \$nil recognized in the years ended December 31, 2019 and 2018, respectively.

Theater Business

The primary drivers of this line of business are theater system installations and the Company's maintenance contract that accompanies each theater installation. For the year ended December 31, 2019, theater business revenue increased \$12.1 million, or 7.2%, to \$180.5 million as compared to the year ended December 31, 2018. The increase in theater business revenue in 2019 as compared to 2018 was primarily due to:

- 11 additional installations of system upgrades;
- 6 additional installations of systems contracted as hybrid joint revenue sharing arrangements; partially offset by
- 8 fewer installations of systems under a sales and sales-type lease arrangement.

Gross margin increased 1.2% to \$86.8 million in 2019 as compared to \$85.8 million in 2018, primarily due to the mix of systems installed under sales and sales-type leases and joint revenue sharing lease arrangements. As well, there has been an increase to sustained engineering costs related to IMAX with Laser roll-out and continued development and support. The costs associated with ongoing fees are minimal as it usually consists of depreciation on the Company's theaters under operating lease arrangements and/or marketing. The theater business gross margin was 48.1% in 2019 compared to 50.9% in 2018. The decrease in margin was primarily due to the installation of more hybrid joint revenue sharing arrangements which come with lower average revenue, resulting in significantly lower margins on recognition than a traditional sale and fewer sales and sales type installation with average revenue of \$1.3 million in 2019 as compared to 2018.

The installation of theater systems in newly built theaters or multiplexes, which make up a large portion of the Company's theater system backlog, depends primarily on the timing of the construction of those projects, which is not under the Company's control. The breakdown in mix of sales and sales-type lease and joint revenue sharing arrangements installations by theater system configuration for 2019 and 2018 is outlined in the table below:

	Years Ended December 31,			
	2019		2018	
	Number of Systems	Revenue	Number of Systems	Revenue
New IMAX theater systems — installed and recognized				
Sales and sales-types lease arrangements	55	\$ 70,367 (1)	63	\$ 83,850
Joint revenue sharing arrangements — hybrid	20	10,610	14	6,613
Total new theater systems	75	80,977	77	90,463
IMAX theater system upgrades — installed and recognized				
Sales and sales-types lease arrangements	17	19,630	6	5,379
Total theater systems installed and recognized	92	\$ 100,607	83	\$ 95,842

(1) Includes one IMAX digital theater system that was relocated from a previous location. This installation is incremental to the IMAX theater network but full revenue for the digital theater system was not received.

Average revenue per full, new theater system under a sales and sales-type lease arrangement was \$1.3 million for the years ended December 31, 2019 and 2018. The average revenue per full, new theater system under a sales and sales-type lease arrangement varies depending upon the number of theater system commitments with a single respective exhibitor, an exhibitor's location or other various factors.

Theater system maintenance revenue increased 7.0% to \$53.2 million in the year ended December 31, 2019 from \$49.7 million in the year ended December 31, 2018 due to the growth of the network. Theater system maintenance gross margin was \$23.0 million in the year ended December 31, 2019 versus \$22.0 million in the year ended December 31, 2018. The Company recorded a write-down of \$0.5 million and \$0.3 million for certain service parts inventories in the years ended December 31, 2019 and 2018, respectively. Maintenance margins vary depending on the mix of theater system configurations in the theater network, volume-pricing related to larger relationships and the timing and the date(s) of installation and/or service.

Ongoing fees and finance income were \$11.6 million in the year ended December 31, 2019 compared to \$12.2 million in the year ended December 31, 2018. Gross margin for ongoing rent and finance income decreased to \$11.4 million in the year ended December 31, 2019 from \$12.0 million in the year ended December 31, 2018. The costs associated with ongoing fees are minimal as it usually consists of depreciation on the Company's theaters under operating lease agreements and/or marketing.

Other theater revenue was \$8.4 million in the years ended December 31, 2019 and 2018, respectively. Other theater revenue primarily includes revenue generated from the Company's after-market sales of projection system parts and 3D glasses. The gross margin recognized from other theater revenue was \$2.6 million in the year ended December 31, 2019 as compared to \$1.8 million in the year ended December 31, 2018.

New Business

Revenue earned from the Company's new business initiatives was \$2.8 million in the year ended December 31, 2019, as compared to \$5.8 million in the year ended December 31, 2018. In the year ended December 31, 2019, revenue in the new business segment is attributable to the IMAX Enhanced program which was launched at the end of 2018 and started generating revenue in the current year compared to the prior year where the income was primarily derived from IMAX VR and the final contractual payment owed to IMAX related to the IMAX VR camera.

The gross margin recognized from the new business segment was \$2.1 million in the year ended December 31, 2019 as compared to a loss of \$0.4 million in the year ended December 31, 2018. The increase in gross margin is primarily attributable to the better performance of the IMAX Enhanced program.

The Company is evaluating its new business initiatives separately from its core business as the nature of its activities is separate and distinct from its ongoing operations. The Company recognized net earnings from its new business initiatives for the year ended December 31, 2019 of \$1.4 million, which includes exit costs, restructuring charges and associated impairments of \$0.1 million and amortization of \$0.1 million. In addition, the net earnings include selling, general and administrative costs of \$0.5 million and research and development costs of \$0.1 million. Net loss before tax from its new business initiatives for the year ended December 31, 2018 was \$9.5 million, which includes asset impairment charges of \$7.2 million, amortization of \$2.5 million and an equity loss of \$0.5 million.

Other

Film distribution and post-production revenues were \$12.2 million in the year ended December 31, 2019, as compared to \$13.0 million in the year ended December 31, 2018, primarily due to a decrease in post-production revenue, partially offset by an increase film distribution revenue from IMAX original films. The film distribution and post-production segments gross margin was a loss of \$1.3 million in the year ended December 31, 2019 as compared to a gross profit of \$1.8 million in the year ended December 31, 2018. The Company reviewed the carrying value of certain documentary film assets as a result of lower than expected revenue being generated during the year and revised expectations for future revenues based on the latest information available. In 2019, an impairment of \$1.4 million was recorded based on the carrying value of these documentary films as compared to the related estimated future box office and revenues that would ultimately be generated by these films. There were no such charges in the year ended December 31, 2018.

Other revenue increased to \$3.4 million in the year ended December 31, 2019, as compared to \$3.1 million in the year ended December 31, 2018. Other revenue primarily includes revenue generated from the Company's theater operations and camera rental business.

The gross margin recognized from other revenue was a loss of \$0.1 million in the year ended December 31, 2019, as compared to loss of \$0.9 million in the year ended December 31, 2018.

Selling, General and Administrative Expenses

Selling, general and administrative expenses were \$123.5 million in 2019, as compared to \$117.5 million in 2018. The staff costs in 2019 increased \$5.3 million compared to 2018, driven primarily by additional employees and higher executive severance. In 2018, the Company invested in and deployed a new global marketing campaign, which increased the marketing expenses as compared to 2019. Selling, general and administrative expenses excluding the impact of stock-based compensation were \$102.7 million in 2019, as compared to \$97.4 million in 2018.

The following reflects the significant items impacting selling, general and administrative expenses for the years ended December 31, 2019 and 2018.

	2019	2018	2019 versus 2018	
Staff costs	\$ 71,132	\$ 65,816	\$ 5,316	8.1 %
Stock-based compensation	20,750	20,102	\$ 648	3.2 %
Consulting and professional fees	11,729	9,642	\$ 2,087	21.6 %
Marketing	7,638	11,069	\$ (3,431)	(31.0) %
Foreign exchange loss (gain)	946	1,705	\$ (759)	(44.5) %
Other general corporate expenditures	11,261	9,143	\$ 2,118	23.2 %
Total	<u>\$ 123,456</u>	<u>\$ 117,477</u>	<u>\$ 5,979</u>	

The Company's net foreign exchange gains/losses are related to the translation of foreign currency denominated monetary assets and liabilities.

Other general corporate expenditures include professional fees and travel and entertainment. Selling, general and administrative expenses also includes asset impairment charges and write-offs, if any, and miscellaneous items, other than interest.

Research and Development

Research and development expenses decreased to \$5.2 million in 2019 compared to \$13.7 million in 2018. The decrease is primarily attributable to the lower spending on new business initiatives compared to the prior year and completeness of most of the laser development.

A significant portion of the Company's research and development efforts over the past several years have been focused on IMAX with Laser, the Company's next-generation laser-based projection system, which the Company believes delivers increased resolution, sharper and brighter images, deeper contrast as well as the widest range of colors available to filmmakers today. The Company expects that research and development expense will continue to decrease in 2020.

The Company also intends to continue research and development in other areas considered important to the Company's continued commercial success, including further improving the reliability of its projectors, certifying more IMAX cameras, enhancing the Company's image quality, expanding the applicability of the Company's digital technology in both theater and home entertainment and improvements to the DMR process.

Receivable Provisions, Net of Recoveries

Receivable provisions, net of recoveries for accounts receivable and financing receivables amounted to a net provision of \$2.4 million in 2019, as compared to \$3.1 million in 2018.

The Company's accounts receivables and financing receivables are subject to credit risk, as a result of geographical location, exchange rate fluctuations, and other unforeseeable financial difficulties. These receivables are concentrated with the leading theater exhibitors and studios in the film entertainment industry. To minimize the Company's credit risk, the Company retains title to underlying theater systems leased, performs initial and ongoing credit evaluations of its customers and makes ongoing provisions for its estimate of potentially uncollectible amounts. Accordingly, the Company believes it has adequately protected itself against exposures relating to receivables and contractual commitments.

Asset Impairments and Other Charges

The Company records asset impairment charges for property, plant and equipment after an assessment of the carrying value of certain asset groups in light of their future expected cash flows. During 2019, the Company recorded asset impairment charges of \$0.1 million (2018 — less than \$0.1 million) as the Company recognized that the carrying values for the assets exceeded the expected undiscounted future cash flows.

In 2019, the Company reviewed the carrying value of certain documentary film assets as a result of lower than expected revenue being generated during the period and revised expectations for future revenues based on the latest information available. An impairment of \$1.4 million was recorded based on the carrying value of these documentary films as compared to the related estimated future box office and revenues that would ultimately be generated by these films. No such charge was recorded in the year ended 2018.

Interest Income and Expense

Interest income was \$2.1 million in 2019, as compared to \$1.8 million in 2018.

Interest expense was \$2.8 million in 2019, as compared to \$2.9 million in 2018. Included in interest expense is the amortization of deferred finance costs in the amount of \$0.5 million and \$1.1 million in 2019 and 2018, respectively. Included in 2018 was \$0.3 million of deferred finance costs relating to the prior Credit Facility written off as a result of the new Credit Facility and an additional \$0.3 million related to the extinguishment of the Playa Vista Loan. Consistent with its historical financial reporting, the Company has elected to classify interest and penalties related to income tax liabilities, when applicable, as part of the interest expense in its consolidated statements of operations rather than income tax expense. The Company expensed \$0.2 million in potential interest and penalties associated with its provision for uncertain tax positions for the years ended December 31, 2019 (2018 — less than \$0.1 million). The Company's policy is to defer and amortize all the costs relating to debt financing which are paid directly to the debt provider, over the life of the debt instrument.

Change in fair value of equity investment

In the first quarter of 2019, IMAX China (Hong Kong), Limited, a wholly-owned subsidiary of IMAX China, entered into a cornerstone investment agreement with Maoyan Entertainment ("Maoyan"), a market-leading mobile ticketing platform providing innovative internet-empowered entertainment services in China, and purchased equity securities for \$15.2 million. These equity securities are traded on the Hong Kong Stock Exchange, and the Company is required to adjust the fair value of the securities each period to reflect the current market value. This adjustment will fluctuate based on the closing market price at the end of each period. In 2019, a loss of \$0.5 million was recognized in the consolidated statements of operations. IMAX China also seeks to develop strategic collaborations with Maoyan and enable the Company to leverage Maoyan's technical advantages to, among other things, more effectively market future content to consumers.

Legal arbitration award

In the year ended December 31, 2018, the Company recorded a charge of \$11.7 million for a legal arbitration award related to one of the Company's litigation matters from 2006. No such charges were incurred in 2019.

Executive transition costs

In the year ended December 31, 2018, the Company recognized executive transition costs of \$3.0 million associated with the separation of the former CEO of IMAX Entertainment and Senior Executive Vice President of the Company. The costs include \$1.9 million of accelerated costs related to retirement benefits which became vested in full. Additional expenses of \$1.1 million have been recorded for severance, bonus and stock-based compensation which relate to the exit of the executive and other executives. No such charges were incurred in 2019.

Exit costs, restructuring charges and associated impairments

Exit costs, restructuring charges and associated impairments were \$0.9 million in the year ended December 31, 2019, for employee severance costs and costs incurred to exit operating lease, as compared to \$9.5 million in the year ended December 31, 2018 which is comprised of employee severance costs, costs incurred to exit operating lease and asset impairments related to the closure of the Company's VR locations and write-downs of VR content assets, which is comprised of costs incurred to exit an existing operating lease, employee severance costs, costs of consolidating facilities and contract termination costs.

Income Taxes

The Company's effective tax rate differs from the statutory tax rate and varies from year to year primarily as a result of numerous permanent differences, investment and other tax credits, the provision for income taxes at different rates in foreign and other provincial jurisdictions, enacted statutory tax rate increases or reductions in the year, including the impact of the Tax Act, changes due to foreign exchange, changes in the Company's valuation allowance based on the Company's recoverability assessments of deferred tax assets, and favorable or unfavorable resolution of various tax examinations.

As at December 31, 2019, the Company had a gross deferred income tax asset of \$24.1 million, against which the Company is carrying a \$0.2 million valuation allowance. For the year ended December 31, 2019, the Company recorded an income tax provision of \$16.8 million, which included a recovery of \$1.4 million related to its uncertain tax positions. In addition, included in the provision for income taxes was a \$0.4 million provision to recognize the reduced tax benefit available on stock based compensation costs recognized in the period.

The Company recorded a gross deferred income tax asset of \$31.5 million for 2018, against which the Company is carrying a \$0.2 million valuation allowance. For the year ended December 31, 2018, the Company recorded an income tax provision of \$9.5 million, which included a provision of \$0.2 million related to its uncertain tax positions. In addition, included in the provision for income taxes was a \$1.2 million provision to recognize the reduced tax benefit available on stock-based compensation costs recognized in the period.

During the year ended December 31, 2019, after considering all available evidence, both positive (including recent profits, projected future profitability, backlog, carry forward periods for, and utilization of net operating loss carryovers and tax credits, discretionary deductions and other factors) and negative (including cumulative losses in past years and other factors), the Company concluded that the valuation allowance against the Company’s deferred tax assets was adequate. The remaining \$0.2 million balance in the valuation allowance as at December 31, 2019 is primarily attributable to certain U.S. state net operating loss carryovers that may expire without being utilized.

The Company’s Chinese subsidiary has taken a deduction for certain stock-based compensation issued by the Chinese subsidiary’s parent company, IMAX China and has set up related deferred tax assets of \$1.4 million (December 31, 2018 — \$1.2 million). Chinese regulatory authorities responsible for capital and exchange controls will need to review and approve the proposed settlement of these transactions before they can be completed. There may be a requirement for future investment of funds into China in order to secure the deduction. Should the Company proceed, any such future investment would come from existing capital invested in the IMAX China group of companies being redeployed amongst the IMAX China group of companies, including the Chinese subsidiary.

Equity-Accounted Investments

The Company accounts for investments in new business ventures using the guidance of the FASB ASC Topic 323. At December 31, 2019, the equity method of accounting is being utilized for investments with a total carrying value of \$nil (December 31, 2018 — \$nil). The Company’s accumulated losses in excess of its equity investment were \$1.5 million as at December 31, 2019 and \$1.6 million as at December 31, 2018 and are classified in Accrued and other liabilities. For the year ended December 31, 2019, gross revenues, cost of revenue and net loss for these investments were \$2.0 million, \$1.2 million and \$1.5 million, respectively (2018 — \$1.9 million, \$3.0 million and \$1.8 million, respectively). The Company recorded its proportionate share of the income which amounted to less than \$0.1 million for 2019 as compared to loss of \$0.5 million in 2018.

Non-Controlling Interests

The Company’s consolidated financial statements include the non-controlling interest in the net income of IMAX China resulting from the IMAX China Investment and the IMAX China IPO as well as the impact of non-controlling interests in its subsidiaries created for the Film Fund and VR Content Fund activity. For the year ended December 31, 2019, the net income attributable to non-controlling interests of the Company’s subsidiaries was \$11.7 million (2018 — \$10.8 million).

Pension Plan

The Company has an unfunded defined benefit pension plan, the Supplemental Executive Retirement Plan (the “SERP”), covering the Company’s CEO, Mr. Gelfond. As at December 31, 2019, the Company had an unfunded and accrued benefit obligation of approximately \$18.8 million (December 31, 2018 — \$18.0 million) in respect of the SERP.

The components of net periodic benefit cost were as follows:

	Years ended December 31,	
	2019	2018
Interest cost	\$ 564	\$ 422
Pension expense	\$ 564	\$ 422

The plan experienced an actuarial gain of \$0.2 million during 2019, as compared to \$1.4 million in 2018, resulting primarily from the continuing change in the Pension Benefit Guaranty Corporation (“PBGC”) published annuity interest rates year-over-year used to determine the lump sum payment under the plan.

Under the terms of the SERP, if Mr. Gelfond's employment is terminated other than for cause (as defined in his employment agreement), he is entitled to receive SERP benefits in the form of a lump sum payment. SERP benefit payments to Mr. Gelfond are subject to a deferral for six months after the termination of his employment, at which time Mr. Gelfond will be entitled to receive interest on the deferred amount credited at the applicable federal rate for short-term obligations. Pursuant to an amendment dated November 1, 2019 to the employment agreement, the term of Mr. Gelfond's employment was extended through December 31, 2022, although Mr. Gelfond has not informed the Company that he intends to retire at that time. Under the terms of the amendment to his employment agreement, the total amount of benefit payable to Mr. Gelfond under the SERP has been fixed at \$20.3 million. The increase in the SERP obligation under the amendment was accounted for as prior service costs arising during the year and recognized in other comprehensive income. The prior service costs arising from the amendment are being amortized over the remaining employment agreement term of 36 months on a straight-line basis. The amortization expense associated with the prior service costs are recorded within the retirement benefits non-service expense in the consolidated statements of operations.

The Company has a postretirement plan to provide health and welfare benefits to Canadian employees meeting certain eligibility requirements. As at December 31, 2019, the Company had an unfunded benefit obligation of \$1.6 million (December 31, 2018 — \$1.5 million). For the year ended December 31, 2019 the Company contributed and expensed an aggregate of \$0.1 million (2018 — \$0.1 million).

In July 2000, the Company agreed to maintain health benefits for Messrs. Gelfond and Bradley J. Wechsler, the Company's former Co-CEO and current Chairman of its Board of Directors, upon retirement. As at December 31, 2019, the Company had an unfunded benefit obligation recorded of \$0.7 million (December 31, 2018 — \$0.6 million). For the year ended December 31, 2019 the Company contributed and expensed an aggregate of less than \$0.1 million (2018 — less than \$0.1 million).

The Company maintained a Retirement Plan covering former CEO of IMAX Entertainment and Senior Executive Vice President of the Company. Under the terms of his agreement with the Company, the plan will vest in full if he incurs a separation of service (as defined therein). In the fourth quarter of 2018, he incurred a separation from service, and as such, his Retirement Plan benefits became fully vested as at December 31, 2018 and the accelerated costs were recognized and reflected in the executive transition costs line on the consolidated statement of operations. As at December 31, 2019, the Company had a funded benefit obligation recorded of \$3.6 million (December 31, 2018 — \$3.6 million). During 2018, the Company expensed an aggregate of \$2.6 million, of which \$0.7 million was recorded in selling, general and administrative expenses as it relates to service performed in 2018, the remaining \$1.9 million is recorded in executive transition costs. No such expense was recorded in the year ended December 31, 2019.

Stock-Based Compensation

The Company estimates the fair value of stock option awards on the date of grant using fair value measurement techniques. The fair value of RSU awards is equal to the closing price of the Company's common stock on the date of grant.

The following reflects the Company's stock-based compensation expense recognized under FASB ASC 718, "Compensation – Stock Compensation" ("ASC 718") in the respective financial statement line items in:

	Years Ended December 31,	
	2019	2018
Cost and expenses applicable to revenues	\$ 1,709	\$ 1,657
Selling, general and administrative expenses	20,750	20,102
Research and development	371	452
Executive transition costs	—	320
Exit costs, restructuring charges and associated impairments	—	54
	<u>\$ 22,830</u>	<u>\$ 22,585</u>

LIQUIDITY AND CAPITAL RESOURCES

Credit Facility

On June 28, 2018, the Company entered into a Fifth Amended and Restated Credit Agreement (the “Credit Agreement”) with Wells Fargo Bank, National Association (“Wells Fargo”), as agent, and a syndicate of lenders party thereto. The Credit Agreement expands the Company’s revolving borrowing capacity from \$200.0 million to \$300.0 million, and also contains an uncommitted accordion feature allowing the Company to further expand its borrowing capacity to \$440.0 million or greater, depending on the mix of revolving and term loans comprising the incremental facility. The new facility (the “Credit Facility”) matures on June 28, 2023.

The Company’s obligations under the Credit Agreement are guaranteed by certain of the Company’s subsidiaries (the “Guarantors”), and are secured by first-priority security interests in substantially all the assets of the Company and the Guarantors.

The Credit Facility, coupled with recurring cash generated by the Company’s theater network, is expected to provide enhanced flexibility as the Company continues with the global expansion of its business and pursues other avenues to increase shareholder value.

Total amounts drawn and available under the Credit Facility at December 31, 2019 were \$20.0 million and \$280.0 million, respectively (December 31, 2018 — \$40.0 million and \$260.0 million, respectively). The effective interest rate for the year ended December 31, 2019 was 3.43% (December 31, 2018 — 3.41%).

The Credit Facility requires that the Company maintain a Senior Secured Net Leverage Ratio (as defined in the Credit Agreement) as of the last day of any Fiscal Quarter (as defined in the Credit Agreement) of no greater than 3.25:1.00. The Company was in compliance with this requirement at December 31, 2019. The Senior Secured Net Leverage Ratio (as defined in the Credit Agreement) was 0.00:1 as at December 31, 2019 where Total Debt (as defined in the Credit Agreement) is the sum of all obligations evidenced by notes, bonds, debentures or similar instruments, net of up to \$75.0 million in unrestricted cash and cash equivalents outside of the People’s Republic of China (“PRC”) was \$nil. Adjusted EBITDA per Credit Facility is calculated as follows:

Adjusted EBITDA per Credit Facility:

(In thousands of U.S. Dollars)

Net income	\$	58,571
Add (subtract):		
Provision for income taxes		16,768
Interest expense, net of interest income		423
Depreciation and amortization, including film asset amortization(1)		63,487
EBITDA	\$	139,249
Stock and other non-cash compensation		23,570
Change in fair value of equity investment		517
Write-downs, net of recoveries including asset impairments and receivable provisions (1)		6,806
Exit costs, restructuring charges and associated impairments		850
Income from equity accounted investments		(3)
Adjusted EBITDA before non-controlling interests	\$	170,989
Adjusted EBITDA attributable to non-controlling interests(2)		(21,661)
Adjusted EBITDA per Credit Facility	\$	149,328

(1) Senior Secured Net Leverage Ratio calculated using twelve months ended Adjusted EBITDA per Credit Facility.

(2) The Adjusted EBITDA per Credit Facility calculation includes the reduction in Adjusted EBITDA per Credit Facility from the Company’s non-controlling interests.

Working Capital Loan

On July 5, 2018, IMAX (Shanghai) Multimedia Technology Co., Ltd. (“IMAX Shanghai”), the Company’s majority-owned subsidiary in China, entered into an unsecured revolving facility for up to 200.0 million Renminbi (approximately \$30.0 million USD) to fund ongoing working capital requirements. On July 24, 2019, this facility was renewed. The total amounts drawn and available under the working capital loan at December 31, 2019 and 2018 were nil and 200.0 million Renminbi, respectively (\$nil and approximately \$30.0 million U.S. Dollars, respectively).

Letters of Credit and Other Commitments

As at December 31, 2019 and 2018, the Company did not have any letters of credit and advance payment guarantees outstanding under the Credit Facility.

Prior to September 30, 2019, the Company had a \$10.0 million facility with the Bank of Montreal for use solely in conjunction with the issuance of performance guarantees and letters of credit fully insured by Export Development Canada (the “Bank of Montreal Facility”). The Bank of Montreal Facility was unsecured and included typical affirmative and negative covenants, including delivery of annual consolidated financial statements within 120 days of the end of the fiscal year. The Bank of Montreal Facility which was subject to periodic annual reviews expired as of September 30, 2019 and was not renewed.

On October 28, 2019, the Company entered into a \$5.0 million facility for advance payment guarantees and letters of credit through the National Bank of Canada for use solely in conjunction with guarantees fully insured by Export Development Canada (the “NBC Facility”) to replace the Bank of Montreal Facility. The NBC Facility contains substantially the same terms as the Bank of Montreal Facility. As such, the NBC Facility is unsecured and includes typical affirmative and negative covenants, including delivery of annual consolidated financial statements within 120 days of the end of the fiscal year. As at December 31, 2019, the Company did not have any letters of credit or advance payment guarantees outstanding under the NBC Facility.

Cash and Cash Equivalents

As at December 31, 2019, the Company’s principal sources of liquidity included cash and cash equivalents of \$109.5 million, the Credit Facility, anticipated collection from trade accounts receivable of \$99.5 million including receivables from theaters under joint revenue sharing arrangements and DMR agreements with studios, anticipated collection from financing receivables due in the next 12 months of \$29.9 and payments expected in the next 12 months on existing backlog deals. As at December 31, 2019, the Company had drawn \$20.0 million on the Credit Facility (remaining availability of \$280.0 million). Cash held outside of North America as at December 31, 2019 was \$89.9 million (December 31, 2018 — \$121.9 million), of which \$67.6 million was held in the People’s Republic of China (“PRC”) (December 31, 2018 — \$54.7 million). The Company’s intent is to permanently reinvest these amounts outside of Canada and the Company does not currently anticipate that it will need funds generated from foreign operations to fund North American operations. In the event funds from foreign operations are needed to fund operations in North America and if withholding taxes have not already been previously provided, the Company would be required to accrue and pay these additional withholding tax amounts on repatriation of funds from China to Canada. The Company currently estimates this amount to be \$21.9 million.

During the year ended December 31, 2019, the Company used cash of \$32.1 million. The Company used cash of \$66.0 million to fund investing activities, of which \$40.5 million was invested in equipment for use in the Company’s joint revenue sharing arrangements with exhibitors, and \$15.2 million was used to purchase an investment in equity securities of Maoyan. In addition, \$10.3 million was used to purchase other intangible assets and to purchase property, plant and equipment. Based on management’s current operating plan for 2020, the Company expects to continue to use cash to deploy additional theater systems under joint revenue sharing arrangements, to fund DMR agreements with studios, and to potentially make share repurchases. Cash flows from joint revenue sharing arrangements are derived from the theater box office and concession revenues and the Company invested directly in the roll out of 54 new theater systems under joint revenue sharing arrangements in the year ending December 31, 2019, which were capitalized by the Company.

In 2017, the Company’s Board of Directors announced a new share repurchase program which authorizes the repurchase of up to \$200.0 million of its common shares by June 30, 2020. The repurchases may be made either in the open market or through private transactions, subject to market conditions, applicable legal requirements and other relevant factors. The Company has no obligation to repurchase shares and the share repurchase program may be suspended or discontinued by the Company at any time. During the year ended December 31, 2019, the Company repurchased 134,384 common shares (December 31, 2018 — 3,436,783) at an average price of \$19.76 per share, excluding commissions. The retired shares were repurchased for \$2.7 million.

The Company's operating cash flow will be adversely affected if management's projections of future signings for theater systems and film performance, theater installations and film productions are not realized. The Company forecasts its short-term liquidity requirements on a quarterly and annual basis. Since the Company's future cash flows are based on estimates and there may be factors that are outside of the Company's control (see "Risk Factors" in Item 1A of this 2019 Form 10-K), there is no guarantee that the Company will continue to be able to fund its operations through cash flows from operations. Under the terms of the Company's typical sale and sales-type lease agreement, the Company receives substantial cash payments before the Company completes the performance of its obligations. Similarly, the Company receives cash payments for some of its film productions in advance of related cash expenditures. Based on the Company's cash flow from operations and facilities, it expects to have sufficient capital and liquidity to fund its operations in the normal course for the next 12 months.

Operating Activities

The Company's net cash provided by operating activities is affected by a number of factors, including the proceeds associated with new signings of theater system lease and sale agreements during the year, costs associated with contributing systems under joint revenue sharing arrangements, the box-office performance of films distributed by the Company and/or released to IMAX theaters, increases or decreases in the Company's operating expenses, including research and development and new business initiatives, and the level of cash collections received from its customers.

Cash provided by operating activities amounted to \$90.4 million for the year ended December 31, 2019 (2018 — \$110.0 million). Changes in other non-cash operating assets and liabilities as compared to December 31, 2018 include:

Decrease (increase) in:		
Accounts receivable (1)	\$	(8,621)
Financing receivables		(320)
Inventories		1,942
Prepaid expenses		(290)
Variable consideration receivable		(4,056)
Other assets		(2,063)
Increase (decrease) in:		
Accounts payable		(11,774)
Accrued and other liabilities (2)		(8,505)
Deferred revenue (3)		(12,242)
	\$	<u>(45,929)</u>

(1) Amounts billed partially offset by cash receipts in the year

(2) Excluded the \$17.4 million non-cash impact of adopting ASC Topic 842 in 2019

(3) Amounts relieved due to theater system installations

Investing Activities

Capital expenditures, including the Company's investment in joint revenue sharing equipment, purchase of property, plant and equipment, other intangible assets and investments in film assets were \$74.3 million in 2019 as compared to \$80.1 million in 2018. The Company expects its investment in capital expenditures to remain fairly consistent as the nature of these cash outlays in particular, joint revenue sharing arrangements and film assets, exist to strengthen operational performances.

Net cash used in investing activities amounted to \$66.0 million in the year ended December 31, 2019 (2018 — \$56.9 million) which includes an investment in joint revenue sharing equipment of \$40.5 million (2018 — \$34.8 million), purchases of \$7.4 million in property, plant and equipment (2018 — \$13.4 million) and an investment in other intangible assets of \$2.9 million (2018 — \$8.7 million), and the purchase by IMAX China (Hong Kong), Limited, a wholly-owned subsidiary of IMAX China of equity securities in Maoyan for \$15.2 million.

Financing Activities

Net cash used in financing activities in the year ended December 31, 2019 amounted to \$57.1 million as compared to \$70.9 million in the year ended December 31, 2018.

In the year ended December 31, 2019, the Company made repayments of \$55.0 million, partially offset by borrowings of \$35.0 million under the Company's Credit Facility.

In 2018, the Company borrowed \$65.0 million from its Credit Facility, which was offset by repayments of \$50.7 million under its Credit Facility and the Playa Vista Loan and paid \$1.9 million in fees related to the Credit Facility.

In addition, the Company paid \$2.7 million for the repurchase of common shares under the Company's share repurchase program (2018 — \$71.5 million), \$19.2 million for the repurchase of common shares under the IMAX China share repurchase program (2018 — \$6.1 million), \$13.8 million to purchase treasury stock for the settlement of restricted share units and options and \$0.6 million of taxes withheld and paid on vested employee stock option awards (2018 — \$6.2 million and \$1.4 million, respectively). The Company also paid \$4.4 million in dividends to the non-controlling interest shareholders of IMAX China (2018 — \$6.9 million). These cash outlays were offset by \$2.4 million received from the issuance of common shares resulting from stock option exercises and \$1.1 million received from third party capital contributions to the Original Film Fund (2018 — \$7.8 million and \$1.0 million, respectively).

CONTRACTUAL OBLIGATIONS

Payments to be made by the Company under contractual obligations as at December 31, 2019 are as follows:

(In thousands of U.S. Dollars)	Payments Due by Period				
	Total Obligation	1 Year	> 1 - 3 years	> 3 - 5 years	Thereafter
Purchase obligations ⁽¹⁾	\$ 41,779	\$ 41,440	\$ 339	\$ —	\$ —
Pension obligations ⁽²⁾	20,298	—	—	20,298	—
Operating lease obligations ⁽³⁾	22,170	2,108	7,685	4,361	8,016
Credit Facility ⁽⁴⁾	20,000	—	—	20,000	—
Postretirement benefits obligations	2,246	108	227	246	1,665
	<u>\$ 106,493</u>	<u>\$ 43,656</u>	<u>\$ 8,251</u>	<u>\$ 44,905</u>	<u>\$ 9,681</u>

- (1) The Company's total payments to be made under binding commitments with suppliers and outstanding payments to be made for supplies ordered but yet to be invoiced.
- (2) The SERP assumptions are that Mr. Gelfond will receive a lump sum payment six months after retirement at the end of the current term of his employment agreement (December 31, 2022), although Mr. Gelfond has not informed the Company that he intends to retire at that time.
- (3) The Company's total minimum annual rental payments to be made under operating leases, mostly consisting of rent at the Company's property in New York and at the various owned and operated theaters.
- (4) The Company is not required to make any minimum payments on its Credit Facility.

Pension and Postretirement Obligations

The Company has an unfunded defined benefit pension plan, the SERP, covering Mr. Gelfond. As at December 31, 2019, the Company had an unfunded and accrued benefit obligation of approximately \$18.8 million (December 31, 2018 — \$18.0 million) in respect of the SERP.

Pursuant to an amendment dated November 1, 2019 to the existing employment agreement, the term of Mr. Gelfond's employment was extended through December 31, 2022, although Mr. Gelfond has not informed the Company that he intends to retire at that time. Under the terms of the amendment to his employment agreement, the total amount of benefit payable to Mr. Gelfond under the SERP has been fixed at \$20.3 million.

The Company has a postretirement plan to provide health and welfare benefits to Canadian employees meeting certain eligibility requirements. As at December 31, 2019, the Company had an unfunded benefit obligation of \$1.6 million (December 31, 2018 — \$1.5 million).

In July 2000, the Company agreed to maintain health benefits for Messrs. Gelfond and Bradley J. Wechsler, the Company's former Co-CEO and current Chairman of its Board of Directors, upon retirement. As at December 31, 2019, the Company had an unfunded benefit obligation of \$0.7 million (December 31, 2018 — \$0.6 million).

The Company maintained a nonqualified deferred compensation benefit plan (the "Retirement Plan") covering the former CEO of IMAX Entertainment and Senior Executive Vice President of the Company. Under the terms of his agreement with the Company, the plan will vest in full if he incurs a separation of service (as defined therein). In the fourth quarter of 2018, he incurred a separation from service, and as such, his Retirement Plan benefits became fully vested as at December 31, 2018 and the accelerated costs were recognized and reflected in the executive transition costs line on the consolidated statement of operations. As at December 31, 2019, the Company had a funded benefit obligation recorded of \$3.6 million (December 31, 2018 — unfunded benefit obligation of \$3.6 million). During 2018, the Company expensed an aggregate of \$2.6 million (2017 — \$0.5 million), of which \$0.7 million was recorded in selling, general and administrative expenses as it relates to service performed in 2018, the remaining \$1.9 million is recorded in executive transition costs. The Company did not recognize any additional expenses in the year ended December 31, 2019.

OFF-BALANCE SHEET ARRANGEMENTS

There are currently no off-balance sheet arrangements that have or are reasonably likely to have a current or future material effect on the Company's financial condition.

Item 7A. Quantitative and Qualitative Factors about Market Risk

The Company is exposed to market risk from foreign currency exchange rates and interest rates, which could affect operating results, financial position and cash flows. Market risk is the potential change in an instrument's value caused by, for example, fluctuations in interest and currency exchange rates. The Company's primary market risk exposure is the risk of unfavorable movements in exchange rates between the U.S. dollar, the Canadian dollar and the Chinese Yuan Renminbi. The Company does not use financial instruments for trading or other speculative purposes.

Foreign Exchange Rate Risk

A majority of the Company's revenue is denominated in U.S. dollars while a significant portion of its costs and expenses is denominated in Canadian dollars. A portion of the Company's net U.S. dollar cash flows is converted to Canadian dollars to fund Canadian dollar expenses through the spot market. In addition, IMAX films generate box office in 81 different countries, and therefore unfavorable exchange rates between applicable local currencies and the U.S. dollar could have an impact on the Company's reported gross box office and revenues. The Company has incoming cash flows from its revenue generating theaters and ongoing operating expenses in China through its majority-owned subsidiary IMAX (Shanghai) Multimedia Technology Co., Ltd. In Japan, the Company has ongoing Yen-denominated operating expenses related to its Japanese operations. Net Renminbi and Japanese Yen cash flows are converted to U.S. dollars through the spot market. The Company also has cash receipts under leases denominated in Renminbi, Japanese Yen, Euros and Canadian dollars.

The Company manages its exposure to foreign exchange rate risks through the Company's regular operating and financing activities and, when appropriate, through the use of derivative financial instruments. These derivative financial instruments are utilized to hedge economic exposures as well as reduce earnings and cash flow volatility resulting from shifts in market rates.

Certain of the Company's subsidiaries held approximately 471.6 million Renminbi (\$67.6 million U.S. dollars) in cash and cash equivalents as at December 31, 2019 (December 31, 2018 — 375.7 million Renminbi or \$54.7 million U.S. dollars) and are required to transact locally in Renminbi. Foreign currency exchange transactions, including the remittance of any funds into and out of the PRC, are subject to controls and require the approval of the China State Administration of Foreign Exchange to complete. Any developments relating to the Chinese economy and any actions taken by the China government are beyond the control of the Company; however, the Company monitors and manages its capital and liquidity requirements to ensure compliance with local regulatory and policy requirements.

For the year ended December 31, 2019, the Company recorded a foreign exchange net loss of \$0.9 million as compared to a foreign exchange net loss of \$1.7 million in 2018, associated with the translation of foreign currency denominated monetary assets and liabilities.

The Company entered into a series of foreign currency forward contracts to manage the Company's risks associated with the volatility of foreign currencies. The forward contracts have settlement dates throughout 2020 and 2021. Foreign currency derivatives are recognized and measured in the balance sheet at fair value. Changes in the fair value (gains or losses) are recognized in the consolidated statements of operations except for derivatives designated and qualifying as foreign currency cash flow hedging instruments. All foreign currency forward contracts held by the Company as at December 31, 2019, are designated and qualify as foreign currency cash flow hedging instruments. The Company currently has cash flow hedging instruments associated with selling, general and administrative expenses, inventory and capital expenditures. For foreign currency cash flow hedging instruments related to selling, general and administrative expenses, the effective portion of the gain or loss in a hedge of a forecasted transaction is reported in other comprehensive income and reclassified to the consolidated statements of operations when the forecasted transaction occurs. For foreign currency cash flow hedging instruments related to inventory, the effective portion of the gain or loss in a hedge of a forecasted transaction is reported in other comprehensive income and reclassified to inventory on the balance sheet when the forecasted transaction occurs. For foreign currency cash flow hedging instruments related to capital expenditures, the effective portion of the gain or loss in a hedge of a forecasted transaction is reported in other comprehensive income and reclassified to property, plant and equipment on the balance sheet when the forecasted transaction occurs. The notional value of foreign currency hedging instruments at December 31, 2019 was \$36.1 million (December 31, 2018 — \$50.8 million). A gain of \$0.6 million was recorded to Other Comprehensive Income with respect to the depreciation/appreciation in the value of these contracts in 2019 (2018 — a loss of \$2.2 million). A loss of \$1.2 million was reclassified from accumulated other comprehensive income to selling, general and administrative expenses, inventory and property, plant and equipment in 2019 (2018 — gain of \$0.4 million). Appreciation or depreciation on forward contracts not meeting the requirements for hedge accounting in the Derivatives and Hedging Topic of the FASB Accounting Standards Codification are recorded to selling, general and administrative expenses.

For all derivative instruments, the Company is subject to counterparty credit risk to the extent that the counterparty may not meet its obligations to the Company. To manage this risk, the Company enters into derivative transactions only with major financial institutions.

At December 31, 2019, the Company's financing receivables and working capital items denominated in Canadian dollars, Renminbi, Yen and Euros translated into U.S. dollars was \$116.6 million. Assuming a 10% appreciation or depreciation in foreign currency exchange rates from the quoted foreign currency exchange rates at December 31, 2019, the potential change in the fair value of foreign currency-denominated financing receivables and working capital items would have been \$11.7 million. A significant portion of the Company's selling, general, and administrative expenses is denominated in Canadian dollars. Assuming a 1% change appreciation or depreciation in foreign currency exchange rates at December 31, 2019, the potential change in the amount of selling, general, and administrative expenses would be \$0.2 million.

Interest Rate Risk Management

The Company's earnings are also affected by changes in interest rates due to the impact those changes have on its interest income from cash, and its interest expense from variable-rate borrowings under the Credit Facility.

As at December 31, 2019, the Company had drawn down \$20.0 million on its Credit Facility (December 31, 2018 — \$40.0 million).

The Company's largest exposure with respect to variable rate debt comes from changes in LIBOR. The Company had variable rate debt instruments representing 8.1% and 14.6% of its total liabilities at December 31, 2019 and 2018, respectively. If the interest rates available to the Company increased by 10%, the Company's interest expense would increase by approximately \$0.1 million and interest income from cash would increase by approximately \$0.2 million. These amounts are determined by considering the impact of the hypothetical interest rates on the Company's variable rate debt and cash balances at December 31, 2019.

On July 27, 2017, the Chief Executive of the U.K. Financial Conduct Authority (the "FCA"), which regulates LIBOR, announced that the FCA will no longer compel banks to submit rates for the calculation of the LIBOR benchmark after 2021. This announcement indicates that the continuation of LIBOR on the current basis cannot and will not be guaranteed after 2021, and it appears likely that LIBOR will be discontinued or modified by 2021. Loans under the Credit Facility bear interest, at the Company's option, at (i) LIBOR plus a margin ranging from 1.00% to 1.75% per annum; or (ii) the U.S. base rate plus a margin ranging from 0.25% to 1.00% per annum, in each case depending on the Company's Total Leverage Ratio (as defined in the Credit Agreement). The Credit Facility also allows for the selection of a replacement rate in the event of the discontinuation of LIBOR, subject to the approval of the administrative agent. The Company expects that the Credit Facility will transition to the Secured Overnight Financing Rate ("SOFR") as the replacement rate. Given the Company's current level of indebtedness and based on the historic differences between LIBOR and SOFR, the Company does not expect that the future discontinuation of LIBOR will have a material impact on future interest expense.

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Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors of IMAX Corporation

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of IMAX Corporation and its subsidiaries (the Company) as of December 31, 2019 and 2018, and the related consolidated statements of operations, comprehensive income, cash flows and shareholders' equity for each of the three years in the period ended December 31, 2019, including the related notes and the schedule of valuation and qualifying accounts for each of the three years in the period ended December 31, 2019, appearing on page 143 (collectively referred to as the consolidated financial statements). We also have audited the Company's internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Change in Accounting Principle

As discussed in notes 3 and 4 to the consolidated financial statements, the Company changed the manner in which it accounts for leases in 2019.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Annual Report on Internal Control over Financial Reporting appearing under Item 9A of this Annual Report on Form 10-K. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

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

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

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that (i) relate to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Revenue Recognition - Theater Systems Revenue

As described in notes 2(n) and 21 to the consolidated financial statements, the Company recognized revenue from theater systems of \$107.9 million which represents a large portion of total revenues of \$395.7 million for the year ended December 31, 2019. Management evaluates whether a theater system arrangement involves either a sale or a lease of a theater system, and for those arrangements that are accounted for as a sale of a theater system, determines the transaction price and the allocation thereof to each separate performance obligation based on estimated standalone selling prices. For arrangements accounted for as a sale of a theater system, the revenue allocated to the performance obligation is recognized when the conditions signifying transfer of control have been met. For theater system arrangements, management applied significant judgment in (i) determining whether the theater system arrangement related to either a sale or a lease by considering the terms of the arrangement including title to the theater system equipment and payment consideration; (ii) estimating the transaction price which may include the discounted present value of fixed ongoing payments and variable consideration; (iii) allocating the transaction price to each separate performance obligation based on estimated standalone selling prices; and (iv) determining the timing of revenue recognition based on when performance obligations are met.

The principal considerations for our determination that performing procedures relating to the revenue recognition of theater systems revenue is a critical audit matter are that management identified the matter as a critical accounting estimate, and there was significant judgment required by management in (i) determining whether the theater system arrangement related to a sale or a lease; (ii) estimating the transaction price which may include the discounted present value of fixed ongoing payments and variable consideration; (iii) allocating the transaction price to each separate performance obligation; and (iv) determining the timing of revenue recognition. This in turn led to a high degree of auditor judgment, subjectivity and effort in performing procedures and evaluating audit evidence relating to the revenue recognition of theater systems revenue.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to the revenue recognition process, including controls over management's review and approval of revenue recognition memorandums produced for each theater system arrangement which include the determination of the type of theater system arrangement, the estimate of the transaction price and allocation thereof and the timing of the related revenue recognition. These procedures also included, among others, evaluating the reasonableness of management's assessment of whether the theater system arrangement related to either a sale or a lease by considering the contractual terms and conditions of the executed contracts. Procedures were also performed to test management's process for estimating the transaction price for a sample of contracts with customers, including (i) evaluating the appropriateness of management's discounted present value method; (ii) testing the completeness, accuracy and relevance of the data used in estimating the transaction price; and (iii) evaluating the reasonableness of significant assumptions used by management, including the discount rate and expected future performance of underlying theaters associated with the arrangement. Evaluating management's assumption related to the discount rate involved evaluating whether the assumption was reasonable considering consistency with external market data. Evaluating management's assumption related to expected future performance of underlying theaters associated with the arrangement involved evaluating whether the assumption was reasonable considering the current and past performance of the underlying theaters. Procedures were also performed to test management's process for allocating the transaction price to each separate performance obligation, including (i) evaluating the appropriateness of management's method of allocating the

transaction price; (ii) testing the completeness, accuracy and relevance of the data used in allocating the transaction price; and (iii) evaluating the reasonableness of significant assumptions used by management, including estimated standalone selling prices. Evaluating management's assumption related to estimated standalone selling prices involved evaluating whether the assumption was reasonable by comparing the estimate to current and historical transactions. Evaluating the appropriateness of management's assessment of the timing of revenue recognition involved inspecting the customers' certificates of acceptance and theater openings during the year.

Uncertain Tax Positions

As described in notes 2(m) and 11 to the consolidated financial statements, the Company had total tax reserves of \$14.7 million as of December 31, 2019 related to uncertain tax positions. The Company is subject to ongoing tax examinations and assessments in various jurisdictions. As disclosed by management, tax benefits are recognized only when it is more likely than not, based on the technical merits, that the benefits will be sustained on examination. Tax benefits that meet the more-likely-than-not recognition threshold are measured using a probability weighting of the largest amount of tax benefit. As management has further disclosed, tax audits can result in subsequent assessments where the ultimate resolution may result in the Company owing additional taxes above what was provided for. Tax reserves for uncertain tax positions are adjusted by management to reflect (i) their best estimate of the outcome of examinations and assessments and changing facts and circumstances, such as the completion of a tax audit, expiration of a statute of limitations, the refinement of an estimate, and (ii) interest accruals associated with the uncertain tax positions until they are resolved. The estimate of the Company's tax reserves relating to uncertain tax positions required management to assess uncertainties and to make significant judgments about the application of complex tax laws.

The principal considerations for our determination that performing procedures relating to uncertain tax positions is a critical audit matter are (i) there was significant judgment required by management in determining uncertain tax positions, including a high degree of estimation uncertainty relative to the numerous and complex tax laws, frequency of tax audits, and potential for significant adjustments as a result of such audits; this in turn led to (ii) a high degree of auditor judgment, subjectivity and effort in performing procedures to evaluate the recognition and measurement of uncertain tax positions. Also, the evaluation of audit evidence available to support the tax reserves for uncertain tax positions required significant auditor judgment as the nature of the evidence is often subjective, and the audit effort involved the use of professionals with specialized skill and knowledge to assist in evaluating the audit evidence obtained.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to the recognition of the tax reserves for uncertain tax positions, and controls addressing the completeness of the uncertain tax positions, as well as controls over measurement of the tax reserves. These procedures also included, among others, (i) testing the information used in the calculation of the tax reserves for uncertain tax positions; (ii) testing the calculation of the tax reserves for uncertain tax positions by jurisdiction; and (iii) evaluating the status and results of income tax audits with the relevant tax authorities, as applicable. Professionals with specialized skill and knowledge were used to assist in the evaluation of the completeness and measurement of the Company's uncertain tax positions, including evaluating the reasonableness of management's assessment of whether tax positions are more-likely-than-not of being sustained and the amount of potential benefit to be realized, the application of relevant tax laws, and estimated interest and penalties.

/s/ PricewaterhouseCoopers LLP

Chartered Professional Accountants, Licensed Public Accountants
Toronto, Canada
February 19, 2020

We have served as the Company's auditor since 1987, which includes periods before the entity became subject to SEC reporting requirements.

IMAX CORPORATION
CONSOLIDATED BALANCE SHEETS
(In thousands of U.S. dollars except share amounts)

	As at December 31,	
	2019	2018
Assets		
Cash and cash equivalents	\$ 109,484	\$ 141,590
Accounts receivable, net of allowance for doubtful accounts of \$5,138 (December 31, 2018 — \$3,174)	99,513	93,309
Financing receivables, net of allowance for uncollectible amounts (notes 5 and 22(c))	128,038	127,432
Variable consideration receivable from contracts (note 6)	40,040	35,985
Inventories (note 7)	42,989	44,560
Prepaid expenses	10,237	10,294
Film assets (note 8)	17,921	16,367
Property, plant and equipment (note 9)	306,849	280,658
Investment in equity securities (note 22(e))	15,685	1,022
Other Assets (notes 10 and 22(e))	25,034	17,997
Deferred income taxes (note 11)	23,905	31,264
Other intangible assets (note 12)	30,347	34,095
Goodwill	39,027	39,027
Total assets	\$ 889,069	\$ 873,600
Liabilities		
Bank indebtedness (note 13)	\$ 18,229	\$ 37,753
Accounts payable	20,414	32,057
Accrued and other liabilities (notes 8, 14, 15, 16, 22(d), 23 and 26)	112,779	97,724
Deferred revenue	94,552	106,709
Total liabilities	245,974	274,243
Commitments and contingencies (notes 14 and 15)		
Non-controlling interests (note 24(b))	5,908	6,439
Shareholders' equity		
Capital stock (note 16) common shares — no par value. Authorized — unlimited number 61,362,872 issued and 61,175,852 outstanding (December 31, 2018 — 61,478,168 issued and 61,433,589 outstanding)	423,386	422,455
Less: Treasury stock, 187,020 shares at cost (December 31, 2018 — 44,579)	(4,038)	(916)
Other equity	171,789	179,595
Accumulated deficit	(40,253)	(85,385)
Accumulated other comprehensive loss	(3,190)	(3,588)
Total shareholders' equity attributable to common shareholders	547,694	512,161
Non-controlling interests (note 24(a))	89,493	80,757
Total shareholders' equity	637,187	592,918
Total liabilities and shareholders' equity	\$ 889,069	\$ 873,600

Subsequent event (note 29)

(the accompanying notes are an integral part of these consolidated financial statements)

IMAX CORPORATION
CONSOLIDATED STATEMENTS OF OPERATIONS
(In thousands of U.S. dollars, except per share amounts)

	Years Ended December 31,		
	2019	2018	2017
Revenues			
Equipment and product sales (notes 17(b) and 20)	\$ 118,245	\$ 106,591	\$ 103,294
Services (note 20)	188,547	181,740	195,594
Rentals (notes 17(b) and 20)	77,961	74,472	72,281
Finance income	10,911	11,598	9,598
	395,664	374,401	380,767
Costs and expenses applicable to revenues (note 2(n))			
Equipment and product sales	63,627	54,853	48,172
Services (note 17(b))	88,175	84,236	120,629
Rentals	29,690	27,383	26,720
	181,492	166,472	195,521
Gross margin	214,172	207,929	185,246
Selling, general and administrative expenses (note 16(c))	123,456	117,477	109,882
Research and development	5,203	13,728	20,855
Asset impairments (note 22(e))	—	—	1,225
Amortization of intangibles	4,955	4,145	3,019
Receivable provisions, net of recoveries (note 18)	2,430	3,130	2,647
Legal arbitration award (note 15)	—	11,737	—
Executive transition costs (note 25)	—	2,994	—
Exit costs, restructuring charges and associated impairments (note 26)	850	9,542	16,174
Income from operations	77,278	45,176	31,444
Change in fair value of equity securities (note 22(e))	(517)	—	—
Retirement benefits non-service expense (note 23)	(737)	(499)	(518)
Interest income	2,105	1,844	1,027
Interest expense	(2,793)	(2,916)	(1,942)
Income before income taxes and income (loss) from equity-accounted investments, net of tax	75,336	43,605	30,011
Provision for income taxes (note 11)	(16,768)	(9,518)	(16,790)
Income (loss) from equity-accounted investments, net of tax	3	(492)	(703)
Net income	58,571	33,595	12,518
Less: net income attributable to non-controlling interests (note 24(a))	(11,705)	(10,751)	(10,174)
Net income attributable to common shareholders	\$ 46,866	\$ 22,844	\$ 2,344
Net income per share attributable to common shareholders - basic and diluted: (note 16(d))			
Net income per share — basic and diluted	\$ 0.76	\$ 0.36	\$ 0.04

(the accompanying notes are an integral part of these consolidated financial statements)

IMAX CORPORATION
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(In thousands of U.S. dollars)

	Years Ended December 31,		
	2019	2018	2017
Net income	\$ 58,571	\$ 33,595	\$ 12,518
Unrealized defined benefit plan actuarial gain (note 23(a))	157	1,448	1,004
Unrealized postretirement benefit plans actuarial (loss) gain (note 23(c) and 23(d))	(153)	85	125
Prior service cost arising during the period (note 23(a))	(456)	—	—
Unrealized net gain (loss) from cash flow hedging instruments (note 22(d))	552	(2,219)	2,545
Realization of cash flow hedging net loss (gain) upon settlement (note 22(d))	1,183	(408)	(824)
Foreign currency translation adjustments (note 2)	(729)	(3,170)	3,618
Other comprehensive income (loss), before tax	554	(4,264)	6,468
Income tax (expense) recovery related to other comprehensive (loss) income (note 11(h))	(378)	286	(746)
Other comprehensive income (loss), net of tax	176	(3,978)	5,722
Comprehensive income	58,747	29,617	18,240
Less: Comprehensive income attributable to non-controlling interests	(11,483)	(9,735)	(11,322)
Comprehensive income attributable to common shareholders	\$ 47,264	\$ 19,882	\$ 6,918

(the accompanying notes are an integral part of these consolidated financial statements)

IMAX CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands of U.S. dollars)

	Years Ended December 31,		
	2019	2018	2017
Cash provided by (used in):			
Operating Activities			
Net income	\$ 58,571	\$ 33,595	\$ 12,518
Adjustments to reconcile net income to cash from operations:			
Depreciation and amortization (notes 19(c) and 21(a))	63,487	57,437	66,807
Write-downs, net of recoveries (notes 19(d) and 21(a))	6,806	11,770	29,568
Deferred income taxes	6,762	(6,923)	(4,017)
Stock and other non-cash compensation	23,570	23,723	24,075
Unrealized foreign currency exchange loss (gain)	32	631	(502)
Change in fair value of equity securities (note 22(e))	517	—	—
Loss from equity-accounted investments	730	95	306
(Gain) loss on non-cash contribution to equity-accounted investees	(733)	397	397
Investment in film assets	(23,437)	(23,200)	(34,645)
Changes in other non-cash operating assets and liabilities (note 19(a))	(45,929)	12,447	(9,141)
Net cash provided by operating activities	90,376	109,972	85,366
Investing Activities			
Purchase of property, plant and equipment	(7,421)	(13,368)	(24,143)
Investment in joint revenue sharing equipment	(40,489)	(34,810)	(42,634)
Acquisition of other intangible assets	(2,931)	(8,696)	(5,214)
Investment in equity securities (note 22(e))	(15,153)	—	(1,606)
Net cash used in investing activities	(65,994)	(56,874)	(73,597)
Financing Activities			
Increase in bank indebtedness (note 13)	35,000	65,000	—
Repayment of bank indebtedness (note 13)	(55,000)	(50,667)	(2,000)
Treasury stock repurchased for future settlement of restricted share units (note 16)	(4,038)	(916)	(5,133)
Settlement of restricted share units and options (note 16)	(9,795)	(5,249)	(20,331)
Repurchase of common shares, IMAX China (note 16)	(19,162)	(6,084)	—
Taxes withheld and paid on employee stock awards vested	(590)	(1,437)	(600)
Common shares issued - stock options exercised	2,404	1,017	16,668
Repurchase of common shares	(2,659)	(71,479)	(46,140)
Issuance of subsidiary shares to non-controlling interests (net of return on capital)	1,106	7,796	—
Dividends paid to non-controlling interests	(4,384)	(6,934)	—
Credit facility amendment fees paid	—	(1,909)	—
Net cash used in financing activities	(57,118)	(70,862)	(57,536)
Effects of exchange rate changes on cash	630	629	(267)
Decrease in cash and cash equivalents during year	(32,106)	(17,135)	(46,034)
Cash and cash equivalents, beginning of year	141,590	158,725	204,759
Cash and cash equivalents, end of year	\$ 109,484	\$ 141,590	\$ 158,725

(the accompanying notes are an integral part of these consolidated financial statements)

IMAX CORPORATION
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
(In thousands of U.S. dollars except share amounts)

	Years Ended December 31,		
	2019	2018	2017
Adjustments to capital stock:			
Balance, beginning of year	\$ 421,539	\$ 440,664	\$ 437,274
Change in shares held in treasury	(3,122)	4,216	(3,194)
Employee stock options exercised	1,752	218	14,652
Fair value of stock options exercised at the grant date	104	70	3,542
Average carrying value of repurchased and retired common shares	(925)	(23,629)	(11,884)
Issuance of common shares for vested restricted share units	—	—	274
Balance, end of year	419,348	421,539	440,664
Adjustments to other equity:			
Balance, beginning of year	179,595	175,300	177,304
Paid-in-capital for employee stock options granted	8,910	5,907	5,496
Paid-in-capital for restricted share units granted	13,985	16,325	17,157
Paid-in-capital for restricted share units vested	(10,525)	(12,582)	(14,756)
Cash received from the issuance of common shares in excess of par value	651	799	2,017
Fair value of stock options exercised at the grant date	(104)	(70)	(3,542)
Common shares repurchased, IMAX China	(19,162)	(6,084)	—
Paid-in-capital for non-employee stock options granted and vested	—	—	17
Stock options exercised from treasury shares purchased on open market	(1,561)	—	(8,393)
Balance, end of year	171,789	179,595	175,300
Adjustments to accumulated deficit:			
Balance, beginning of year	(85,385)	(87,592)	(47,366)
Retrospective adoption of ASC Topic 606, Revenue from Contracts with Customers	—	27,213	—
Retrospective adoption of ASC Topic 740, Intra-entity transfers	—	—	(8,314)
Net income attributable to common shareholders	46,866	22,844	2,344
Common shares repurchased and retired	(1,734)	(47,850)	(34,256)
Balance, end of year	(40,253)	(85,385)	(87,592)
Adjustments to accumulated other comprehensive loss:			
Balance, beginning of year	(3,588)	(626)	(5,200)
Other comprehensive income (loss), net of tax	398	(2,962)	4,574
Balance, end of year	(3,190)	(3,588)	(626)
Adjustments to non-controlling interests:			
Balance, beginning of year	80,757	74,511	59,562
Retrospective adoption of ASC Topic 606, Revenue from Contracts with Customers	—	735	—
Net income attributable to non-controlling interests	13,343	13,461	13,801
Other comprehensive (loss) income, net of tax	(223)	(1,016)	1,148
Dividends paid to non-controlling shareholders	(4,384)	(6,934)	—
Balance, end of year	89,493	80,757	74,511
Total Shareholders' Equity	\$ 637,187	\$ 592,918	\$ 602,257
Common shares issued and outstanding:			
Balance, beginning of year	61,433,589	64,695,550	66,159,902
Employee stock options exercised	19,088	12,750	405,229
Restricted share units vested (net of shares withheld for tax)	—	—	7,127
Restricted share units and stock option exercises settled from treasury shares purchased on open market	44,579	206,651	66,093
Repurchase of common shares	(134,384)	(3,436,783)	(1,736,150)
Shares held in treasury	(187,020)	(44,579)	(206,651)
Balance, end of year	61,175,852	61,433,589	64,695,550

(The accompanying notes are an integral part of these consolidated financial statements)

IMAX CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Tabular amounts in thousands of U.S. dollars, unless otherwise stated)

1. Description of the Business

IMAX Corporation, together with its consolidated subsidiaries (the “Company”), is an entertainment technology company specializing in digital and film-based motion picture technologies, whose principal activities are the:

- design, manufacture, sale and lease of proprietary theater systems for IMAX theaters principally owned and operated by commercial and institutional customers located in 81 countries and territories as at December 31, 2019;
- production, digital re-mastering, post-production and/or distribution of certain films shown throughout the IMAX theater network;
- provision of other services to the IMAX theater network, including ongoing maintenance and extended warranty services for IMAX theater systems;
- operation of certain theaters primarily in the United States; and
- other activities, which includes short-term rental of cameras and aftermarket sales of projector system components.

The Company refers to all theaters using the IMAX theater system as “IMAX theaters.”

The Company’s revenues from equipment and product sales include the sale and sales-type leasing of its theater systems and sales of their associated parts and accessories, contingent rentals on sales-type leases and contingent additional payments on sales transactions.

The Company’s revenues from services include the provision of maintenance and extended warranty services, digital re-mastering services, film production and film post-production services, film distribution, and the operation of certain theaters.

The Company’s rentals include revenues from the leasing of its theater systems that are operating leases, contingent rentals on operating leases, joint revenue sharing arrangements and the rental of the Company’s cameras and camera equipment.

The Company’s finance income represents interest income and accretion of variable consideration arising from the sales-type leases and financed sales of the Company’s theater systems.

2. Summary of Significant Accounting Policies

Significant accounting policies are summarized as follows:

The Company prepares its consolidated financial statements in accordance with U.S. GAAP.

(a) Basis of Consolidation

The consolidated financial statements include the accounts of the Company together with its consolidated subsidiaries, except for subsidiaries which the Company has identified as variable interest entities (“VIEs”) where the Company is not the primary beneficiary.

The Company has evaluated its various variable interests to determine whether they are VIEs as required by the Consolidation Topic of the Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC” or “Codification”).

The Company has ten film and content related companies that are VIEs. For five of the Company’s film production companies, the Company has determined that it is the primary beneficiary of these entities as the Company has the power to direct the activities of the respective VIE that most significantly impact the respective VIE’s economic performance and has the obligation to absorb losses of the VIE that could potentially be significant to the respective VIE or the right to receive benefits from the respective VIE that could potentially be significant to the respective VIE. The majority of these consolidated assets are held by the IMAX Original Film Fund (the “Original Film Fund”) as described in note 24(b). For the other five film production companies which are VIEs, the Company did not consolidate these film entities since it does not have the power to direct activities and does not absorb the majority of the expected losses or expected residual returns. The Company equity accounts for these entities. A loss in value of an investment other than a temporary decline is recognized as a charge to the consolidated statements of operations.

Total assets and liabilities of the Company's consolidated VIEs are as follows:

	December 31, 2019	December 31, 2018
Total assets	\$ 9,677	\$ 12,203
Total liabilities	\$ 15,528	\$ 11,573

Total assets and liabilities of the VIE entities which the Company does not consolidate are as follows:

	December 31, 2019	December 31, 2018
Total assets	\$ 448	\$ 447
Total liabilities	\$ 372	\$ 362

The Company accounts for investments in new business ventures using the guidance of the FASB ASC 323 "Investments – Equity Method and Joint Ventures" ("ASC 323") and ASC 320 "Investments in Debt and Equity Securities" ("ASC 320"), as appropriate.

All intercompany accounts and transactions, including all unrealized intercompany profits on transactions with equity-accounted investees, have been eliminated.

(b) Use of Estimates

The preparation of consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and judgments that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could be materially different from these estimates. Significant estimates made by management include, but are not limited to: estimated transaction price related to distinct performance obligations; economic lives of joint revenue sharing equipment; allowances for potential uncollectability of accounts receivable, financing receivables and net investment in leases; provisions for inventory obsolescence; ultimate revenues for film assets; impairment provisions for film assets, long-lived assets and goodwill; depreciable lives of property, plant and equipment and right-of-use assets; discount rates of lease liabilities; useful lives of intangible assets; pension plan assumptions; accruals for contingencies including uncertain tax positions; valuation allowances for deferred income tax assets; and, estimates of the fair value of stock-based payment awards.

(c) Cash and Cash Equivalents

The Company considers all highly liquid investments convertible to a known amount of cash and with an original maturity to the Company of three months or less to be cash equivalents.

(d) Accounts Receivable and Financing Receivables

Allowances for doubtful accounts receivable are based on the Company's assessment of the collectability of specific customer balances, which is based upon a review of the customer's credit worthiness, past collection history and the underlying asset value of the equipment, where applicable. Interest on overdue accounts receivable is recognized as income as the amounts are collected.

For trade accounts receivable that have characteristics of both a contractual maturity of one year or less, and arose from the sale of other goods or services, the Company charges off the balance against the allowance for doubtful accounts when it is known that a provided amount will not be collected.

The Company monitors the performance of the theaters to which it has leased or sold theater systems which are subject to ongoing payments. When facts and circumstances indicate that there is a potential impairment in the net investment in lease or a financing receivable, the Company will evaluate the potential outcome of either a renegotiation involving changes in the terms of the receivable or defaults on the existing lease or financed sale agreements. The Company will record a provision if it is considered probable that the Company will be unable to collect all amounts due under the contractual terms of the arrangement or a renegotiated lease amount will cause a reclassification of the sales-type lease to an operating lease.

When the net investment in lease or the financing receivable is impaired, the Company will recognize a provision for the difference between the carrying value in the investment and the present value of expected future cash flows discounted using the effective interest rate for the net investment in the lease or the financing receivable. If the Company expects to recover the theater system, the provision is equal to the excess of the carrying value of the investment over the fair value of the equipment.

When the minimum lease payments are renegotiated and the lease continues to be classified as a sales-type lease, the reduction in payments is applied to reduce unearned finance income.

These provisions are adjusted when there is a significant change in the amount or timing of the expected future cash flows or when actual cash flows differ from cash flow previously expected.

Once a net investment in lease or financing receivable is considered impaired, the Company does not recognize finance income until the collectability issues are resolved. When finance income is not recognized, any payments received are applied against outstanding gross minimum lease amounts receivable or gross receivables from financed sales. Once the collectability issues are resolved, the Company will once again commence the recognition of interest income.

(e) Inventories

Inventories are carried at the lower of cost, determined on an average cost basis, and net realizable value except for raw materials, which are carried at the lower of cost and replacement cost. Finished goods and work-in-process include the cost of raw materials, direct labor, theater design costs, and an applicable share of manufacturing overhead costs.

The costs related to theater systems under sales and sales-type lease arrangements are relieved from inventory to costs and expenses applicable to revenues-equipment and product sales when revenue recognition criteria are met. The costs related to theater systems under operating lease arrangements and joint revenue sharing arrangements are transferred from inventory to assets under construction in property, plant and equipment when allocated to a signed joint revenue sharing arrangement or when the arrangement is first classified as an operating lease.

The Company records provisions for excess and obsolete inventory based upon current estimates of future events and conditions, including the anticipated installation dates for the current backlog of theater system contracts, technological developments, signings in negotiation, growth prospects within the customers' ultimate marketplace and anticipated market acceptance of the Company's current and pending theater systems.

Finished goods inventories can contain theater systems for which title has passed to the Company's customer (as the theater system has been delivered to the customer) but the revenue recognition criteria as discussed in note 2(n) have not been met.

(f) Film Assets

Costs of producing films, including labor, allocated overhead, capitalized interest, and costs of acquiring film rights are recorded as film assets and accounted for in accordance with Entertainment-Films Topic of the FASB ASC. Production financing provided by third parties that acquire substantive rights in the film is recorded as a reduction of the cost of the production. Film assets are amortized and participation costs are accrued using the individual-film-forecast method in the same ratio that current gross revenues bear to current and anticipated future ultimate revenues. Estimates of ultimate revenues are prepared on a title-by-title basis and reviewed regularly by management and revised where necessary to reflect the most current information. Ultimate revenues for films include estimates of revenue over a period not to exceed ten years following the date of initial release.

Film exploitation costs, including advertising costs, are expensed as incurred.

Costs, including labor and allocated overhead, of digitally re-mastering films where the copyright is owned by a third party and the Company shares in the revenue of the third party are included in film assets. These costs are amortized using the individual-film-forecast method in the same ratio that current gross revenues bear to current and anticipated future ultimate revenues from the re-mastered film.

The recoverability of film assets is dependent upon commercial acceptance of the films. If events or circumstances indicate that the recoverable amount of a film asset is less than the unamortized film costs, the film asset is written down to its fair value. The Company determines the fair value of its film assets using a discounted cash flow model.

(g) Property, Plant and Equipment

Property, plant and equipment are recorded at cost and are depreciated on a straight-line basis over their estimated useful lives as follows:

Theater system components ⁽¹⁾	—	over the equipment's anticipated useful life (7 to 20 years)
Camera equipment	—	5 to 10 years
Buildings	—	20 to 25 years
Office and product equipment	—	3 to 5 years
Leasehold improvements	—	over the shorter of the initial term of the underlying leases plus any reasonably assured renewal terms, and the useful life of the asset

(1) Includes equipment under joint revenue sharing arrangements.

Equipment and components allocated to be used in future operating leases and joint revenue sharing arrangements, as well as direct labor costs and an allocation of direct production costs, are included in assets under construction until such equipment is installed and in working condition, at which time the equipment is depreciated on a straight-line basis over the lesser of the term of the joint revenue sharing arrangement and the equipment's anticipated useful life. The estimated useful life is periodically reviewed for the equipment and components used in joint revenue sharing arrangements to determine if any adjustments need to be made to the current amortization.

The Company reviews the carrying values of its property, plant and equipment for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset or asset group might not be recoverable. Assets are grouped at the lowest level for which identifiable cash flows are largely independent when testing for, and measuring for, impairment. In performing its review of recoverability, the Company estimates the future cash flows expected to result from the use of the asset or asset group and its eventual disposition. If the sum of the expected undiscounted future cash flows is less than the carrying amount of the asset or asset group, an impairment loss is recognized in the consolidated statements of operations. Measurement of the impairment loss is based on the excess of the carrying amount of the asset or asset group over the fair value calculated using discounted expected future cash flows.

A liability for the fair value of an asset retirement obligation associated with the retirement of tangible long-lived assets and the associated asset retirement costs are recognized in the period in which the liability and costs are incurred if a reasonable estimate of fair value can be made using a discounted cash flow model. The associated asset retirement costs are capitalized as part of the carrying amount of the long-lived asset and subsequently amortized over the asset's useful life. The liability is accreted over the period to expected cash outflows.

(h) Investment in Equity Securities

Equity securities with readily determinable fair values are reported at fair value with changes in fair value recorded within the change in fair value of equity securities in the consolidated statements of operations.

(i) Other Assets

Other assets include lease incentives, deferred selling costs that are direct and incremental to the acquisition of sales contracts, various investments, insurance recoverable and foreign currency derivatives.

When no amounts have been drawn down on the related debt instrument, the costs of debt financing are deferred and amortized over the term of the debt using the effective interest rate method. When amounts are drawn on the debt instrument, the deferred financing fees are reclassified to net against the outstanding debt amount and amortized over the life of the debt instrument and recognized in interest expense.

Selling costs related to an arrangement incurred prior to recognition of the related revenue are deferred and expensed to costs and expenses applicable to revenues upon: (i) recognition of the contract's theater system revenue; or (ii) abandonment of the sale arrangement.

Foreign currency derivatives are accounted for at fair value using quoted prices in closed exchanges (Level 2 input in accordance with the Fair Value Measurements Topic of the FASB ASC hierarchy).

The Company may provide lease incentives to certain exhibitors which are essential to entering into the respective lease arrangement. Lease incentives include payments made to or on behalf of the exhibitor. These lease incentives are recognized as a reduction in rental revenue on a straight-line basis over the term of the lease.

Investments in new business ventures are accounted for using ASC 323 as described in note 2(a). The Company currently accounts for its joint venture investment with TCL Multimedia Technology Holdings Limited (“TCL”), using the equity method of accounting. The Company accounts for in-kind contributions to its equity investment in accordance with ASC 845 “Non-Monetary Transactions” (“ASC 845”) whereby if the fair value of the asset or assets contributed is greater than the carrying value a partial gain shall be recognized.

The Company’s investment in debt securities is classified as an available-for-sale investment in accordance with ASC 320. Unrealized holding gains and losses for this investment is excluded from earnings and reported in other comprehensive income until realized. Realization occurs upon sale of a portion of or the entire investment. The investment is impaired if the fair value is less than cost, which is assessed in each reporting period. When the Company intends to sell a specifically identified beneficial interest, a write-down for other-than-temporary impairment shall be recognized in earnings.

The Company’s investment in preferred shares, which meets the criteria for classification as an equity security in accordance with ASC 325, is accounted for at cost. The Company records the related warrants at fair value upon recognition date. Warrants are recognized over the term of the agreement.

(j) Goodwill

Goodwill represents the excess of purchase price over the fair value of net identifiable assets acquired in a purchase business combination. Goodwill is not subject to amortization and is tested for impairment annually (on September 30th) or more frequently if events occur or circumstances change that indicate that the asset might be impaired. The Company performs a qualitative assessment of its reporting units and certain select quantitative calculations against its current long-range plan to determine whether it is more likely than not (that is, a likelihood of more than 50 percent) that the fair value of a reporting unit is less than its carrying amount. Impairment of goodwill is tested at the reporting unit level by comparing the reporting unit’s carrying amount, including goodwill, to the fair value of the reporting unit. The fair value of the reporting unit is estimated using a discounted cash flow approach. Any impairment loss is expensed in the consolidated statement of operations and is not reversed if the fair value subsequently increases.

(k) Other Intangible Assets

Patents, trademarks and other intangibles are recorded at cost and are amortized on a straight-line basis over estimated useful lives ranging from 4 to 10 years except for intangible assets that have an identifiable pattern of consumption of the economic benefit of the asset, which are amortized over the consumption pattern.

The Company reviews the carrying values of its other intangible assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset or asset group might not be recoverable. Assets are grouped at the lowest level for which identifiable cash flows are largely independent when testing for, and measuring for, impairment. In performing its review for recoverability, the Company estimates the future cash flows expected to result from the use of the asset or asset group and its eventual disposition. If the sum of the expected undiscounted future cash flows is less than the carrying amount of the asset or asset group, an impairment loss is recognized in the consolidated statement of operations. Measurement of the impairment loss is based on the excess of the carrying amount of the asset or asset group over the fair value calculated using discounted expected future cash flows.

(l) Deferred Revenue

Deferred revenue represents cash received prior to revenue recognition criteria being met for theater system sales or leases, film contracts, maintenance and extended warranty services, film related services and film distribution.

(m) Income Taxes

Income taxes are accounted for under the liability method whereby deferred income tax assets and liabilities are recognized for the expected future tax consequences of temporary differences between the accounting and tax bases of assets and liabilities. Deferred income tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which temporary differences are expected to be recovered or settled. The effect on deferred income tax assets and liabilities of a change in tax rates or laws is recognized in the consolidated statement of operations in the period in which the change is enacted. Investment tax credits are recognized as a reduction of income tax expense.

The Company assesses realization of deferred income tax assets and, based on all available evidence, concludes whether it is more likely than not that the net deferred income tax assets will be realized. A valuation allowance is provided for the amount of deferred income tax assets not considered to be realizable.

The Company is subject to ongoing tax exposures, examinations and assessments in various jurisdictions. The Company follows the provisions of ASC 740-10-25 that provide a recognition threshold and measurement criteria for the financial statement recognition of a tax benefit taken in a tax return. Tax benefits are recognized only when it is more likely than not, based on the technical merits, that the benefits will be sustained on examination. Tax benefits that meet the more-likely-than-not recognition threshold are measured using a probability weighting of the largest amount of tax benefit that has greater than 50% likelihood of being realised upon settlement. Whether the more-likely-than-not recognition threshold is met for a particular tax benefit is a matter of judgment based on the individual facts and circumstances evaluated in light of all available evidence as of the balance sheet date. Although we believe we have adequately accounted for our uncertain tax positions, tax audits can result in subsequent assessments where the ultimate resolution may result in us owing additional taxes above what was provided for.

Tax reserves for uncertain tax positions are adjusted by the Company to reflect its best estimate of the outcome of examinations and assessments and in light of changing facts and circumstances, such as the completion of a tax audit, expiration of a statute of limitations, the refinement of an estimate, and interest accruals associated with the uncertain tax positions until they are resolved. Some of these adjustments require significant judgment in estimating the timing and amount of the additional tax expense.

(n) Revenue Recognition

Contracts with Multiple Performance Obligations

The Company's revenue arrangements with certain customers may involve performance obligations consisting of the delivery of a theater system (projector, sound system, screen system and, if applicable, 3D glasses cleaning machine); services associated with the theater system including theater design support, supervision of installation, and projectionist training; a license to use the IMAX brand; 3D glasses; maintenance and extended warranty services; and licensing of films. The Company evaluates all of the performance obligations in an arrangement to determine which are considered distinct, either individually or in a group, for accounting purposes and which of the deliverables represent separate units of accounting based on the applicable accounting guidance in ASC Topic 842 "Leases"; ASC Topic 460 "Guarantees"; and ASC Topic 606 "Revenue from Contracts with Customers". If separate units of accounting are either required under the relevant accounting standards or determined to be applicable under the Revenue Recognition Topic, the total transaction price received or receivable in the arrangement is allocated based on the applicable guidance in the above noted standards.

Theater Systems

The Company has identified the projection system, sound system, screen system and, if applicable, 3D glasses cleaning machine, theater design support, supervision of installation, projectionist training and the use of the IMAX brand to be, as a group, a distinct performance obligation, and a single unit of accounting (the "System Obligation"). When an arrangement does not include all the performance obligations of a System Obligation, the performance obligations of the System Obligation included in the arrangement are considered by the Company to be a grouped distinct performance obligation and a single unit of accounting. The Company is not responsible for the physical installation of the equipment in the customer's facility; however, the Company supervises the installation by the customer. The customer has the right to use the IMAX brand from the date the Company and the customer enter into an arrangement.

The Company's System Obligation arrangements involve either a lease or a sale of the theater system. The transaction price for the System Obligation, other than for those delivered pursuant to joint revenue sharing arrangements, consist of upfront or initial payments made before and after the final installation of the theater system equipment and ongoing payments throughout the term of the lease or over a period of time, as specified in the arrangement. The ongoing payments are the greater of an annual fixed minimum amount or a certain percentage of the theater box-office. Amounts received in excess of the annual fixed minimum amounts are considered contingent payments. The Company's arrangements are non-cancellable, unless the Company fails to perform its obligations. In the absence of a material default by the Company, there is no right to any remedy for the customer under the Company's arrangements. If a material default by the Company exists, the customer has the right to terminate the arrangement and seek a refund only if the customer provides notice to the Company of a material default and only if the Company does not cure the default within a specified period.

Transaction price is allocated to each separate performance obligation for each good or service based on estimated standalone selling prices. The Company uses observable prices when the Company sells the deliverable separately and is the price actually charged by the Company for that deliverable. Standalone prices are established for the Company's System Obligation, maintenance and extended warranty services and film license arrangements. The Company uses an adjusted market assessment approach for separate performance obligations that do not have standalone selling prices or third-party evidence of estimated standalone selling price. The Company considers multiple factors including the Company's historical pricing practices, product class, market competition and geography.

Sales Arrangements

For arrangements qualifying as sales, the revenue allocated to the System Obligation is recognized in accordance with the Revenue Recognition Topic of the FASB ASC, when all of the following conditions signifying transfer of control have been met: (i) the projector, sound system and screen system have been installed and are in full working condition, (ii) the 3D glasses cleaning machine, if applicable, has been delivered, (iii) projectionist training has been completed and (iv) the earlier of (a) receipt of written customer acceptance certifying the completion of installation and run-in testing of the equipment and the completion of projectionist training or (b) public opening of the theater.

The initial revenue recognized consists of the initial payments received and the present value of any future initial payments, fixed minimum ongoing payments and an estimate of future variable consideration (future CPI and additional payments in excess of the minimums in the case of full sale arrangements or a percentage of ongoing box office in the case of hybrid sales arrangements) that have been attributed to this performance obligation.

The Company has also agreed, on occasion, to sell equipment under lease or at the end of a lease term. Transaction price agreed to for these lease buyouts is included in revenues from equipment and product sales.

Taxes assessed by governmental authorities that are both imposed on and concurrent with the specific revenue-producing transactions and collected by the Company have been excluded from the measurement of the transaction prices discussed above.

Lease Arrangements

As a lessor, for lease arrangements, the Company determines the classification of the lease in accordance with ASC Topic 842. The Company adopted ASC Topic 842 as of January 1, 2019, which with respect to lessor arrangements is consistent with ASC 840, which was applied in prior periods. A lease arrangement that transfers substantially all of the benefits and risks incident to ownership of the equipment is classified as a sales-type lease based on the criteria established by the accounting standard; otherwise the lease is classified as an operating lease. Prior to commencement of the lease term for the equipment, the Company may modify certain payment terms or make concessions. If these circumstances occur, the Company reassesses the classification of the lease based on the modified terms and conditions.

For sales-type leases, the revenue allocated to the System Obligation is recognized when the lease term commences, which the Company deems to be when all of the following conditions have been met: (i) the projector, sound system and screen system have been installed and are in full working condition; (ii) the 3D glasses cleaning machine, if applicable, has been delivered; (iii) projectionist training has been completed; and (iv) the earlier of (a) receipt of the written customer acceptance certifying the completion of installation and run-in testing of the equipment and the completion of projectionist training or (b) public opening of the theater, provided collectability is reasonably assured.

The initial revenue recognized for sales-type leases consists of the initial payments received and the present value of future initial payments and fixed minimum ongoing payments computed at the interest rate implicit in the lease. Contingent payments in excess of the fixed minimum payments are recognized when reported by theater operators, provided collectability is reasonably assured.

For operating leases, initial payments and fixed minimum ongoing payments are recognized as revenue on a straight-line basis over the lease term. For operating leases, the lease term is considered to commence when all of the following conditions have been met: (i) the projector, sound system and screen system have been installed and in full working condition; (ii) the 3D glasses cleaning machine, if applicable, has been delivered; (iii) projectionist training has been completed; and (iv) the earlier of (a) receipt of written customer acceptance certifying the completion of installation and run-in testing of the equipment and the completion of projectionist training or (b) public opening of the theater. Contingent payments in excess of fixed minimum ongoing payments are recognized as revenue when reported by theater operators, provided collectability is reasonably assured.

Revenues from joint revenue sharing arrangements with upfront payments that qualify for classification as sales-type leases are recognized in accordance with the sales and sales-type lease criteria discussed above. Contingent revenues from joint revenue sharing arrangements are recognized as box-office results and concessions revenues are reported by the theater operator, provided collectability is reasonably assured.

Finance Income

Finance income, which includes the accretion of variable consideration under ASC Topic 606, is recognized over the term of the sales-type lease or financed sales receivable, provided collectability is reasonably assured. Finance income recognition ceases when the Company determines that the associated receivable is not collectible.

Finance income is suspended when the Company identifies a theater that is delinquent, non-responsive or not negotiating in good faith with the Company. Once the collectability issues are resolved the Company will resume recognition of finance income.

Improvements and Modifications

Improvements and modifications to the theater system after installation are treated as separate performance obligations, if and when the Company is requested to perform these services. Revenue is recognized for these services once they have been provided.

Cost of Equipment and Product Sales

Theater systems and other equipment subject to sales-type leases and sales arrangements includes the cost of the equipment and costs related to project management, design, delivery and installation supervision services as applicable. The costs related to theater systems under sales and sales-type lease arrangements are relieved from inventory to costs and expenses applicable to revenues-equipment and product sales when revenue recognition criteria are met. In addition, the Company defers direct selling costs such as sales commissions and other amounts related to these contracts until the related revenue is recognized. These costs included in costs and expenses applicable to revenues-equipment and product sales, totaled \$2.0 million in 2019 (2018 — \$2.0 million; 2017 — \$2.7 million). The cost of equipment and product sales prior to direct selling costs was \$63.6 million in 2019 (2018 — \$52.9 million; 2017 — \$45.5 million). The Company may have warranty obligations at or after the time revenue is recognized which require replacement of certain parts that do not affect the functionality of the theater system or services. The costs for warranty obligations for known issues are accrued as charges to costs and expenses applicable to revenues-equipment and product sales at the time revenue is recognized based on the Company's past historical experience and cost estimates.

Cost of Rentals

For theater systems and other equipment subject to an operating lease or placed in a theater operators' venue under a joint revenue sharing arrangement, the cost of equipment and those costs that result directly from and are essential to the arrangement, is included within property, plant and equipment. Depreciation and impairment losses, if any, are included in cost of rentals based on the accounting policy set out in note 2(g). After the adoption of ASC Topic 606, commissions continue to be deferred and recognized as costs and expenses applicable to revenues-rentals in the month they are earned, which is typically the month of installation. These costs totaled \$0.4 million in 2019 (2018 — \$0.9 million; 2017 — \$1.6 million). Direct advertising and marketing costs for each theater are charged to costs and expenses applicable to revenues-rentals as incurred. These costs totaled \$3.0 million in 2019 (2018 — \$2.1 million; 2017 — \$2.6 million).

Terminations, Consensual Buyouts and Concessions

The Company enters into theater system arrangements with customers that contain customer payment obligations prior to the scheduled installation of the theater system. During the period of time between signing and the installation of the theater system, which may extend several years, certain customers may be unable to, or may elect not to, proceed with the theater system installation for a number of reasons including business considerations, or the inability to obtain certain consents, approvals or financing. Once the determination is made that the customer will not proceed with installation, the arrangement may be terminated under the default provisions of the arrangement or by mutual agreement between the Company and the customer (a "consensual buyout"). Terminations by default are situations when a customer does not meet the payment obligations under an arrangement and the Company retains the amounts paid by the customer. Under a consensual buyout, the Company and the customer agree, in writing, to a settlement and to release each other of any further obligations under the arrangement or an arbitrated settlement is reached. Any initial payments retained or additional payments received by the Company are recognized as revenue when the settlement arrangements are executed and the cash is received, respectively.

In addition, the Company could agree with customers to convert their obligations for other theater system configurations that have not yet been installed to arrangements to acquire or lease the IMAX digital theater system. The Company considers these situations to be a termination of the previous arrangement and origination of a new arrangement for the IMAX digital theater system.

The Company may offer certain incentives to customers to complete theater system transactions including payment concessions or free services and products such as film licenses or 3D glasses. Reductions in, and deferral of, payments are taken into account in determining the transaction price either by a direct reduction in the sales price or a reduction of payments to be discounted in accordance with the Leases or Interests Topic of the FASB ASC. Free products and services are accounted for as separate units of accounting. Other consideration given by the Company to customers are accounted for in accordance with ASC Topic 606 “Revenue from Contracts with Customers”.

Maintenance and Extended Warranty Services

Maintenance and extended warranty services may be provided under an arrangement with multiple performance obligations or as a separately priced contract. Revenues related to these services are deferred and recognized on a straight-line basis over the contract period and are recognized in Services revenues. Maintenance and extended warranty services includes maintenance of the customer’s equipment and replacement parts. Under certain maintenance arrangements, maintenance services may include additional training services to the customer’s technicians. All costs associated with this maintenance and extended warranty program are expensed as incurred. A loss on maintenance and extended warranty services is recognized if the expected cost of providing the services under the contracts exceeds the related deferred revenue. As the maintenance services are a stand ready obligation with the cost of providing the service expected to increase throughout the term, revenue is recognized over the term of the arrangement such that increased amounts are recognized in later periods.

Film Production and IMAX DMR Services

In certain film arrangements, the Company produces a film financed by third parties whereby the third party retains the copyright and the Company obtains exclusive distribution rights. Under these arrangements, the Company is entitled to receive a fixed fee or to retain as a fee the excess of funding over cost of production (the “production fee”). The third parties receive a portion of the revenues received by the Company from distributing the film, which is charged to costs and expenses applicable to revenues-services. The production fees are deferred, and recognized as a reduction in the cost of the film based on the ratio of the Company’s distribution revenues recognized in the current period to the ultimate distribution revenues expected from the film. Film exploitation costs, including advertising and marketing totaled \$22.5 million in 2019 (2018 — \$16.5 million; 2017 — \$15.4 million) and are recorded in costs and expenses applicable to revenues-services as incurred.

Revenue from film production services where the Company does not hold the associated distribution rights are recognized in Services revenues when performance obligations associated with the contractual service are satisfied.

Revenues from digitally re-mastering (IMAX DMR) films where third parties own or hold the copyrights and the rights to distribute the film are derived in the form of processing fees and recoupments calculated as a percentage of box-office receipts generated from the re-mastered films. Processing fees are recognized as Services revenues when the performance obligations of the related re-mastering service are satisfied. Recoupments, calculated as a percentage of box-office receipts, are recognized as Services revenue when box-office receipts are reported by the third party that owns or holds the related film rights.

Losses on film production and IMAX DMR services are recognized as costs and expenses applicable to revenues-services in the period when it is determined that the Company’s estimate of total revenues to be realized by the Company will not exceed estimated total production costs to be expended on the film production and the cost of IMAX DMR services.

Film Distribution

Revenue from the licensing of films is recognized in Services revenues when all performance obligations have been satisfied, which includes the completion and delivery of the film and the commencement of the license period. When license fees are based on a percentage of box-office receipts, revenue is recognized when box-office receipts are reported by exhibitors. Film exploitation costs, including advertising and marketing, totaled an expense of \$0.4 million in 2019 (2018 — an expense of \$2.2 million; 2017 — a recovery of \$0.7 million) and are recorded in costs and expenses applicable to revenues-services as incurred.

Revenues from post-production film services are recognized in Services revenues when performance of the contracted services are satisfied.

Other

The Company recognizes revenue in Services revenues from its owned and operated theaters resulting from box-office ticket and concession sales as tickets are sold, films are shown and upon the sale of various concessions. The sales are cash or credit card transactions with theater goers based on fixed prices per seat or per concession item.

In addition, the Company enters into commercial arrangements with third party theater owners resulting in the sharing of profits and losses which are recognized in Services revenues when reported by such theaters. The Company also provides management services to certain theaters and recognizes revenue over the term of such services.

Revenues on camera rentals are recognized in Rental revenues over the rental period.

Revenue from the sale of 3D glasses is recognized in Equipment and product sales revenue when the 3D glasses have been delivered to the customer.

Other service revenues are recognized in Service revenues when the performance of contracted services is complete.

(o) Leases

The Company adopted ASC Topic 842 on January 1, 2019 (see note 4), utilizing the modified retrospective transition method, which allowed the Company to adopt the standard as of the date of initial application. Prior year comparative amounts are not required to be restated and are presented in accordance with ASC Topic 840, "Leases" or other applicable standards prior to January 1, 2019.

For the year ended December 31, 2019, the Company uses ASC Topic 842 to evaluate whether an arrangement is a lease within the scope of the accounting standard. Transactions accounted for under ASC Topic 842 are not within the scope of ASC Topic 606. Arrangements not within the scope of the accounting standard are accounted for either as a sales or services arrangement, as applicable.

As a lessee, the Company mainly leases office and warehouse storage space which are classified as operating leases. The operating lease right-of-use ("ROU") assets and liabilities are included in Property, Plant and Equipment and Accrued and other liabilities in the Company's consolidated balance sheet. ROU assets represent the Company's right to use an underlying asset for the lease term and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. As most of the leases do not provide an implicit rate, the incremental borrowing rate used in the calculation of the lease liability is based on the location of each leased property. None of the Company's leases include options to purchase the leased property. The implicit rate is used when readily determinable. Most leases include one or more options to renew, with renewal terms that can extend the lease term from one to 5 years or more. The Company determined that it was reasonably certain that the renewal options on its warehouse leases would be exercised based on previous history and knowledge, current understanding of future business needs and level of investment in leasehold improvements, among other considerations. The depreciable life of ROU assets and leasehold improvements are limited by the expected lease term. The Company's lease agreements do not contain any material residual value guarantees or material restrictive covenants. The Company rents or subleases certain office space to third parties, which have a remaining term of less than 12 months and are not expected to be renewed. When there are modifications to the lease agreements, the Company remeasures the lease liabilities to reflect changes to lease payments and recognizes the amount of remeasurement of the lease liability as an adjustment to the ROU assets. The Company reviews the carrying values of the ROU assets for impairment whenever events or changes in circumstances indicate that the carrying amount might not be recoverable. Impairment loss is recognized in the consolidated statement of operations. Amortization of ROU assets and interest on lease liabilities are included in the selling, general and administrative expenses in the consolidated statement of operations.

(p) Research and Development

Research and development costs are expensed as incurred and primarily include projector and sound parts, labor, consulting fees, allocation of overheads and other related materials which pertain to the Company's development of ongoing product and services. Research and development costs pertaining to fixed and intangible assets that have alternative future uses are capitalized and amortized under their related policies.

(q) Foreign Currency Translation

Monetary assets and liabilities of the Company's operations which are denominated in currencies other than the functional currency are translated into the functional currency at the exchange rates prevailing at the end of the period. In 2013, the Company determined that the functional currency of one of its consolidated subsidiaries had changed from the Company's reporting currency to the currency of the nation in which it is domiciled. As a result, in accordance with the FASB ASC 830 "Foreign Currency Matters", the adjustment attributable to current-rate translation of non-monetary assets as of the date of the change was reported in other comprehensive income ("OCI"). The functional currency of its other consolidated subsidiaries continues to be the United States dollar. Foreign exchange translation gains and losses are included in the determination of earnings in the period in which they arise.

Foreign currency derivatives are recognized and measured in the balance sheet at fair value. Changes in the fair value (gains or losses) are recognized in the consolidated statement of operations except for derivatives designated and qualifying as foreign currency hedging instruments. For foreign currency hedging instruments, the effective portion of the gain or loss in a hedge of a forecasted transaction is reported in other comprehensive income (loss) and reclassified to the consolidated statement of operations when the forecasted transaction occurs. Any ineffective portion is recognized immediately in the consolidated statement of operations.

(r) Stock-Based Compensation

The Company's stock-based compensation generally includes stock options, restricted share units ("RSUs") and performance share units ("PSUs"). Stock-based compensation is recognized in accordance with the FASB ASC Topic 505, "Equity" and Topic 718, "Compensation-Stock Compensation." The Company measures stock-based compensation cost based on the grant date fair value of the award, which is recognized as an expense in the consolidated statement of operations on a straight-line basis over the requisite service period. Stock-based compensation expense is not adjusted for estimated forfeitures, but is instead adjusted upon the actual forfeiture of the award.

Stock-based compensation expense includes compensation cost for employee stock-based payment awards granted and all modified, repurchased or cancelled employee awards. In addition, compensation expense includes the compensation cost, based on the grant-date fair value calculated for pro forma disclosures under ASC 718-10-55, for the portion of awards for which required service had not been rendered that were outstanding. Compensation expense for these employee awards is recognized using the straight-line single-option method. The Company utilizes the market yield on U.S. treasury securities (also known as nominal rate) over the contractual term of the instrument being issued.

Stock Options

The Company utilizes a lattice-binomial option-pricing model ("Binomial Model") to determine the fair value of stock option awards on the grant date. The fair value determined by the Binomial Model is affected by the Company's stock price as well as assumptions regarding a number of highly complex and subjective variables. These variables include, but are not limited to, the Company's expected stock price volatility over the term of the award, and actual and projected employee stock option exercise behaviors. The Binomial Model also considers the expected exercise multiple which is the multiple of exercise price to grant price. Option-pricing models were developed for use in estimating the value of traded options that have no vesting or hedging restrictions and are fully transferable. Because the Company's employee stock options have certain characteristics that are significantly different from traded options, and because changes in the subjective assumptions can materially affect the estimated value, in management's opinion, the Binomial Model best provides a fair measure of the fair value of the Company's employee stock options. See note 16(c) for the assumptions used to determine the fair value of stock-based payment awards.

As the Company stratifies its employees into homogeneous groups in order to calculate the grant date fair value of options using the Binomial Model, ranges of assumptions used are presented for the expected life of the option. The Company uses historical data to estimate option exercise behavior within the valuation model; various groups of employees that have similar historical exercise behavior are grouped together for valuation purposes. The expected volatility rate is estimated based on a blended volatility method which takes into consideration the Company's historical share price volatility, the Company's implied volatility which is implied by the observed current market prices of the Company's traded options and the Company's peer group volatility. The Company utilizes the Binomial Model to determine expected option life based on such data as vesting periods of awards, historical data that includes past exercise and post-vesting cancellations and stock price history.

The Company's policy is to issue new common shares from treasury or shares purchased in the open market to satisfy stock options which are exercised.

Restricted Share Units

The fair value of RSU awards is equal to the closing price of the Company's common stock on the date of grant. The value of the portion of the award that is ultimately expected to vest is recognized as compensation expense over the requisite service periods in the Company's consolidated statements of operations.

The Company's RSUs have been classified as equity in accordance with Topic 505.

Performance Share Units

The Company grants two types of PSU awards, one which vests based on a combination of employee service and the achievement of certain EBITDA-based targets and one which vests based on a combination of employee service and the achievement of certain stock-price targets. The fair value of the PSUs with EBITDA-based targets is equal to the closing price of the Company's common stock on the date of grant. The fair value of the PSUs with stock-price targets is determined on the grant date using a Monte Carlo simulation, which is a valuation model which takes into account the likelihood of achieving the stock-price targets embedded in the award ("Monte Carlo Model"). The compensation expense attributable to each type of PSU is recognized on a straight-line basis over the requisite service period.

The fair value determined by the Monte Carlo Model is affected by the Company's stock price as well as assumptions regarding a number of highly complex and subjective variables. These variables include, but are not limited to, the Company's expected stock price volatility over the term of the awards, and actual and projected employee stock option exercise behaviors.

The amount and timing of compensation expense recognized for PSUs with EBITDA-based targets is dependent upon management's quarterly assessment of the likelihood and timing of achieving these targets. If, as a result of management's assessment, it is projected that a greater number of PSUs will vest than previously anticipated, a life-to-date adjustment to increase compensation expense is recorded in the period such determination is made. Conversely, if, as a result of management's assessment, it is projected that a lower number of PSUs will vest than previously anticipated, a life-to-date adjustment to decrease compensation expense is recorded in the period such determination is made.

The Company's PSUs have been classified as equity in accordance with Topic 505.

Awards to Non-Employees

Stock-based awards for services provided by non-employees within the scope of ASC Topic 718 are measured at grant date fair value of the equity instruments that the Company is obligated to issue when service has been rendered and any other conditions necessary to earn the right to benefit from the instruments have been satisfied. The grant date is the date which the Company and the non-employees reach a mutual understanding of the key terms and conditions of stock-based awards. When there are performance conditions related to the vesting of the stock-based awards, the Company assesses the probability of vesting at each reporting date and adjusts the compensation costs based on the probability assessment.

(s) Pension Plans and Postretirement Benefits

The Company has a defined benefit pension plan, the Supplemental Executive Retirement Plan (the "SERP"). As the Company's SERP is unfunded, as at December 31, 2019, a liability is recognized for the benefit obligation.

Assumptions used in computing the defined benefit obligations are reviewed annually by management in consultation with its actuaries and adjusted for current conditions. Actuarial gains or losses and prior service costs or credits that arise during the period but are not recognized as components of net periodic benefits cost are recognized as a component of other comprehensive income. Amounts recognized in accumulated other comprehensive income including unrecognized actuarial gains or losses and prior service costs are adjusted as they are subsequently recognized in the consolidated statement of operations as components of net periodic benefit cost. Prior service costs resulting from the pension plan inception or amendments are amortized over the expected future service life of the employees, cumulative actuarial gains and losses in excess of 10% of the projected benefit obligation are amortized over the expected average remaining service life of the employees, and current service costs are expensed when earned. The remaining weighted average future service life of the employee used in computing the defined benefit obligation for the year ended December 31, 2019 was 3.0 year.

For defined contribution pension plans, required contributions by the Company are recorded as an expense.

A liability is recognized for the unfunded accumulated benefit obligation of the postretirement benefits plan. Assumptions used in computing the accumulated benefit obligation are reviewed by management in consultation with its actuaries and adjusted for current conditions. Net benefit cost is split between operating income and non-operating income, where only the service cost is included in income from operations and the non-service components are included in Retirement benefits non-service expenses. Actuarial gains and losses are recognized as a component of other comprehensive income (loss). Amounts recognized in accumulated other comprehensive income (loss) including unrecognized actuarial gains or losses are adjusted as they are subsequently recognized in the consolidated statement of operations as components of net periodic benefit cost.

(t) Guarantees

The ASC Topic 460 “Guarantees” requires a guarantor to recognize, at the inception of a guarantee, a liability for the fair value of certain guarantees. Disclosures as required under the accounting guidance have been included in note 15(f).

3. New Accounting Standards and Accounting Changes

Adoption of New Accounting Policies

The Company adopted several standards including the following on January 1, 2019.

In 2016, the FASB issued ASU 2016-02, “Leases (Topic 842)” (“ASC Topic 842”). The Company adopted 2016-02 and several associated ASUs on January 1, 2019. See note 4 for a further discussion of the Company’s adoption of ASC Topic 842.

In January 2017, the FASB issued ASU No. 2017-04, “Intangibles – Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment” (“ASU 2017-04”). The adoption of this standard was applied prospectively and did not have an impact on the Company’s consolidated financial statements.

In December 2017, the FASB issued ASU No. 2017-12, “Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities” (“ASU 2017-12”). The adoption of this standard was applied prospectively and did not have an impact on the Company. See note 22(d) for additional disclosure regarding the Company’s hedging arrangements.

In June 2018, the FASB issued ASU No. 2018-07, “Compensation – Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting. The adoption of this standard was applied prospectively and did not have a material impact on the Company’s consolidated financial statements.

In August 2018, the FASB issued ASU No. 2018-13, “Fair Value Measurement (Topic 820): Disclosure Framework – Changes to the Disclosure Requirements for Fair Value Measurement” (“ASU 2018-13”). The adoption of this standard was applied prospectively and did not have a material impact on the Company’s consolidated financial statements.

Recently Issued FASB Accounting Standard Codification Updates Not Yet Adopted

In December 2019, the FASB issued ASU No. 2019-12, “Income Taxes (Topic 740): Simplifying the accounting for income taxes” (“ASU 2019-12”). The purpose of ASU 2019-12 is to simplify the accounting for income taxes. For public business entities, the amendments in ASU 2019-12 are effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2020. The Company is currently assessing the impact of ASU 2019-12 on its consolidated financial statements.

In November 2019, the FASB issued ASU No. 2019-11, “Codification Improvements to Topic 326, Financial Instruments—Credit Losses” (“ASU 2019-11”). The purpose of ASU 2019-11 is to clarify or address stakeholders’ specific issues about certain aspects of the amendments in ASU 2016-13. As the Company has not yet adopted ASU 2016-13, the effective date and transition requirements for the amendments in ASU 2019-11 related to amendments in 2016-13, have the same effective date and transition requirements as ASU 2016-13. ASU 2016-13 is effective for interim and annual reporting periods beginning after December 15, 2019 (see below). The Company is currently assessing the impact of the codification improvements on its consolidated financial statements.

In May 2019, the FASB issued ASU No. 2019-05, “Financial Instruments – Credit Losses (Topic 326)” (“ASU 2019-05”). The purpose of ASU 2019-05 is to provide the option to irrevocably elect the fair value option applied on an instrument-by-instrument basis for certain financial assets upon adoption of ASU 2016-13. Adoption of ASU 2019-05 coincides with the adoption of ASU 2016-13 and will therefore be effective for interim and annual reporting periods beginning after December 15, 2019. The Company’s Accounts receivable, Financing receivables, Variable consideration receivable from contracts and certain small loans receivable are within the scope of ASU 2019-05. The Company has concluded that historical data, adjusted for any current events and expected future economic factors, is the most appropriate modelling information to determine the Company’s expected credit losses. The Company is in the process of completing the necessary analysis for its adoption of ASU 2019-05 in the first quarter of 2020.

In April 2019, the FASB issued ASU No. 2019-04, “Codification Improvements to Topic 326, Financial Instruments – Credit Losses, Topic 815, Derivatives and Hedging, and Topic 825, Financial Instruments” (“ASU 2019-04”). The purpose of ASU 2019-04 is to provide clarification and improve the guidance provided by ASU 2016-01, ASU 2016-13, and ASU 2017-12. Adoption of these amendments are required at the time of adopting ASU 2016-01, ASU 2016-13, and ASU 2017-12. As the Company has not yet adopted ASU 2016-13, the effective date and transition requirements for the amendments in ASU 2019-04 related to amendments in 2016-13, have the same effective date and transition requirements as ASU 2016-13. ASU 2016-13 is effective for interim and annual reporting periods beginning after December 15, 2019 (see below). The Company is currently assessing the impact of the codification improvements on its consolidated financial statements. The Company has previously adopted ASU 2016-01 and ASU 2017-12. As a result, the effective date for adoption of ASU 2019-04 as it pertains to ASU 2016-01 is the fiscal year beginning after December 15, 2019 and ASU 2017-12 is the beginning of the first annual period beginning after the issuance date. The Company is currently assessing the potential impacts of the codification improvements in ASU 2019-04 relating to ASU 2016-01 and 2017-12 on its consolidated financial statements.

In March 2019, the FASB issued ASU No. 2019-02, “Entertainment—Films—Other Assets—Film Costs (Subtopic 926-20) and Entertainment—Broadcasters—Intangibles—Goodwill and Other (Subtopic 920-350)” (“ASU 2019-02”). The purpose of ASU 2019-02 is to align the accounting for production costs of an episodic television series with the accounting for production costs of films by removing the content distinction for capitalization, as well as requiring an entity to reassess estimates of the use of a film in a film group. In addition, ASU 2019-02 will require an entity to test for impairment at a film group level if it is predominantly monetized with other films. Amendments in this update would be applied prospectively, and for public entities, the amendments in ASU 2019-02 are effective for interim and annual reporting periods beginning after December 15, 2019. The Company is currently assessing the impact of ASU 2019-02 on its consolidated financial statements.

In June 2016, the FASB issued ASU No. 2016-13, “Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments” (“ASU 2016-13”). The purpose of ASU 2016-13 is to require a financial asset measured on the amortized cost basis to be presented at the net amount expected to be collected. Credit losses relating to available-for-sale debt securities should be recorded through an allowance for credit losses. For public entities, the amendments in ASU 2016-13 are effective for interim and annual reporting periods beginning after December 15, 2019. The Company is currently assessing the impact of ASU 2016-13 on its consolidated financial statements.

The Company considers the applicability and impact of all recently issued FASB accounting standard codification updates. Accounting standards updates that are not noted above were assessed and determined to be not applicable or not significant to the Company’s consolidated financial statements for the period ended December 31, 2019.

4. Adoption of ASC Topic 842, Leases, effective January 1, 2019

On January 1, 2019, the Company adopted ASC Topic 842 “Leases”. The standard was issued to help investors and other financial statement users better understand the amount, timing, and uncertainty of cash flows arising from leases.

As a lessee, the adoption of the standard resulted in the Company recording a net increase to net lease assets and lease liabilities of approximately \$17.4 million as at January 1, 2019. The gross right-of-use assets and lease liabilities amounted to \$20.0 million, while prepaid expenses of less than \$0.1 million and unamortized lease inducements and other accruals of \$2.5 million were reclassified from accrued liabilities to offset the applicable right-of-use asset. The Company mainly leases office and warehouse storage space. Office equipment is generally purchased outright. Adoption of ASC Topic 842 did not change the lease classification of its leases. The leases continue to be classified as operating leases similar to the guidance under ASC Topic 840. The adoption of ASC Topic 842 did not materially impact the Company’s net earnings and had no impact on cash flows.

As a lessor, several of the Company's leases of IMAX theater systems are classified as sales-type leases. The accounting treatment of its lease arrangements for IMAX theater systems has not changed under Topic ASC 842 as compared to guidance under ASC Topic 840, as the Company has very few sales-type leases with variable consideration tied to an index.

The Company adopted ASC Topic 842, utilizing the modified retrospective transition method, which allowed the Company to adopt the standard as of the date of initial application. Prior year comparative amounts are not required to be restated and are presented in accordance with ASC Topic 840, "Leases" or other applicable standards effective prior to January 1, 2019. The Company has elected the 'package of practical expedients' permitted under the transition guidance within ASC Topic 842, which permits the Company to carry forward the historical lease classification and not reassess whether any expired or existing contracts are or contain leases. In addition, the Company is not required to reassess initial direct costs for any existing leases. The Company did not elect the land easements and the use of hindsight practical expedients in determining the lease term for existing leases. ASC Topic 842 also provides practical expedients for an entity's ongoing accounting. The Company has elected the short-term lease recognition exemption for all leases that qualify. As a result, for those leases with a term of less than 12 months, it will not recognize right-of-use assets or lease liabilities. The Company also elected the practical expedient to not separate lease and non-lease components for all its leases regardless of whether the Company is the lessee or a lessor to the lease.

The following table presents the impact from the adoption of ASC Topic 842 on the Company's assets and liabilities in the consolidated balance sheet:

	Balance at December 31, 2018	ASC Topic 842 Adjustments	Balance at January 1, 2019
Assets			
Property, plant and equipment	\$ 280,658	\$ 17,462	\$ 298,120
Prepaid expenses	10,294	(36)	10,258
Liabilities			
Accrued and other liabilities	97,724	17,426	115,150

5. Lease Arrangements and Financing Receivables

IMAX Corporation as a Lessor:

Several of the Company's leases are classified as sales-type leases for transactions related to the lease of IMAX theater systems. Certain arrangements that are legal sales are also classified as sales-type leases as certain clauses within the arrangements limit transfer of title or provide the Company with conditional rights to the system. The customer's rights under the Company's lease arrangements are described in note 2(n) in the Company's 2019 Form 10-K. The Company classifies its lease arrangements at inception of the arrangement and, if required, after a modification of the lease arrangement, to determine whether they are sales-type leases or operating leases. Under the Company's lease arrangements, the customer has the ability and the right to operate the hardware components or direct others to operate them in a manner determined by the customer. The Company's lease portfolio terms are typically non-cancellable for 10 to 20 years with renewal provisions from inception. Except for those sales arrangements that are classified as sales-type leases, the Company's leases generally do not contain an automatic transfer of title at the end of the lease term. The Company's lease arrangements do not contain a guarantee of residual value at the end of the lease term. The customer is required to pay for executory costs such as insurance and taxes and is required to pay the Company for maintenance and extended warranty generally after the first year of the lease until the end of the lease term. The customer is responsible for obtaining insurance coverage for the theater systems commencing on the date specified in the arrangement's shipping terms and ending on the date the theater systems are delivered back to the Company.

The Company has assessed the nature of its joint revenue sharing arrangements and concluded that, based on the guidance in the Revenue Recognition Topic of the ASC, the arrangements contain a lease. Under joint revenue sharing arrangements, the customer has the ability and the right to operate the hardware components or direct others to operate them in a manner determined by the customer. The Company's joint revenue sharing arrangements are typically non-cancellable for 10 years or longer with renewal provisions. Title to equipment under joint revenue sharing arrangements does not transfer to the customer. The Company's joint revenue sharing arrangements do not contain a guarantee of residual value at the end of the term. The customer is required to pay for executory costs such as insurance and taxes and is required to pay the Company for maintenance and extended warranty throughout the term. The customer is responsible for obtaining insurance coverage for the theater systems commencing on the date specified in the arrangement's shipping terms and ending on the date the theater systems are delivered back to the Company. The Company

monitors the performance of the theaters to which it has leased theater systems. When facts and circumstances indicate that there is a potential impairment in the net investment in lease, the Company will evaluate the potential outcome of either a renegotiation involving changes in the terms of the receivable or defaults on the existing lease. The Company will record a provision if it is considered probable that the Company will be unable to collect all amounts due under the contractual terms of the arrangement or a renegotiated lease amount will cause a reclassification of the sales-type lease to an operating lease. See additional details regarding the Company's traditional and hybrid joint revenue sharing arrangements as described in note 2(n) in the Company's 2019 Form 10-K.

Financing receivables, consisting of net investment in sales-type leases and receivables from financed sales of theater systems are as follows:

	As at December 31,	
	2019	2018
Gross minimum lease payments receivable	\$ 16,766	\$ 10,499
Unearned finance income	(1,005)	(902)
Minimum lease payments receivable	15,761	9,597
Accumulated allowance for uncollectible amounts	(155)	(155)
Net investment in leases	15,606	9,442
Gross financed sales receivables	146,660	155,044
Unearned finance income	(33,313)	(36,215)
Financed sales receivables	113,347	118,829
Accumulated allowance for uncollectible amounts	(915)	(839)
Net financed sales receivables	112,432	117,990
Total financing receivables	\$ 128,038	\$ 127,432
Net financed sales receivables due within one year	\$ 27,595	\$ 26,911
Net financed sales receivables due after one year	\$ 84,837	\$ 91,079
	As at December 31,	
	2019	2018
Weighted-average remaining lease term (years)		
Sales-type lease arrangements	8.1	7.3
Weighted-average interest rate		
Sales-type lease arrangements	6.68 %	8.00 %
Financed sales receivables	9.00 %	9.10 %

IMAX Corporation as a Lessee:

The Company mainly leases office and warehouse storage space and office equipment is generally purchased outright. Leases with an initial term of less than 12 months are not recorded on the balance sheet; the Company recognizes lease expense for these leases on a straight-line basis over the lease term. Most leases include one or more options to renew, with renewal terms that can extend the lease term from one to 5 years or more. The Company determined that it was reasonably certain that the renewal options on its warehouse leases would be exercised based on previous history and knowledge, current understanding of future business needs and level of investment in leasehold improvements, among other considerations. The incremental borrowing rate used in the calculation of the lease liability is based on the location of each leased property. None of the Company's leases include options to purchase the leased property. The depreciable life of assets and leasehold improvements are limited by the expected lease term. The Company's lease agreements do not contain any material residual value guarantees or material restrictive covenants. The Company rents or subleases certain office space to third parties, which have a remaining term of less than 12 months and are not expected to be renewed.

The components of lease expense are as follows:

		Years Ended December 31,		
		2019	2018	2017
Operating lease cost (1)	Selling, general and administrative expenses	\$ 850	\$ 4,863	\$ 6,059
Amortization of lease assets	Selling, general and administrative expenses	2,370	—	—
Interest on lease liabilities	Selling, general and administrative expenses	1,102	—	—
Total lease cost		<u>\$ 4,322</u>	<u>\$ 4,863</u>	<u>\$ 6,059</u>

(1) Includes short-term leases and variable lease costs, which are not significant for the December 31, 2019

Supplemental cash flow information related to leases are as follows:

	Year Ended December 31, 2019
Cash paid for amounts included in the measurement of lease liabilities	\$ 3,607
Right-of-use assets obtained in exchange for lease obligations	\$ 17,147

Supplemental balance sheet information related to leases are as follows:

		As at December 31, 2019	January 1, 2019
Assets			
Operating Leases	Property, plant and equipment	\$ 16,262	\$ 17,462
Liabilities			
Operating Leases(1)	Accrued and other liabilities	\$ 18,677	\$ 19,960

(1) The Company recorded lease liabilities of approximately \$20.0 million as at January 1, 2019 upon initial adoption of ASC Topic 842. In addition, unamortized lease inducements and other accruals of \$2.5 million were reclassified from accrued liabilities to offset against the applicable right-of-use asset.

		As at December 31, 2019	January 1, 2019
Weighted-average remaining lease term (years)			
Operating Leases		8.1	8.3
Weighted-average discount rate			
Operating Leases		5.90 %	5.80 %

Maturities of lease liabilities are as follows:

	Operating Leases
2020	\$ 3,732
2021	3,308
2022	2,387
2023	2,268
2024	2,220
Thereafter	10,060
Total lease payments	<u>\$ 23,975</u>
Less: interest expense	(5,298)
Present value of lease liabilities	<u>\$ 18,677</u>

As of December 31, 2018, under ASC Topic 840, minimum lease payments under non-cancelable operating leases by period were expected to be as follows:

	Operating Leases
2019	\$ 3,847
2020	2,790
2021	2,491
2022	1,843
2023	1,759
Thereafter	9,657
Total lease payments	\$ 22,387

6. Variable Consideration Receivable from Contracts

ASC Topic 606 requires the Company to estimate the transaction price, including an estimate of future variable consideration, received in exchange for the goods delivered or service rendered. The arrangements for the sale of projection systems include indexed minimum payment increases over the term of the arrangement, as well as provision for additional payments in excess of the minimum agreed payments in situations where the theater exceeds certain box office thresholds. Both of these contract provisions constitute variable consideration under the new standard that, subject to constraints to ensure reversal of revenues do not occur, require estimation and recognition upon transfer of control of the System Obligation to the customer, which is at the earlier of client acceptance of the installation of the system, including projectionist training, and the theater's opening to the public. As this variable consideration extends through the entire term of the arrangement, which typically last 10 years, the Company applies constraints to its estimates and recognizes the variable consideration on a discounted present value basis at recognition.

In certain joint revenue sharing arrangements, specifically the Company's hybrid sales arrangements, the Company's arrangements call for sufficient upfront revenues to cover the cost of the arrangement, with monthly payments calculated based on the theater's net box office earned. Title and control of the projection system transfer to the customer at the earlier of client acceptance of the theater installation, including projectionist training, and theater opening to the public. Under ASC Topic 606, the percentage payment is considered variable consideration that must be estimated and recognized at the time of initial revenue recognition. Using box office projections and the Company's history with theater and box office experience in different territories, the Company estimates the amount of percentage payment earned over the life of the arrangement, subject to sufficient constraint such that there is not a risk of significant revenue reversal.

The recognition of variable consideration involves a significant amount of judgment. ASC Topic 606 requires variable consideration to be recognized subject to appropriate constraints to avoid a significant reversal of revenue in future periods. The Company will review the variable consideration receivable on an ongoing basis. The standard identifies several examples of situations where constraining variable consideration would be appropriate:

- The amount of consideration is highly susceptible to factors outside the entity's influence
- The uncertainty about the amount of consideration is not expected to be resolved for a long period of time
- The Company's experience (or other evidence) with similar types of contracts is limited, or that experience has limited predictive value
- The Company has a practice of either offering a broad range of price concessions or changing the payment terms and conditions of similar contracts in similar circumstances

The following table sets forth a summary of activities in variable consideration receivable from contracts for the year ended December 31:

	Variable Consideration Receivable from Contracts	
Balance as at December 31, 2018	\$	35,985
Recognition of variable consideration		9,948
Accretion to finance income		1,936
True-up of variable consideration receivable		979
Payments received		(8,808)
Balance as at December 31, 2019	\$	40,040

7. Inventories

	As at December 31,	
	2019	2018
Raw materials	\$ 26,538	\$ 29,705
Work-in-process	4,608	4,733
Finished goods	11,843	10,122
	\$ 42,989	\$ 44,560

At December 31, 2019, finished goods inventory for which title had passed to the customer, however control has not yet been transferred, and revenue was deferred amounted to \$0.7 million (December 31, 2018 — \$1.9 million).

Inventories at December 31, 2019 include impairments and write-downs for excess and obsolete inventory based upon current estimates of net realizable value considering future events and conditions of \$0.4 million (December 31, 2018 — \$0.3 million).

8. Film Assets

	As at December 31,	
	2019	2018
Completed and released films, net of accumulated amortization of \$192,999 (2018 — \$173,812)	\$ 7,193	\$ 5,958
Films in production	4,250	4,500
Films in development	6,478	5,909
	\$ 17,921	\$ 16,367

The Company expects to amortize film costs of \$11.4 million for released films within three years from December 31, 2019 (December 31, 2018— \$11.4 million), including \$7.3 million (December 31, 2018 — \$6.8 million), which reflects the portion of the costs of the Company's completed films that are expected to be amortized within the next year. The amount of participation payments to third parties related to these films that the Company expects to pay during 2020, which is included in accrued liabilities at December 31, 2019, is \$1.6 million (2018 — \$1.9 million).

In 2019, the Company considered the lower than expected revenues and revised expectations for future revenues based on the latest information. An impairment of \$1.4 million was recorded based on the carrying value of certain documentary films as compared to the related estimated future box office and revenues that would ultimately be generated by these films. No such charge was recorded in the year ended 2018.

9. Property, Plant and Equipment

	As at December 31, 2019		
	Cost	Accumulated Depreciation	Net Book Value
Equipment leased or held for use			
Theater system components ⁽¹⁾⁽²⁾⁽³⁾	\$ 322,492	\$ 133,739	\$ 188,753
Camera equipment	5,192	4,239	953
	327,684	137,978	189,706
Assets under construction ⁽⁴⁾	14,483	—	14,483
Right-of-use assets ⁽⁵⁾	17,147	885	16,262
Other property, plant and equipment			
Land	8,203	—	8,203
Buildings	80,850	22,931	57,919
Office and production equipment ⁽⁶⁾	41,673	25,654	16,019
Leasehold improvements	7,614	3,357	4,257
	138,340	51,942	86,398
	<u>\$ 497,654</u>	<u>\$ 190,805</u>	<u>\$ 306,849</u>

	As at December 31, 2018		
	Cost	Accumulated Depreciation	Net Book Value
Equipment leased or held for use			
Theater system components ⁽¹⁾⁽²⁾⁽³⁾	\$ 287,066	\$ 120,273	\$ 166,793
Camera equipment	5,080	3,839	1,241
	292,146	124,112	168,034
Assets under construction ⁽⁴⁾	24,327	—	24,327
Other property, plant and equipment			
Land	8,203	—	8,203
Buildings	77,468	20,012	57,456
Office and production equipment ⁽⁶⁾	42,252	24,295	17,957
Leasehold improvements	7,583	2,902	4,681
	135,506	47,209	88,297
	<u>\$ 451,979</u>	<u>\$ 171,321</u>	<u>\$ 280,658</u>

- (1) Included in theater system components are assets with costs of \$7.6 million (2018 — \$8.5 million) and accumulated depreciation of \$6.7 million (2018 — \$7.4 million) that are leased to customers under operating leases.
- (2) Included in theater system components are assets with costs of \$297.4 million (2018 — \$269.8 million) and accumulated depreciation of \$121.3 million (2018 — \$108.4 million) that are used in joint revenue sharing arrangements.
- (3) In 2019, the Company recorded a charge of \$2.2 million (2018 — \$0.6 million) in cost of sales applicable to Rentals upon the upgrade of xenon-based digital systems under joint revenue sharing arrangements to laser-based digital systems.
- (4) Included in assets under construction are components with costs of \$13.2 million (2018 — \$15.3 million) that will be utilized to construct assets to be used in joint revenue sharing arrangements.
- (5) The right-of-use assets mainly include operating leases for office and warehouse storage space. See note 4 for further discussion of the adoption impact of ASC Topic 842 on the Company's consolidated financial statements.
- (6) Fully amortized office and production equipment is still in use by the Company. In 2019, the Company identified and wrote off \$4.9 million (2018 — \$1.3 million) of office and production equipment that is no longer in use and fully amortized.

In 2019, the Company recorded a charge of \$0.2 million (2018 — \$0.8 million; 2017 — \$1.2 million) reflecting property, plant and equipment that were no longer in use.

The Company recognized asset impairment charges of \$0.1 million (2018 — less than \$0.1 million; 2017 — \$0.3 million) against property, plant and equipment after an assessment of the carrying value of certain assets in light of their future expected cash flows.

In addition, as a result of the Company's restructuring activities in 2018 and 2017, certain long-lived assets were deemed to be impaired as the Company's exit from certain activities limited the future revenue associated with these assets. In 2018, the Company recognized property, plant and equipment charges of \$3.7 million (2017 — \$3.7 million). No such charge was recorded in the year ended 2019.

10. Other Assets

	As at December 31,	
	2019	2018
Lease incentives provided to theaters	19,125	10,550
Commissions and other deferred selling expenses	1,501	2,796
Other investments	2,500	2,500
Investment in content	955	1,073
Foreign currency derivatives	602	649
Other	351	429
	<u>\$ 25,034</u>	<u>\$ 17,997</u>

11. Income Taxes

(a) Income (loss) before income taxes by tax jurisdiction are comprised of the following:

	Years Ended December 31,		
	2019	2018	2017
Canada	\$ 884	\$ (14,749)	\$ (17,261)
United States	(234)	(6,079)	(11,895)
China	51,809	50,446	50,410
Ireland	17,630	8,071	3,632
Other	5,247	5,916	5,125
	<u>\$ 75,336</u>	<u>\$ 43,605</u>	<u>\$ 30,011</u>

(b) The (provision) recovery of income taxes is comprised of the following:

	Years Ended December 31,		
	2019	2018	2017
Current:			
Canada	\$ 2,369	\$ (4,893)	\$ (6,898)
United States	595	1,300	267
China	(11,789)	(11,259)	(12,724)
Ireland	(762)	(1,095)	(735)
Other	(419)	(494)	(717)
	<u>(10,006)</u>	<u>(16,441)</u>	<u>(20,807)</u>
Deferred:(1)			
Canada	(3,913)	5,993	8,748
United States	(949)	2,386	(7,109)
China	(18)	(6)	1,405
Ireland	(1,923)	(1,423)	1,085
Other	41	(27)	(112)
	<u>(6,762)</u>	<u>6,923</u>	<u>4,017</u>
Provision for income taxes	<u>\$ (16,768)</u>	<u>\$ (9,518)</u>	<u>\$ (16,790)</u>

(1) For the year ended December 31, 2019, the Company has not adjusted the valuation allowance from the prior year (2018 — \$nil) relating to the future utilization of deductible temporary differences, tax credits, and certain net operating loss carryforwards. Included in the provision for income taxes is the deferred tax related to amounts recorded in and reclassified from other comprehensive income in the year of \$0.4 million (2018 — \$0.3 million).

(c) The provision for income taxes from operations differs from the amount that would have resulted by applying the combined Canadian federal and provincial statutory income tax rates to earnings due to the following:

	Years Ended December 31,		
	2019	2018	2017
Income tax provision at combined statutory rates	\$ (19,964)	\$ (11,555)	\$ (7,954)
Adjustments resulting from:			
Non-deductible stock based compensation	(276)	(363)	(295)
Other non-deductible/non-includable items	93	202	(717)
Changes to tax reserves	1,418	(204)	(1,435)
U.S. federal and state taxes	(300)	30	(373)
Withholding taxes	(1,071)	(1,418)	(1,217)
Income tax at different rates in foreign and other provincial jurisdictions	5,019	3,477	4,147
Investment and other tax credits (non-refundable)	701	783	1,570
Changes to deferred tax assets and liabilities resulting from audit and other tax return adjustments	(1,998)	768	(532)
(Reduction of) excess tax benefit from realized stock-based compensation awards	(374)	(1,232)	(591)
Impact of changes due to U.S. Tax Act	—	—	(9,323)
Other	(16)	(6)	(70)
Provision for income taxes	<u>\$ (16,768)</u>	<u>\$ (9,518)</u>	<u>\$ (16,790)</u>

(d) The net deferred income tax asset is comprised of the following:

	As at December 31,	
	2019	2018
Net operating loss carryforwards	\$ 888	\$ 3,389
Investment tax credit and other tax credit carryforwards	3,650	4,829
Write-downs of other assets	1,220	1,218
Excess of tax accounting basis in property, plant and equipment, inventories and other assets	6,257	8,243
Accrued pension liability	6,393	6,125
Accrued stock-based compensation	5,360	2,054
Other accrued reserves	4,617	11,423
Total deferred income tax assets	28,385	37,281
Income recognition on net investment in leases	(4,283)	(5,820)
	24,102	31,461
Valuation allowance	(197)	(197)
Net deferred income tax asset	<u>\$ 23,905</u>	<u>\$ 31,264</u>

The gross deferred tax assets include a liability of \$0.4 million (December 31, 2018 — \$0.1 million) relating to the remaining tax effect resulting from the Company's defined benefit pension plan, the related actuarial gains and losses, and unrealized net gains and losses on cash flow hedging instruments recorded in accumulated other comprehensive income.

The Company recorded income tax expense of \$16.8 million for the year-ended December 31, 2019. The effective tax rate for the year of 22.3% was lower than the Canadian statutory combined Federal and Provincial rate of 26.22% primarily due to income earned in Greater China and Ireland at lower effective rates. The effective tax rate for the year ended December 31, 2019 was consistent with the effective tax rate for the year ended December 31, 2018 of 21.8%.

The effective tax rate for the year ended December 31, 2018 was significantly lower than the effective tax rate for December 31, 2017 of 55.9% due to the impact of the Tax Cuts and Jobs Act (the “Tax Act”), which was enacted on December 22, 2017 by the U.S. government. The Tax Act made broad and complex changes to the U.S. tax code including, but not limited to reducing the U.S. federal corporate tax rate from 35% to 21%, imposing other limitations and changes that limit or eliminate various deductions, including interest expense, performance-based compensation for certain executives, and other deductions and required the re-measurement of deferred tax assets and liabilities. U.S. GAAP requires that the impact of changes to tax legislation be recognized in the period in which the law was enacted. As a result, the Company recorded a discrete tax provision charge of \$9.3 million for the year ended December 31, 2017 increasing the effective tax rate for 2017 by 31.1%.

The Tax Act also includes a number of other changes including: (a) the imposition of a one-time deemed repatriation tax on accumulated foreign earnings (the “Transition Tax”), (b) a 100% dividends received deduction on dividends from foreign affiliates, (c) a current inclusion in U.S. federal taxable income of earnings of foreign affiliates that are determined to be global intangible low taxed income or “GILTI”, (d) creation of the base erosion anti-abuse tax, or “BEAT”, (e) provision for an effective tax rate of 13.125% for certain income derived from outside of the U.S. (referred to as foreign derived intangible income or “FDII”) and (f) 100% expensing of qualifying fixed assets acquired after September 27, 2017.

Given that the Company is a Canadian based multinational with subsidiary operations in the US and other foreign jurisdictions a number of these changes did not impact the Company. The Company is not expecting to be subject to the BEAT, Transition Tax or GILTI given its current legal and tax structures. The Company is eligible to expense qualifying fixed assets acquired after September 27, 2017, and was subject to the additional limitations imposed on the deductibility of executive compensation. The Company is not adversely impacted by the limitations placed on the deductibility of interest expense.

In 2018, the Company finalised its accounting related to changes in the Tax Act. Among other things, the Company has finalised provisional estimates and tax calculations made under SAB 118, which included an evaluation of recent interpretations and new guidance issued. No adjustments were recognised during the year ended December 31, 2018, and the provisional re-measurement effect on deferred taxes recorded in the year 2017 year reflects the total effect of the changes in the Tax Act.

No U.S. income taxes have been provided for any undistributed foreign earnings, or any additional outside basis differences inherent in these foreign entities, as the Company is a Canadian corporation and these amounts continue to be indefinitely reinvested in foreign operations which are owned directly or indirectly.

Further, the Company has not provided for Canadian taxes on cumulative earnings of non-Canadian affiliates and associated companies that have been reinvested indefinitely. Taxes are provided for earnings of non-Canadian affiliates and associated companies when the Company determines that such earnings are no longer indefinitely reinvested.

(e) Estimated U.S. and Canadian net operating loss carryforwards of \$13.7 million can be carried forward to reduce taxable income through to 2037 and the remaining \$2.9 million can be carried forward indefinitely. Investment tax credits and other tax credits can be carried forward to reduce income taxes payable through to 2039.

(f) Valuation allowance

The provision for income taxes in the year ended December 31, 2019 does not include an adjustment to the valuation allowance (2018 — \$nil) in continuing operations. During the year ended December 31, 2019, after considering all available evidence, both positive (including recent and historical profits, projected future profitability, backlog, carryforward periods for, and utilization of net operating loss carryovers and tax credits, discretionary deductions and other factors) and negative (including cumulative losses in past years and other factors), it was concluded that the existing valuation allowance against the Company’s deferred tax assets was appropriate (2018 — \$nil). The \$0.2 million (2018 — \$0.2 million) balance in the valuation allowance as at December 31, 2019 is primarily attributable to certain U.S. state net operating loss carryovers that may expire unutilized.

(g) Uncertain tax positions

The Company recorded a net decrease of \$1.4 million related to reserves for income taxes, of which \$nil was recorded directly to retained earnings. As at December 31, 2019 and December 31, 2018, the Company had total tax reserves (including interest and penalties) of \$14.7 million and \$16.1 million, respectively, for various uncertain tax positions. While the Company believes it has adequately provided for all tax positions, amounts asserted by taxing authorities could differ from the Company’s accrued position. Accordingly, additional provisions on federal, provincial, state and foreign tax-related matters could be recorded in the future as revised estimates are made or the underlying matters are settled or otherwise resolved.

A reconciliation of the beginning and ending amount of tax reserves (excluding interest and penalties) for the years ended December 31 is as follows:

	Years Ended December 31,		
	2019	2018	2017
Balance at beginning of the year	\$ 16,136	\$ 15,927	\$ 12,593
Additions based on tax positions related to the current year	812	4,329	3,639
Reductions for tax positions of prior years	(2,230)	(170)	(195)
Reductions resulting from lapse of applicable statute of limitations and administrative practices	—	(3,950)	(110)
Balance at the end of the year	<u>\$ 14,718</u>	<u>\$ 16,136</u>	<u>\$ 15,927</u>

The Company has elected to classify interest and penalties related to income tax liabilities, when applicable, as part of the interest expense in its consolidated statements of operations rather than income tax expense. The Company expensed \$0.2 million in potential interest and penalties associated with its provision for uncertain tax positions for the years ended December 31, 2019 (2018 — less than \$0.1 million; 2017 — less than \$0.1 million).

The number of years with open tax audits varies depending on the tax jurisdiction. The Company's major taxing jurisdictions include Canada, the province of Ontario, the United States (including multiple states), Ireland and China.

The Company's 2015 through 2019 tax years remain subject to examination by the IRS for U.S. federal tax purposes, and the 2015 through 2019 tax years remain subject to examination by the appropriate governmental agencies for Canadian federal tax purposes. There are other on-going audits in various other jurisdictions that are not material to the financial statements.

Cash held outside of North America as at December 31, 2019 was \$89.9 million (December 31, 2018 — \$121.9 million), of which \$67.6 million was held in the People's Republic of China ("PRC") (December 31, 2018 — \$54.7 million). The Company's intent is to permanently reinvest these amounts outside of Canada and does not currently anticipate that it will need funds generated from foreign operations to fund North American operations. In the event funds from foreign operations are needed to fund operations in North America and if withholding taxes have not already been previously provided, the Company would be required to accrue and pay these additional withholding tax amounts on repatriation of funds from China to Canada. The Company currently estimates this amount to be \$21.9 million.

(h) Income tax effect on comprehensive income

The income tax benefit (expense) related to the following items included in other comprehensive income (loss) are:

	Years Ended December, 31		
	2019	2018	2017
Unrecognized actuarial gain (loss) on defined benefit plan	\$ (42)	\$ (379)	\$ (262)
Unrecognized actuarial gain or loss on postretirement benefit plans	—	(23)	(32)
Prior service cost arising during the period	145	—	—
Amortization of prior service cost included in net income	(26)	—	—
Unrealized change in cash flow hedging instruments	(145)	581	(667)
Realized change in cash flow hedging instruments upon settlement	(310)	107	215
	<u>\$ (378)</u>	<u>\$ 286</u>	<u>\$ (746)</u>

12. Other Intangible Assets

	As at December 31, 2019		
	Cost	Accumulated Amortization	Net Book Value
Patents and trademarks	\$ 12,779	\$ 8,587	\$ 4,192
Licenses and intellectual property	26,168	10,747	15,421
Internal use software	23,791	13,239	10,552
Other	576	394	182
	<u>\$ 63,314</u>	<u>\$ 32,967</u>	<u>\$ 30,347</u>

	As at December 31, 2018		
	Cost	Accumulated Amortization	Net Book Value
Patents and trademarks	\$ 12,266	\$ 7,871	\$ 4,395
Licenses and intellectual property	26,168	8,972	17,196
Internal use software	21,528	9,264	12,264
Other	548	308	240
	<u>\$ 60,510</u>	<u>\$ 26,415</u>	<u>\$ 34,095</u>

Fully amortized other intangible assets are still in use by the Company. In 2019, the Company identified and wrote off \$0.1 million (2018 — \$0.2 million) of patents and trademarks that are no longer in use.

During 2019, the Company acquired \$2.9 million in other intangible assets, which is mainly an investment in the Company's internal use software. The weighted average amortization period for these additions is 4.7 years. The net book value of the internal use software was \$1.9 million as at December 31, 2019.

During 2019, the Company incurred costs of \$0.4 million to renew or extend the term of acquired patents and trademarks which were recorded in selling, general and administrative expenses (2018 — \$0.3 million).

The estimated amortization expense for each of the years ended December 31, are as follows:

2020	\$	6,553
2021		6,553
2022		6,553
2023		6,553
2024		6,553

13. Credit Facility and Other Financing Arrangements

Credit Facility

On June 28, 2018, the Company entered into a Fifth Amended and Restated Credit Agreement (the "Credit Agreement") with Wells Fargo Bank, National Association ("Wells Fargo"), as agent, and a syndicate of lenders party thereto. The Credit Agreement expands the Company's revolving borrowing capacity from \$200.0 million to \$300.0 million, and also contains an uncommitted accordion feature allowing the Company to further expand its borrowing capacity to \$440.0 million or greater, depending on the mix of revolving and term loans comprising the incremental facility. The facility (the "Credit Facility") matures on June 28, 2023.

Loans under the Credit Facility will bear interest, at the Company's option, at (i) LIBOR plus a margin ranging from 1.00% to 1.75% per annum; or (ii) the U.S. base rate plus a margin ranging from 0.25% to 1.00% per annum, in each case depending on the Company's Total Leverage Ratio (as defined in the Credit Agreement).

The Credit Agreement provides that the Company is required to maintain a Senior Secured Net Leverage Ratio (as defined in the Credit Agreement) as of the last day of any fiscal quarter (as defined in the Credit Agreement) of no greater than 3.25:1.00. In addition, the Credit Agreement contains customary affirmative and negative covenants for a transaction of this type, including covenants that limit indebtedness, liens, capital expenditures, asset sales, investments and restricted payments, in each case subject to negotiated exceptions and baskets. The Credit Agreement also contains representations, warranties and event of default provisions customary for a transaction of this type.

The Company's obligations under the Credit Agreement are guaranteed by certain of the Company's subsidiaries (the "Guarantors"), and are secured by first-priority security interests in substantially all the assets of the Company and the Guarantors.

The Company was in compliance with all of its requirements at December 31, 2019.

Total amounts drawn and available under the Credit Facility at December 31, 2019 were \$20.0 million and \$280.0 million, respectively (December 31, 2018 — \$40.0 million and \$260.0 million, respectively). The effective interest rate for the year ended December 31, 2019 was 3.43% (2018 — 3.41%).

As at December 31, 2019 and 2018, the Company did not have any letters of credit and advance payment guarantees outstanding under the Credit Facility.

Working Capital Loan

On July 5, 2018, IMAX (Shanghai) Multimedia Technology Co., Ltd. ("IMAX Shanghai"), one of the Company's majority-owned subsidiaries in China, entered into an unsecured revolving facility for up to 200.0 million Renminbi (approximately \$30.0 million U.S. Dollars) to fund ongoing working capital requirements. On July 24, 2019, this facility was renewed. The total amounts drawn and available under the working capital loan at December 31, 2019 and 2018 were nil and 200.0 million Renminbi, respectively (\$nil and approximately \$30.0 million U.S. Dollars, respectively).

Bank indebtedness includes the following:

	December 31, 2019	December 31, 2018
Credit Facility	\$ 20,000	\$ 40,000
Deferred charges on debt financing	(1,771)	(2,247)
	<u>\$ 18,229</u>	<u>\$ 37,753</u>

Wells Fargo Foreign Exchange Facility

Within the Credit Facility, the Company is able to purchase foreign currency forward contracts and/or other swap arrangements. The net settlement gain on its foreign currency forward contracts was \$0.5 million at December 31, 2019, as the fair value of the forward contracts exceeded the notional value (December 31, 2018 — \$1.2 million net settlement risk). As at December 31, 2019, the Company has \$36.1 million in notional value of such arrangements outstanding (December 31, 2018 — \$50.8 million).

Bank of Montreal Facility

Prior to September 30, 2019, the Company had available a \$10.0 million facility (December 31, 2018 — \$10.0 million) with the Bank of Montreal for use solely in conjunction with the issuance of performance guarantees and letters of credit fully insured by Export Development Canada (the “Bank of Montreal Facility”). The Bank of Montreal Facility expired as of September 30, 2019 and was not renewed.

NBC Facility

On October 28, 2019, the Company entered into a \$5.0 million facility with the National Bank of Canada for use solely in conjunction with the issuance of performance guarantees and letters of credit fully insured by Export Development Canada (the “NBC Facility”) to replace the Bank of Montreal Facility. The Company did not have any letters of credit and advance payment guarantees outstanding as at December 31, 2019 under the NBC Facility.

14. Commitments

In the ordinary course of business, the Company enters into contractual agreements with third parties that include non-cancelable payment obligations, for which it is liable in future periods. These arrangements can include terms binding the Company to minimum payments and/or penalties if it terminates the agreement for any reason other than an event of default as described by the agreement. The following table presents a summary of the Company’s contractual obligations and commitments as at December 31, 2019:

	Payments Due by Fiscal Year						
	Total Obligations	2020	2021	2022	2023	2024	Thereafter
Purchase obligations	\$ 41,779	\$ 41,440	\$ 339	\$ —	\$ —	\$ —	\$ —
Pension obligations	20,298	—	—	—	20,298	—	—
Operating lease obligations	22,170	4,215	3,260	2,318	2,203	2,158	8,016
Credit Facility	20,000	—	—	—	20,000	—	—
Postretirement benefits obligations	2,246	108	114	113	123	123	1,665
	<u>\$ 106,493</u>	<u>\$ 45,763</u>	<u>\$ 3,713</u>	<u>\$ 2,431</u>	<u>\$ 42,624</u>	<u>\$ 2,281</u>	<u>\$ 9,681</u>

Operating Lease Obligations

The Company’s lease commitments consist of rent and equipment under operating leases. The Company accounts for any incentives provided over the term of the lease. The following table summarizes information about the Company’s total rental expenses under operating leases:

	Years Ended December 31,		
	2019	2018	2017
Total rent expense	\$ 3,753	\$ 4,303	\$ 5,685

Recorded in the accrued liabilities balance as at December 31, 2019 is \$0.3 million (December 31, 2018—\$3.0 million) related to accrued rent and lease inducements being recognized as an offset to rent expense over the term of the respective leases.

Purchase Obligations

Purchase obligations primarily consist of the Company’s commitments made under long-term supplier contracts.

Pension and Postretirement Benefits Obligations

The Company has an unfunded defined benefit pension plan, covering certain individuals and a postretirement plan to provide health and welfare benefits to Canadian employees meeting certain eligibility requirements. See note 23 for further information.

Credit Facility

The Company is not required to make any minimum payments on its Credit Facility. See note 13 for further information.

As at December 31, 2019 the Company did not have any letters of credit and advance payment guarantees outstanding (December 31, 2018 — \$nil), under the Credit Facility, the Bank of Montreal Facility or the NBC Facility. See note 13 for further information.

Commissions

The Company compensates its sales force with both fixed and variable compensation. Commissions on the sale or lease of the Company's theater systems are payable in graduated amounts from the time of collection of the customer's first payment to the Company up to the collection of the customer's last initial payment. At December 31, 2019, \$0.6 million (December 31, 2018 — \$1.8 million) of commissions have been accrued and will be payable in future periods.

15. Contingencies and Guarantees

The Company is involved in lawsuits, claims, and proceedings, including those identified below, which arise in the ordinary course of business. In accordance with the Contingencies Topic of the FASB ASC, the Company will make a provision for a liability when it is both probable that a loss has been incurred and the amount of the loss can be reasonably estimated. The Company believes it has adequate provisions for any such matters. The Company reviews these provisions in conjunction with any related provisions on assets related to the claims at least quarterly and adjusts these provisions to reflect the impacts of negotiations, settlements, rulings, advice of legal counsel and other pertinent information related to the case. Should developments in any of these matters outlined below cause a change in the Company's determination as to an unfavorable outcome and result in the need to recognize a material provision, or, should any of these matters result in a final adverse judgment or be settled for significant amounts, they could have a material adverse effect on the Company's results of operations, cash flows, and financial position in the period or periods in which such a change in determination, settlement or judgment occurs.

The Company expenses legal costs relating to its lawsuits, claims and proceedings as incurred.

(a) In January 2004, the Company and IMAX Theatre Services Ltd., a subsidiary of the Company, commenced an arbitration seeking damages before the International Court of Arbitration of the International Chamber of Commerce (the "ICC") with respect to the breach by Electronic Media Limited ("EML") of its December 2000 agreement with the Company. In June 2004, the Company commenced a related arbitration before the ICC against EML's affiliate, E-City Entertainment (I) PVT Limited ("E-City"). On March 27, 2008, the arbitration panel issued a final award in favor of the Company in the amount of \$11.3 million, consisting of past and future rents owed to the Company, plus interest and costs, as well as an additional \$2,512 each day in interest from October 1, 2007 until the date the award is paid. In July 2008, E-City commenced a proceeding in Mumbai, India seeking an order that the ICC award may not be recognized in India and on June 10, 2013, the Bombay High Court ruled that it had jurisdiction over the proceeding filed by E-City. The Company appealed that ruling to the Supreme Court of India, and on March 10, 2017, the Supreme Court set aside the Bombay High Court's judgement and dismissed E-City's petition. On March 29, 2017, the Company filed an Execution Application in the Bombay High Court seeking to enforce the ICC award against E-City and several related parties. That matter is currently pending. The Company has also taken steps to enforce the ICC final award outside of India. In December 2011, the Ontario Superior Court of Justice issued an order recognizing the final award and requiring E-City to pay the Company \$30,000 to cover the costs of the application, and in October 2015, the New York Supreme Court recognized the Canadian judgment and entered it as a New York judgment. The Company intends to continue pursuing its rights and seeking to enforce the award, although no assurances can be given with respect to the ultimate outcome.

(b) On November 11, 2013, Giencourt Investments, S.A. ("Giencourt") initiated arbitration before the International Centre for Dispute Resolution in Miami, Florida, based on alleged breaches by the Company of its theater agreement and related license agreement with Giencourt. An arbitration hearing for witness testimony was held during the week of December 14, 2015. At the hearing, Giencourt's expert identified monetary damages of up to approximately \$10.4 million, which Giencourt sought to recover from the Company. The Company asserted a counterclaim against Giencourt for breach of contract and sought to recover lost profits in excess of \$24.0 million under the agreements. Subsequently, in December 2015, Giencourt made a motion to the panel seeking to enforce a purported settlement of the matter based on negotiations between Giencourt and the Company. The panel held a final hearing with closing arguments in October 2016. On February 7, 2017, the panel issued a Partial Final Award and on July 21, 2017, the panel issued a Final Award (collectively, the "Award"), which held that the parties had reached a binding settlement, and therefore the panel did not reach the merits of the dispute. The Company strongly disputes that discussions about a potential resolution of this matter amounted to an enforceable settlement. In October 2017, the Company filed a petition to vacate the arbitration award in the United States Court for the Southern District of Florida on various grounds, including that the panel exceeded its jurisdiction, and a hearing was held on June 27, 2019. On September 27, 2019, a Magistrate Judge filed a non-binding recommendation that the

Company's petition be dismissed. On October 14, 2019, the Company filed an objection to that recommendation. The Company's petition to vacate the arbitration award was denied by the District Judge on January 10, 2020. The Company plans to appeal this decision to the Eleventh Circuit Court of Appeals. At this time, the Company is unable to determine the amounts that it may owe pursuant to the Award, or the timing of any such payments, and therefore no assurances can be given with respect to the ultimate outcome of the matter.

(c) In addition to the matters described above, the Company is currently involved in other legal proceedings or governmental inquiries which, in the opinion of the Company's management, will not materially affect the Company's financial position or future operating results, although no assurance can be given with respect to the ultimate outcome of any such proceedings.

(d) In the normal course of business, the Company enters into agreements that may contain features that meet the definition of a guarantee. The Guarantees Topic of the FASB ASC defines a guarantee to be a contract (including an indemnity) that contingently requires the Company to make payments (either in cash, financial instruments, other assets, shares of its stock or provision of services) to a third party based on (a) changes in an underlying interest rate, foreign exchange rate, equity or commodity instrument, index or other variable, that is related to an asset, a liability or an equity security of the counterparty, (b) failure of another party to perform under an obligating agreement or (c) failure of another third party to pay its indebtedness when due.

Financial Guarantees

The Company has provided no significant financial guarantees to third parties.

Product Warranties

The Company's accrual for product warranties, that was recorded as part of accrued and other liabilities in the consolidated balance sheets is \$0.2 million and \$0.2 million as at December 31, 2019 and 2018, respectively.

Director/Officer Indemnifications

The Company's General By-law contains an indemnification of its directors/officers, former directors/officers and persons who have acted at its request to be a director/officer of an entity in which the Company is a shareholder or creditor, to indemnify them, to the extent permitted by the *Canada Business Corporations Act*, against expenses (including legal fees), judgments, fines and any amounts actually and reasonably incurred by them in connection with any action, suit or proceeding in which the directors and/or officers are sued as a result of their service, if they acted honestly and in good faith with a view to the best interests of the Company. In addition, the Company has entered into indemnification agreements with each of its directors in order to effectuate the foregoing. The nature of the indemnification prevents the Company from making a reasonable estimate of the maximum potential amount it could be required to pay to counterparties. The Company has purchased directors' and officers' liability insurance. No amount has been accrued in the consolidated balance sheet as at December 31, 2019 and December 31, 2018 with respect to this indemnity.

Other Indemnification Agreements

In the normal course of the Company's operations, the Company provides indemnifications to counterparties in transactions such as: theater system lease and sale agreements and the supervision of installation or servicing of the theater systems; film production, exhibition and distribution agreements; real property lease agreements; and employment agreements. These indemnification agreements require the Company to compensate the counterparties for costs incurred as a result of litigation claims that may be suffered by the counterparty as a consequence of the transaction or the Company's breach or non-performance under these agreements. While the terms of these indemnification agreements vary based upon the contract, they normally extend for the life of the agreements. A small number of agreements do not provide for any limit on the maximum potential amount of indemnification; however, virtually all of the Company's system lease and sale agreements limit such maximum potential liability to the purchase price of the system. The fact that the maximum potential amount of indemnification required by the Company is not specified in some cases prevents the Company from making a reasonable estimate of the maximum potential amount it could be required to pay to counterparties. Historically, the Company has not made any significant payments under such indemnifications and no amounts have been accrued in the consolidated financial statements with respect to the contingent aspect of these indemnities.

16. Capital Stock

(a) Authorized

Common Shares

The authorized capital of the Company consists of an unlimited number of common shares. The following is a summary of the rights, privileges, restrictions and conditions of the common shares.

The holders of common shares are entitled to receive dividends if, as and when declared by the directors of the Company, subject to the rights of the holders of any other class of shares of the Company entitled to receive dividends in priority to the common shares.

The holders of the common shares are entitled to one vote for each common share held at all meetings of the shareholders.

(b) Changes during the Year

During the year, the Company settled common shares pursuant to the exercise of stock options for cash proceeds and vesting of RSUs. The settlement of common shares can be either settled through newly issued common shares from treasury or through the purchase of common shares in the open market by the IMAX Long-Term Incentive Plan trustee. The following table summarizes the settlement of stock option and RSU transactions:

	Years Ended December 31,		
	2019	2018	2017
Stock options			
Issued from treasury	19,088	12,750	405,229
Plan trustee purchases	67,840	—	263,112
Total stock options exercised	86,928	12,750	668,341
Cash proceeds on stock option exercises	\$ 1,752	\$ 218	\$ 14,652
RSUs			
Issued from treasury	—	—	7,127
Plan trustee purchases	404,719	462,137	422,022
Shares withheld for tax withholdings	29,577	72,056	27,630
Total RSUs vested	434,296	534,193	456,779

(c) Stock-Based Compensation

The Company issues stock-based compensation to eligible employees, directors, and consultants under the IMAX Corporation Amended and Restated Long-Term Incentive Plan (the “IMAX LTIP”) and the China Long-Term Incentive Plan (the “China LTIP”) as summarized below.

The IMAX LTIP is the Company’s governing document and awards to employees, directors, and consultants under this plan may consist of stock options, RSUs, PSUs and other awards. Stock options are no longer granted under the Company’s previous approved Stock Option Plan (“SOP”).

A separate stock option plan, the China LTIP, was adopted by a subsidiary of the Company in October 2012.

Compensation costs recorded in the consolidated statements of operations for the Company's stock-based compensation plans were \$22.8 million (2018 — \$22.6 million; 2017 — \$23.0 million). The following reflects the stock-based compensation expense recorded to the respective financial statement line items:

	Years Ended December 31,		
	2019	2018	2017
Cost and expenses applicable to revenues	\$ 1,709	\$ 1,657	\$ 1,704
Selling, general and administrative expenses	20,750	20,102	20,393
Research and development	371	452	556
Executive transition costs	—	320	—
Exit costs, restructuring charges and associated impairments	—	54	357
	<u>\$ 22,830</u>	<u>\$ 22,585</u>	<u>\$ 23,010</u>

As at December 31, 2019, the Company has reserved a total of 8,944,999 (December 31, 2018 — 9,767,307) common shares for future issuance under the IMAX LTIP. Of the common shares reserved for issuance, there are options in respect of 5,732,209 (December 31, 2018 — 5,465,046) common shares and RSUs in respect of 1,065,347 (December 31, 2018 — 1,033,871) common shares outstanding at December 31, 2019. At December 31, 2019 options in respect of 4,801,272 (December 31, 2018 — 3,990,970) common shares were vested and exercisable.

Stock Option Plan

The Company's policy is to issue new common shares from treasury or shares purchased in the open market to satisfy stock options which are exercised.

The Company utilizes a Binomial Model to determine the fair value of stock-based payment awards. The fair value determined by the Binomial Model is affected by the Company's stock price as well as assumptions regarding a number of highly complex and subjective variables. These variables include, but are not limited to, the Company's expected stock price volatility over the term of the awards, and employee stock option exercise behaviors. The Binomial Model also considers the expected exercise multiple which is the multiple of exercise price to grant price at which exercises are expected to occur on average. Option-pricing models were developed for use in estimating the value of traded options that have no vesting or hedging restrictions and are fully transferable. Because the Company's employee stock options have certain characteristics that are significantly different from traded options, and because changes in the subjective assumptions can materially affect the estimated value, in management's opinion, the Binomial Model best provides a fair measure of the fair value of the Company's employee stock options.

All awards of stock options are made at fair market value of the Company's common shares on the date of grant. The fair market value of a common share on a given date means the higher of the closing price of a common share on the grant date (or the most recent trading date if the grant date is not a trading date) on the New York Stock Exchange ("NYSE") or such national exchange as may be designated by the Company's Board of Directors (the "Fair Market Value"). The stock options vest within 4 years and expire 10 years or less from the date granted. The SOP and IMAX LTIP provide for double-trigger accelerated vesting in the event of a change in control, as defined in each plan.

The Company recorded the following expenses related to stock option grants issued to employees and directors in the IMAX LTIP and SOP plans.

	Years Ended December 31,		
	2019	2018	2017
Stock option expense	\$ 8,329	\$ 5,950	\$ 4,462

An income tax benefit is recorded in the consolidated statement of operations of \$1.9 million for the year ended December 31, 2019 (2018 — \$1.2 million; 2017 — \$1.0 million) related to stock option expenses.

Total stock-based compensation expense related to non-vested employee stock options not yet recognized at December 31 are as follows:

	Years Ended December 31,		
	2019	2018	2017
Expense related to non-vested employee stock options not yet recognized	\$ 4,073	\$ 8,482	\$ 7,441

The weighted average period over which the awards are expected to be recognized are as follows:

	Years Ended December 31,		
	2019	2018	2017
Weighted average period awards are expected to be recognized (in years)	2.7	1.9	2.3

The weighted average fair value of all stock options granted to employees and directors at the measurement date and the assumptions used to estimate the average fair value of the stock option are as follows:

	Years Ended December 31,		
	2019	2018	2017
Weighted average fair value per share	\$ 6.65	\$ 6.74	\$ 8.31
Average risk-free interest rate	2.64%	2.67%	2.34%
Expected option life (in years)	6.73 - 10.00	5.06 - 7.00	4.71 - 5.83
Expected volatility	31%	30%	30%
Dividend yield	0%	0%	0%

Stock Options to Non-Employees

There were no common share options issued to non-employees in 2019, 2018 or 2017.

In 2019, the Company did not record a charge (2018 — \$nil; 2017 — less than \$0.1 million) to selling, general and administrative expenses related to the non-employee stock options. There were no accrued liabilities related to non-employee stock options as at December 31, 2019 (December 31, 2018 — \$nil).

China Long-Term Incentive Plan

Each stock option (“China Option”), RSU or cash settled share-based payment (“CSSBP”) issued under the China LTIP represents an opportunity to participate economically in the future growth and value creation of IMAX China.

The CSSBPs represent the right to receive cash payments in an amount equal to a certain percentage of the excess of the total equity value of IMAX China based on the per share price in the IMAX China initial public offering (the “IMAX China IPO”) over the strike price of the CSSBPs. The CSSBPs were issued in conjunction with the China LTIP, with similar terms and conditions as the China Options. The CSSBP awards are accounted as liability awards, however the fair value of the liability was fixed at the time of the initial public offering. During 2017, the remaining balance of the CSSBPs vested and were settled in cash for \$0.6 million.

In connection with the IMAX China IPO and in accordance with the China LTIP, IMAX China adopted a post-IPO share option plan and a post-IPO restricted stock unit plan. Pursuant to these plans, IMAX China has issued additional China Options and China LTIP Restricted Share Units (“China RSUs”).

The following table summarizes the expense related to China Options, China RSUs, CSSBPs and any accrued liability related to CSSBPs:

Expense	Years Ended December 31,		
	2019	2018	2017
China Options	\$ 320	\$ 217	\$ 1,034
China RSUs	1,664	1,229	1,124
CSSBPs	—	—	353
CSSBPs liability	\$ —	\$ —	\$ —

Stock Option Summary

The following table summarizes certain information in respect of option activity under the SOP and IMAX LTIP:

	Number of Shares			Weighted Average Exercise Price Per Share		
	2019	2018	2017	2019	2018	2017
Options outstanding, beginning of year	5,465,046	5,082,100	5,190,542	\$ 27.63	\$ 29.31	\$ 28.35
Granted	1,016,882	1,082,123	854,764	20.66	21.95	30.07
Exercised	(86,928)	(12,750)	(668,341)	20.16	17.08	21.92
Forfeited	(336,493)	(69,332)	(108,551)	23.63	29.99	32.42
Expired	(299,134)	(507,977)	(89,958)	25.82	31.69	32.29
Cancelled	(27,164)	(109,118)	(96,356)	31.13	30.44	29.28
Options outstanding, end of year	5,732,209	5,465,046	5,082,100	26.82	27.63	29.31
Options exercisable, end of year	4,801,272	3,990,970	3,913,088	27.40	28.48	28.96

As at December 31, 2019, 5,732,209 options included both fully vested and unvested options with a weighted average exercise price of \$26.82, aggregate intrinsic value of \$0.9 million and weighted average remaining contractual life of 4.5 years. As at December 31, 2019, options that are exercisable have an intrinsic value of \$0.9 million and a weighted average remaining contractual life of 4.3 years. The intrinsic value of options exercised in 2019 was \$0.2 million (2018 — \$0.1 million; 2017 — \$6.8 million).

Restricted Share Units

RSUs have been granted to employees and directors under the IMAX LTIP. Each RSU represents a contingent right to receive one common share and is the economic equivalent of one common share. The grant date fair value of each RSU is equal to the share price of the Company's stock at the grant date. The Company recorded the following expenses related to RSU grants issued to employees and directors in the plan:

	Years Ended December 31,		
	2019	2018	2017
RSU expenses	\$ 12,394	\$ 15,189	\$ 16,033

The Company's actual tax benefits realized for the tax deductions related to the vesting of RSUs was \$1.6 million for the year ended December 31, 2019 (2018 — \$1.4 million; 2017 — \$3.6 million).

The Company's accrued liability for RSUs, deemed as granted, was \$0.4 million as at December 31, 2019 (December 31, 2018 — \$nil).

Total stock-based compensation expense related to non-vested RSUs not yet recognized and the weighted average period over which the awards are expected to be recognized are as follows:

	Years Ended December 31,		
	2019	2018	2017
Expense related to non-vested RSUs not yet recognized	\$ 23,548	\$ 18,597	\$ 22,440
Weighted average period awards are expected to be recognized (in years)	2.7	2.2	2.1

The following table summarizes certain information in respect of RSU activity under the IMAX LTIP:

	Number of Awards			Weighted Average Grant Date Fair Value Per Share		
	2019	2018	2017	2019	2018	2017
RSUs outstanding, beginning of year	1,033,871	995,329	1,124,180	\$ 25.70	\$ 32.68	\$ 33.01
Granted	687,475	659,282	463,010	22.30	20.99	30.47
Vested and settled	(434,296)	(534,193)	(456,779)	27.54	32.33	31.66
Forfeited	(221,703)	(86,547)	(135,082)	23.68	29.19	32.03
RSUs outstanding, end of year	1,065,347	1,033,871	995,329	23.17	25.70	32.68

Historically, RSUs granted under the IMAX LTIP have vested between immediately and four years from the grant date. In connection with the amendment and restatement of the IMAX LTIP at the Company's annual and special meeting of the shareholders on June 6, 2016, the IMAX LTIP plan was amended to impose a minimum one-year vesting period on future RSU grants, with a carve-out for 300,000 RSUs that may vest on a shorter schedule. Vesting of the RSUs is subject to continued employment or service with the Company. The following table summarizes the number of RSUs issued from the carve-out balance:

Outstanding, December 31, 2017	213,661
Issued during 2018	(65,838)
Outstanding, December 31, 2018	147,823
Issued during 2019	(64,053)
Outstanding, December 31, 2019	83,770

Restricted Share Units to Non-Employees

The Company issued 12,580 RSU awards to a certain advisor of the Company which were granted, vested, and settled in the year ended December 31, 2019 (2018 and 2017 — nil, respectively). The Company recorded an expense of \$0.1 million for the year ended December 31, 2019 (2018 and 2017 — \$nil, respectively) related to RSU grants issued to advisors and strategic partners of the Company.

Issuer Purchases of Equity Securities

In 2017, the Company's Board of Directors approved a \$200.0 million share repurchase program for shares of the Company's common stock. The share purchase program expires on June 30, 2020. The repurchases may be made either in the open market or through private transactions, subject to market conditions, applicable legal requirements and other relevant factors. The Company has no obligation to repurchase shares and the share repurchase program may be suspended or discontinued by the Company at any time. In 2019, the Company repurchased 134,384 (2018 — 3,436,783) common shares at an average price of \$19.76 per share (2018 — \$20.78 per share), excluding commissions.

In 2018, IMAX China announced that its shareholders granted its Board of Directors a general mandate authorizing the Board, subject to applicable laws, to buy back shares of IMAX China in an amount not to exceed 10% of the total number of issued shares of IMAX China as at May 3, 2018 (35,818,112 shares). The share repurchase program expired on June 6, 2019. In 2019, IMAX China announced that its shareholders granted its Board of Directors a general mandate authorizing the Board, subject to applicable laws, to repurchase shares of IMAX China in an amount not to exceed 10% of the total number of issued shares of IMAX China as at June 6, 2019 (35,605,560 shares). The share purchase program expires on the date of the 2020 annual general meeting of IMAX China. The repurchases may be made in the open market or through other means permitted by applicable laws. IMAX China has no obligation to repurchase its shares and the share repurchase program may be suspended or discontinued by IMAX China at any time. In 2019, IMAX China repurchased 8,051,500 common shares at an average price of HKD \$18.63 per share (U.S. \$2.38).

The total number of shares purchased during the year ended December 31, 2019 and 2018 does not include 615,000 and 300,000 common shares, purchased in the administration of employee share-based compensation plans, at an average price of \$22.49 and \$20.55 per share, respectively.

As at December 31, 2019, the IMAX LTIP trustee held 187,020 shares purchased for \$4.0 million in the open market to be issued upon the settlement of RSUs and certain stock options. The shares held with the trustee are recorded at cost and are reported as a reduction against capital stock on the consolidated balance sheet.

(d) Net income per share

Reconciliations of the numerator and denominator of the basic and diluted per-share computations are comprised of the following:

	Years Ended December 31,		
	2019	2018	2017
Net income attributable to common shareholders	\$ 46,866	\$ 22,844	\$ 2,344
<i>Weighted average number of common shares (000's):</i>			
Issued and outstanding, beginning of period	61,434	64,696	66,160
Weighted average number of shares repurchased during the period, net	(124)	(1,621)	(780)
Weighted average number of shares used in computing basic earnings per share	61,310	63,075	65,380
Assumed exercise of stock options and RSUs, net of shares assumed repurchased	179	132	160
Weighted average number of shares used in computing diluted earnings per share	61,489	63,207	65,540

The calculation of diluted earnings per share exclude 5,809,468 (2018 and 2017 — 5,666,976 and 4,993,014, respectively) shares that are issuable upon exercise of 77,259 (2018 and 2017 — 277,543 and 579,808, respectively) RSUs and 5,732,209 (2018 and 2017 — 5,389,433 and 4,413,206, respectively) stock options for the years ended December 31, 2019, 2018 and 2017, as the impact of these exercises would be antidilutive.

17. Consolidated Statements of Operations Supplemental Information

(a) Selling Expenses

The Company defers direct selling costs such as sales commissions and other amounts related to its sales and sales-type lease arrangements until the related revenue is recognized. These costs and direct advertising and marketing, included in costs and expenses applicable to Revenues – Equipment and product sales, totaled \$3.1 million for the year ended December 31, 2019 (2018 — \$2.9 million; 2017 — \$3.6 million).

Film exploitation costs, including advertising and marketing, totaled \$22.9 million for the year ended December 31, 2019 (2018 — \$21.2 million; 2017 — \$14.7 million), and are recorded in costs and expenses applicable to revenues-services as incurred.

Commissions are recognized as costs and expenses applicable to Revenues – Rentals in the month they are earned. These costs totaled an expense of \$0.4 million for the year ended December 31, 2019 (2018 — \$0.9 million; 2017 — \$1.6 million). Direct advertising and marketing costs for each theater are charged to costs and expenses applicable to Revenues – Rentals as incurred. These costs totaled an expense of \$3.0 million for the year ended December 31, 2019 (2018 — \$2.1 million; 2017 — \$2.6 million).

(b) Foreign Exchange

Included in selling, general and administrative expenses for the year ended December 31, 2019 is \$0.9 million for a net foreign exchange loss related to the translation of foreign currency denominated monetary assets and liabilities as compared to a net loss of \$1.7 million and a net gain of \$1.0 million for the years ended December 31, 2018 and 2017, respectively. See note 22(d) for additional information.

(c) Collaborative Arrangements

Joint Revenue Sharing Arrangements

In a joint revenue sharing arrangement, the Company receives a portion of a theater's box-office and concession revenues, and in some cases a small upfront or initial payment, in exchange for placing a theater system at the theater operator's venue. Under joint revenue sharing arrangements, the customer has the ability and the right to operate the hardware components or direct others to operate them in a manner determined by the customer. The Company's joint revenue sharing arrangements are typically non-cancellable for 10 years or longer with renewal provisions. Title to equipment under joint revenue sharing arrangements generally does not transfer to the customer. The Company's joint revenue sharing arrangements do not contain a guarantee of residual value at the end of the term. The customer is required to pay for executory costs such as insurance and taxes and is required to pay the Company for maintenance and extended warranty throughout the term. The customer is responsible for obtaining insurance coverage for the theater systems commencing on the date specified in the arrangement's shipping terms and ending on the date the theater systems are delivered back to the Company.

The Company has signed traditional and hybrid joint revenue sharing agreements with 39 exhibitors (2018 — 35) for a total of 1,223 theater systems (2018 — 1,185), of which 870 theaters (2018 — 798) were operating as at December 31, 2019. The terms of the Company's joint revenue sharing arrangements are similar in nature, rights and obligations. The accounting policy for the Company's joint revenue sharing arrangements is disclosed in note 2(n).

Amounts attributable to transactions arising between the Company and its customers under joint revenue sharing arrangements are included in Equipment and Product Sales and Rentals revenue under ASC Topic 606 and for the year ended December 31, 2019 amounted to \$92.0 million (2018 — \$86.6 million; 2017 — \$80.6 million).

IMAX DMR

In an IMAX DMR arrangement, the Company transforms conventional motion pictures into the Company's large screen format, allowing the release of Hollywood content to the global IMAX theater network. In a typical IMAX DMR film arrangement, the Company will absorb its costs for the digital re-mastering and then recoup this cost from a percentage of the box-office receipts of the film, which in recent years has averaged approximately 12.5% outside of Greater China and a lower percentage for certain films within Greater China. The Company does not typically hold distribution rights or the copyright to these films.

In 2019, the majority of IMAX DMR revenue was earned from the exhibition of 72 IMAX DMR films (2018 — 80) throughout the IMAX theater network. The accounting policy for the Company's IMAX DMR arrangements is disclosed in note 2(n).

Amounts attributable to transactions arising between the Company and its customers under IMAX DMR arrangements are included in Services revenues and for the year ended December 31, 2019 amounted to \$120.8 million (2018 — \$110.8 million; 2017 — \$108.9 million).

Co-Produced Film Arrangements

In certain film arrangements, the Company co-produces a film with a third party whereby the third party retains the copyright and rights to the film except that the Company obtains exclusive theatrical distribution rights to the film. Under these arrangements, both parties contribute funding to the Company's wholly-owned company for the production of the film or content and for associated exploitation costs. Clauses in the film arrangements generally provide for the third party to take over the production of the film if the cost of the production exceeds its approved budget or if it appears as though the film will not be delivered on a timely basis.

As at December 31, 2019, the Company has two significant co-produced arrangements which primarily represents the VIE total assets balance of \$9.7 million and liabilities balance of \$15.5 million and three other co-produced film arrangements, the terms of which are similar. The accounting policies relating to co-produced film arrangements are disclosed in notes 2(a) and 2(n).

In 2019, an expense of \$0.6 million (2018 — recovery of \$0.5 million; 2017 — expense of \$1.2 million) attributable to transactions between the Company and other parties involved in the production of the films have been included in cost and expenses applicable to revenues-services.

In 2017, the Company participated in one significant co-produced television arrangement. This arrangement was not a VIE.

For the year ended December 31, 2019, revenues of \$0.4 million (2018 — \$0.3 million; 2017 — \$20.4 million) and costs and expenses applicable to revenues of less than \$0.1 million (2018 — \$0.3 million; 2017 — \$33.4 million), attributable to this collaborative arrangement have been recorded in Revenue — Services and Costs and expenses applicable to revenues — Services, respectively. In 2017, included therein are net revenues attributable to transactions between the Company and other parties involved in the production of the episodic content of \$20.1 million.

18. Receivable Provisions, Net of Recoveries

The following table reflects the Company's receivable provisions net of recoveries recorded in the consolidated statements of operations:

	Years Ended December 31,		
	2019	2018	2017
Accounts receivable provisions, net of recoveries	\$ 2,354	\$ 3,030	\$ 1,967
Financing receivable provisions, net of recoveries	76	100	680
Receivable provisions, net of recoveries	<u>\$ 2,430</u>	<u>\$ 3,130</u>	<u>\$ 2,647</u>

19. Consolidated Statements of Cash Flows Supplemental Information

(a) Changes in other non-cash operating assets and liabilities are comprised of the following:

	Years Ended December 31,		
	2019	2018	2017
Decrease (increase) in:			
Accounts receivable	\$ (8,621)	\$ 33,942	\$ (37,807)
Financing receivables	(320)	1,325	(7,253)
Inventories	1,942	(14,022)	10,832
Prepaid expenses	(290)	(3,703)	(924)
Variable consideration receivable	(4,056)	—	—
Other assets	(2,063)	(3,084)	(457)
Increase (decrease) in:			
Accounts payable	(11,774)	7,749	4,204
Accrued and other liabilities (1)	(8,505)	(3,266)	(642)
Deferred revenue	(12,242)	(6,494)	22,906
	<u>\$ (45,929)</u>	<u>\$ 12,447</u>	<u>\$ (9,141)</u>

(1) Excluded the \$17.4 million non-cash impact of adopting ASC Topic 842 in 2019

(b) Cash payments made on account of:

	Years Ended December 31,		
	2019	2018	2017
Income taxes	\$ 17,298	\$ 12,684	\$ 22,829
Interest	\$ 1,231	\$ 502	\$ 826

(c) Depreciation and amortization are comprised of the following:

	Years Ended December 31,		
	2019	2018	2017
Film assets(1)	\$ 19,176	\$ 15,679	\$ 31,031
Property, plant and equipment			
Joint revenue sharing arrangements	23,153	20,739	18,112
Other property, plant and equipment	12,477	13,164	11,803
Other intangible assets	6,290	5,507	4,319
Other assets	1,882	1,242	980
Deferred financing costs	509	1,106	562
	<u>\$ 63,487</u>	<u>\$ 57,437</u>	<u>\$ 66,807</u>

(1) Included in film asset amortization is a charge of \$nil (2018 — \$nil; 2017 — \$1.5 million) relating to changes in estimates based on the ultimate recoverability of future films.

(d) Write-downs, net of recoveries, are comprised of the following:

	Years Ended December 31,		
	2019	2018	2017
Asset impairments			
Property, plant and equipment	\$ 96	3,725	\$ 3,966
Other assets	—	2,565	2,533
Prepaid expenses	—	121	—
Other intangible assets	—	66	—
Impairment of investments	—	—	1,225
Film assets	1,379	—	17,363
Other charges			
Accounts receivable (net of recoveries)	2,354	3,030	1,967
Financing receivables	76	100	680
Inventories	446	250	500
Property, plant and equipment (1)	2,360	1,762	1,224
Other intangible assets	95	151	63
Other assets	—	—	47
	<u>\$ 6,806</u>	<u>\$ 11,770</u>	<u>\$ 29,568</u>
Inventory charges			
Recorded in costs and expenses applicable to revenues - product & equipment sales	\$ 276	\$ 250	\$ 500
Recorded in costs and expenses applicable to revenues - services	170	—	—
	<u>\$ 446</u>	<u>\$ 250</u>	<u>\$ 500</u>

(1) In 2019, the Company recorded a charge of \$0.2 million (2018 — \$0.8 million; 2017 — \$1.2 million) reflecting property, plant and equipment that were no longer in use. In 2019, the Company recorded a charge of \$2.2 million in cost of sales applicable to Rentals upon the upgrade of xenon-based digital systems under joint revenue sharing arrangements to laser-based digital systems. In 2018, the Company also recorded a charge of \$0.6 million in cost of sales applicable to Rentals, and \$0.4 million in revenue applicable to Rentals upon the upgrade of xenon-based digital systems under operating lease arrangements to laser-based digital systems under sales or sales-type lease arrangements. No such charge was recorded in the year ended December 31, 2017.

(e) Significant non-cash investing and financing activities are comprised of the following:

	Years Ended December 31,	
	2019	2018
Net accruals related to:		
Purchases of property, plant and equipment	\$ 496	\$ 227
Investment in joint revenue sharing arrangements	(2,013)	(61)
Acquisition of other intangible assets	(51)	89
	<u>\$ (1,568)</u>	<u>\$ 255</u>

20. Revenue from Contracts with Customers

The following tables present a breakdown of the Company's revenues between fixed and variable consideration and lease arrangements:

	Years Ended December 31, 2019			
	Subject to the Revenue Recognition Standard		Subject to the Lease Standard	
	Fixed consideration	Variable consideration	Lease arrangements	Total
Network business				
IMAX DMR	\$ —	\$ 120,765	\$ —	\$ 120,765
Joint revenue sharing arrangements – contingent rent	—	—	75,932	75,932
IMAX systems – contingent rent	—	—	139	139
	—	120,765	76,071	196,836
Theater business				
IMAX systems				
Sales and sales-type leases	86,202	10,108	—	96,310
Ongoing fees and finance income	11,613	—	—	11,613
Joint revenue sharing arrangements – fixed fees	—	—	11,014	11,014
Theater system maintenance	53,151	—	—	53,151
Other theater	8,390	—	—	8,390
	159,356	10,108	11,014	180,478
New business	2,754	—	—	2,754
Other				
Film post-production	7,392	—	—	7,392
Film distribution	—	4,818	—	4,818
Other	—	2,123	1,263	3,386
	7,392	6,941	1,263	15,596
Total	\$ 169,502	\$ 137,814	\$ 88,348	\$ 395,664

	Year Ended December 31, 2018			
	Subject to the Revenue Recognition Standard		Subject to the Lease Standard	
	Fixed consideration	Variable consideration	Lease arrangements	Total
Network business				
IMAX DMR	\$ —	\$ 110,793	\$ —	\$ 110,793
Joint revenue sharing arrangements – contingent rent	—	—	73,371	73,371
IMAX systems – contingent rent	—	—	—	—
	—	110,793	73,371	184,164
Theater business				
IMAX systems				
Sales and sales-type leases	82,128	6,304	—	88,432
Ongoing fees and finance income	12,224	—	—	12,224
Joint revenue sharing arrangements – fixed fees	9,706	—	—	9,706
Theater system maintenance	49,684	—	—	49,684
Other theater	8,358	—	—	8,358
	162,100	6,304	—	168,404
New business	4,050	1,719	—	5,769
Other				
Film post-production	9,516	—	—	9,516
Film distribution	—	3,446	—	3,446
Other	50	3,052	—	3,102
	9,566	6,498	—	16,064
Total	\$ 175,716	\$ 125,314	\$ 73,371	\$ 374,401

The Company's arrangements include a requirement for the provision of maintenance services over the life of the arrangement, subject to a consumer price index increase on renewal each year. In circumstances where customers prepay the entire term's maintenance arrangement, payments are due to the Company for the years after the extended warranty and maintenance services offered as part of the System performance obligations expire. Payments upon renewal each year can be either in arrears or in advance and can vary in frequency from monthly to annually. At December 31, 2019, \$17.7 million of consideration has been deferred in relation to outstanding stand ready performance obligations related to these maintenance services (December 31, 2018 — \$21.9 million). As the maintenance services are a stand ready obligation, revenue, subject to appropriate constraint, is recognized evenly over the contract term.

In instances where consideration is received prior to performance obligations being satisfied, it is deferred. The majority of the Company's deferred revenue balance relates to payments for theater systems that have not yet been recognized. The deferred revenue related to an individual theater increases as progress payments are made and is recognized at the time the system obligation is satisfied. Recognition dates are variable and depend on numerous factors, including some outside of the Company's control.

21. Segmented Information

Management, including the Company’s Chief Executive Officer (“CEO”) who is the Company’s Chief Operating Decision Maker (as defined in the Segment Reporting Topic of the FASB ASC), assesses segment performance based on segment revenues and gross margins. Selling, general and administrative expenses, research and development costs, amortization of intangibles, receivables provisions (recoveries), write-downs net of recoveries, interest income, interest expense and tax (provision) recovery are not allocated to the segments.

The Company’s reportable segments are organized under four primary groups identified by nature of product sold or service provided: (1) Network Business, representing variable revenue generated by box office results and which includes the reportable segment of IMAX DMR and contingent rent from the joint revenue sharing arrangements and IMAX systems segments (hybrid joint revenue sharing arrangements, which take the form of a sale are reflected under the IMAX systems segment of Theater Business); (2) Theater Business, representing revenue generated by the sale and installation of theater systems and maintenance services, primarily related to the IMAX Systems and Theater System Maintenance reportable segments, and also includes hybrid (fixed and contingent) revenues and upfront installation costs from sales arrangements previously reported in the joint revenue sharing arrangements segment and after-market sales of projection system parts and 3D glasses from the other segment; (3) New Business, which includes which includes home entertainment, and other new business initiatives that are in the development, start-up and/or wind-up phases, and (4) Other; which includes the film post-production and distribution segments, certain IMAX theaters that the Company owns and operates, camera rentals and other miscellaneous items. The Company is presenting information at a disaggregated level to provide more relevant information to readers, as permitted by the standard. The accounting policies of the segments are the same as those described in note 2.

Transactions between the film production and IMAX DMR segment and the film post-production segment are valued at exchange value. Inter-segment profits are eliminated upon consolidation, as well as for the disclosures below.

- (a) The Company has the following eight reportable segments: IMAX DMR, joint revenue sharing arrangements, IMAX systems, theater system maintenance, other theater, new business, film distribution and film post-production. The Company organizes its reportable segments into the following four primary groups: Network Business, Theater Business, New Business and Other.

	Years Ended December 31,		
	2019	2018	2017
Revenue⁽¹⁾			
Network business			
IMAX DMR	\$ 120,765	\$ 110,793	\$ 108,853
Joint revenue sharing arrangements – contingent rent	75,932	73,371	70,444
IMAX systems – contingent rent	139	—	3,890
	<u>196,836</u>	<u>184,164</u>	<u>183,187</u>
Theater business			
IMAX systems	107,923	100,656	90,347
Joint revenue sharing arrangements – fixed fees	11,014	9,706	10,118
Theater system maintenance	53,151	49,684	45,383
Other theater	8,390	8,358	9,145
	<u>180,478</u>	<u>168,404</u>	<u>154,993</u>
New business	<u>2,754</u>	<u>5,769</u>	<u>24,522</u>
Other			
Film post-production	7,392	9,516	10,382
Film distribution	4,818	3,446	2,790
Other	3,386	3,102	4,893
	<u>15,596</u>	<u>16,064</u>	<u>18,065</u>
Total revenues	<u>\$ 395,664</u>	<u>\$ 374,401</u>	<u>\$ 380,767</u>
Gross Margin			
Network business			
IMAX DMR ⁽²⁾	\$ 78,592	\$ 72,773	\$ 71,789
Joint revenue sharing arrangements – contingent rent ⁽²⁾	47,935	48,856	47,337
IMAX systems – contingent rent	139	—	3,890
	<u>126,666</u>	<u>121,629</u>	<u>123,016</u>
Theater business			
IMAX systems ⁽²⁾⁽³⁾	58,540	60,019	57,734
Joint revenue sharing arrangements – fixed fees ⁽²⁾	2,613	1,982	2,349
Theater system maintenance ⁽³⁾	23,010	21,991	18,275
Other theater	2,624	1,806	1,965
	<u>86,787</u>	<u>85,798</u>	<u>80,323</u>
New business	<u>2,106</u>	<u>(350)</u>	<u>(16,176)</u>
Other			
Film post-production	1,680	3,107	4,791
Film distribution ⁽²⁾	(2,942)	(1,344)	(5,797)
Other	(125)	(911)	(911)
	<u>(1,387)</u>	<u>852</u>	<u>(1,917)</u>
Total segment margin	<u>\$ 214,172</u>	<u>\$ 207,929</u>	<u>\$ 185,246</u>

	Years Ended December 31,		
	2019	2018	2017
Depreciation and amortization			
Network business			
IMAX DMR	\$ 16,117	\$ 13,602	\$ 15,779
Joint revenue sharing arrangements - contingent rent	25,036	21,970	19,092
Theater business			
IMAX systems	3,878	3,615	3,551
Theater system maintenance	299	164	173
New business	58	2,519	15,365
Other			
Film post-production	1,301	1,500	1,845
Film distribution	3,894	2,225	2,128
Other	747	790	911
Corporate and other non-segment specific assets	12,157	11,052	7,963
Total	<u>\$ 63,487</u>	<u>\$ 57,437</u>	<u>\$ 66,807</u>

	Years Ended December 31,		
	2019	2018	2017
Asset impairments and write-downs, net of recoveries			
Network business			
IMAX DMR	—	\$ 15	\$ —
Joint revenue sharing arrangements - contingent rent	2,207	1,193	944
Theater business			
IMAX systems	276	250	2,930
Theater system maintenance	170	—	—
New business	96	7,399	16,400
Other			
Film post-production	—	—	—
Film distribution	1,379	—	5,865
Corporate and other non-segment specific assets	2,678	2,913	3,429
Total	<u>\$ 6,806</u>	<u>\$ 11,770</u>	<u>\$ 29,568</u>

	Years Ended December 31,		
	2019	2018	2017
Purchase of property, plant and equipment			
Network business			
IMAX DMR	\$ 99	\$ 55	\$ 518
Joint revenue sharing arrangements - contingent rent	40,489	34,810	42,634
Theater business			
IMAX systems	452	2,813	4,537
Theater system maintenance	311	527	206
New business	—	342	4,487
Other			
Film post-production	1,210	1,067	810
Other	504	193	367
Corporate and other non-segment specific assets	4,845	8,371	13,218
Total	<u>\$ 47,910</u>	<u>\$ 48,178</u>	<u>\$ 66,777</u>

	As at December 31	
	2019	2018
Assets		
Network business		
IMAX DMR	\$ 46,417	\$ 38,117
Joint revenue sharing arrangements - contingent rent	231,626	223,799
IMAX systems - contingent rent	—	—
Theater business		
IMAX systems	277,720	266,290
Joint revenue sharing arrangements - fixed fees	27,189	18,044
Theater system maintenance	22,869	26,225
Other theater	2,042	2,197
New business	—	1,677
Other		
Film post-production	36,562	36,998
Film distribution	14,831	15,601
Other	23,809	26,519
Corporate and other non-segment specific assets	206,004	218,133
Total	\$ 889,069	\$ 873,600

- (1) The Company's largest customer represents 16.5% of total revenues as at December 31, 2019, (2018 — 17.1%; 2017 — 16.4%).
- (2) IMAX DMR segment margins include marketing costs of \$22.5 million, \$16.5 million and \$15.4 million in 2019, 2018 and 2017, respectively. Joint revenue sharing arrangements segment margins include advertising, marketing, and commission costs of \$4.5 million, \$3.6 million and \$4.5 million in 2019, 2018 and 2017, respectively. IMAX systems segment margins include marketing and commission costs of \$2.0 million, \$2.4 million and \$2.9 million in 2019, 2018 and 2017, respectively. Film distribution segment margins includes marketing expense of \$0.4 million, expense of \$2.2 million and recovery of \$0.7 million in 2019, 2018 and 2017, respectively.
- (3) In 2019, the Company recorded a charge of \$0.4 million (2018 — \$0.3 million; 2017 — \$0.5 million, respectively) in costs and expenses applicable to revenues, primarily for its film-based projector inventories. Specifically, IMAX systems include an inventory charge of \$0.3 million (2018 — \$0.3 million; 2017 — \$0.5 million). Theater system maintenance includes inventory write-downs of \$0.2 million (2018 — \$nil; 2017 — \$nil).
- (4) Goodwill is allocated on a relative fair market value basis to the IMAX systems segment, theater system maintenance segment and joint revenue sharing segment. There has been no change in the allocation of goodwill from the prior year.

(b) Geographic Information

Revenue by geographic area is based on the location of the customer. Revenue related to IMAX DMR is presented based upon the geographic location of the theaters that exhibit the re-mastered films. IMAX DMR revenue is generated through contractual relationships with studios and other third parties and these may not be in the same geographical location as the theater.

	Years Ended December 31,		
	2019	2018	2017
Revenue			
Greater China	\$ 124,294	\$ 117,520	\$ 126,474
United States	121,264	118,495	135,153
Canada	9,220	10,507	12,812
Asia (excluding Greater China)	48,386	46,858	35,896
Western Europe	46,911	40,497	32,765
Russia & the CIS	16,124	10,133	11,054
Latin America	9,438	12,952	10,963
Rest of the World	20,027	17,439	15,650
Total	\$ 395,664	\$ 374,401	\$ 380,767

No single country in the Rest of the World, Western Europe, Latin America and Asia (excluding Greater China) classifications comprise more than 10% of total revenue.

	As at December 31	
	2019	2018
Property, plant and equipment		
United States	\$ 109,240	\$ 97,843
Greater China	105,312	93,494
Canada	47,837	48,275
Western Europe	27,748	26,566
Asia (excluding Greater China)	9,948	8,084
Rest of the World	6,764	6,396
Total	<u>\$ 306,849</u>	<u>\$ 280,658</u>

22. Financial Instruments

(a) Financial Instruments

The Company maintains cash with various major financial institutions. The Company's cash is invested with highly rated financial institutions.

The Company's accounts receivables and financing receivables are subject to credit risk. The Company's accounts receivable and financing receivables are concentrated with the theater exhibition industry and film entertainment industry. To minimize the Company's credit risk, the Company retains title to underlying theater systems leased, performs initial and ongoing credit evaluations of its customers and makes ongoing provisions for its estimate of potentially uncollectible amounts. The Company believes it has adequately provided for related exposures surrounding receivables and contractual commitments.

(b) Fair Value Measurements

The carrying values of the Company's cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities due within one-year approximate fair values due to the short-term maturity of these instruments. The Company's other financial instruments at December 31, are comprised of the following:

	As at December 31, 2019		As at December 31, 2018	
	Carrying Amount	Estimated Fair Value	Carrying Amount	Estimated Fair Value
Level 1				
Cash and cash equivalents ⁽¹⁾	\$ 109,484	109,484	\$ 141,590	141,590
Equity securities ⁽³⁾	15,685	15,685	1,022	1,022
Level 2				
Net financed sales receivables ⁽²⁾	\$ 112,432	\$ 111,441	\$ 117,990	117,428
Net investment in sales-type leases ⁽²⁾	15,606	15,309	9,442	9,529
Convertible loan receivable ⁽²⁾	1,500	1,500	1,500	1,500
Equity securities ⁽¹⁾	1,000	1,000	1,000	1,000
Foreign exchange contracts — designated forwards ⁽³⁾	530	530	(1,202)	(1,202)
Borrowings under the Credit Facility ⁽¹⁾	(20,000)	(20,000)	(40,000)	(40,000)

(1) Recorded at cost, which approximates fair value.

(2) Estimated based on discounting future cash flows at currently available interest rates with comparable terms.

(3) Value determined using quoted prices in active markets.

When a determination is made to classify an asset or liability within Level 3, the determination is based upon the significance of the unobservable inputs to the overall fair value measurement. There were no transfers in or out of the Company's Level 3 assets during the year ended December 31, 2019 and 2018.

(c) Financing Receivables

The Company's net investment in leases and its net financed sale receivables are subject to the disclosure requirements of ASC 310 "Receivables". Due to differing risk profiles of its net investment in leases and its net financed sales receivables, the Company views its net investment in leases and its net financed sale receivables as separate classes of financing receivables. The Company does not aggregate financing receivables to assess impairment.

The Company monitors the credit quality of each customer on a frequent basis through collections and aging analyses. The Company also holds meetings monthly in order to identify credit concerns and whether a change in credit quality classification is required for the customer. A customer may improve in their credit quality classification once a substantial payment is made on overdue balances or the customer has agreed to a payment plan with the Company and payments have commenced in accordance to the payment plan. The change in credit quality indicator is dependent upon management approval.

The Company classifies its customers into four categories to indicate the credit quality worthiness of its financing receivables for internal purposes only:

Good standing — Theater continues to be in good standing with the Company as the client's payments and reporting are up-to-date.

Credit Watch — Theater operator has begun to demonstrate a delay in payments, and has been placed on the Company's credit watch list for continued monitoring, but active communication continues with the Company. Depending on the size of outstanding balance, length of time in arrears and other factors, transactions may need to be approved by management. These financing receivables are considered to be in better condition than those receivables related to theaters in the "Pre-approved transactions" category, but not in as good of condition as those receivables in "Good standing."

Pre-approved transactions only — Theater operator is demonstrating a delay in payments with little or no communication with the Company. All service or shipments to the theater must be reviewed and approved by management. These financing receivables are considered to be in better condition than those receivables related to theaters in the "All transactions suspended" category, but not in as good of condition as those receivables in "Credit Watch." Depending on the individual facts and circumstances of each customer, finance income recognition may be suspended if management believes the receivable to be impaired.

All transactions suspended — Theater is severely delinquent, non-responsive or not negotiating in good faith with the Company. Once a theater is classified as "All transactions suspended" the theater is placed on nonaccrual status and all revenue recognitions related to the theater are stopped.

The following table discloses the recorded investment in financing receivables by credit quality indicator:

	As at December 31, 2019			As at December 31, 2018		
	Minimum Lease Payments	Financed Sales Receivables	Total	Minimum Lease Payments	Financed Sales Receivables	Total
In good standing	\$ 15,094	\$ 102,450	\$ 117,544	\$ 8,701	\$ 108,574	\$ 117,275
Credit Watch	667	9,279	9,946	574	8,723	9,297
Pre-approved transactions	—	830	830	322	565	887
Transactions suspended	—	788	788	—	967	967
	<u>\$ 15,761</u>	<u>\$ 113,347</u>	<u>\$ 129,108</u>	<u>\$ 9,597</u>	<u>\$ 118,829</u>	<u>\$ 128,426</u>

While recognition of finance income is suspended, payments received by a customer are applied against the outstanding balance owed. If payments are sufficient to cover any unreserved receivables, a recovery of provision taken on the billed amount, if applicable, is recorded to the extent of the residual cash received. Once the collectability issues are resolved and the customer has returned to being in good standing, the Company will resume recognition of finance income.

The Company's investment in financing receivables on nonaccrual status is as follows:

	As at December 31, 2019		As at December 31, 2018	
	Recorded Investment	Related Allowance	Recorded Investment	Related Allowance
Net investment in leases	\$ —	\$ —	\$ —	\$ —
Net financed sales receivables	788	(732)	967	(739)
Total	<u>\$ 788</u>	<u>\$ (732)</u>	<u>\$ 967</u>	<u>\$ (739)</u>

The Company considers financing receivables with aging between 60-89 days as indications of theaters with potential collection concerns. The Company will begin to focus its review on these financing receivables and increase its discussions internally and with the theater regarding payment status. Once a theater's aging exceeds 90 days, the Company's policy is to review and assess collectability on the theater's past due accounts. Over 90 days past due is used by the Company as an indicator of potential impairment as invoices up to 90 days outstanding could be considered reasonable due to the time required for dispute resolution or for the provision of further information or supporting documentation to the customer.

The Company's aged financing receivables are as follows:

	As at December 31, 2019							
	Accrued and Current	30-89 Days	90+ Days	Billed Financing Receivables	Related Unbilled Recorded Investment	Total Recorded Investment	Related Allowances	Recorded Investment Net of Allowances
Net investment in leases	\$ 30	\$ 68	\$ 251	\$ 349	\$ 15,412	\$ 15,761	\$ (155)	\$ 15,606
Net financed sales receivables	1,678	2,772	5,446	9,896	103,451	113,347	(915)	112,432
Total	<u>\$ 1,708</u>	<u>\$ 2,840</u>	<u>\$ 5,697</u>	<u>\$ 10,245</u>	<u>\$ 118,863</u>	<u>\$ 129,108</u>	<u>\$ (1,070)</u>	<u>\$ 128,038</u>

	As at December 31, 2018							
	Accrued and Current	30-89 Days	90+ Days	Billed Financing Receivables	Related Unbilled Recorded Investment	Total Recorded Investment	Related Allowances	Recorded Investment Net of Allowances
Net investment in leases	\$ 52	\$ 18	\$ 253	\$ 323	\$ 9,274	\$ 9,597	\$ (155)	\$ 9,442
Net financed sales receivables	1,442	2,066	5,241	8,749	110,080	118,829	(839)	117,990
Total	<u>\$ 1,494</u>	<u>\$ 2,084</u>	<u>\$ 5,494</u>	<u>\$ 9,072</u>	<u>\$ 119,354</u>	<u>\$ 128,426</u>	<u>\$ (994)</u>	<u>\$ 127,432</u>

The Company's recorded investment in financing receivables with billed amounts past due for which the Company continues to accrue finance income is as follows:

	As at December 31, 2019						
	Accrued and Current	30-89 Days	90+ Days	Billed Financing Receivables	Related Unbilled Recorded Investment	Related Allowance	Recorded Investment Past Due and Accruing
Net investment in leases	\$ 9	\$ 19	\$ 251	\$ 279	\$ 578	\$ —	\$ 857
Net financed sales receivables	1,146	1,290	5,523	7,959	29,173	—	37,132
Total	<u>\$ 1,155</u>	<u>\$ 1,309</u>	<u>\$ 5,774</u>	<u>\$ 8,238</u>	<u>\$ 29,751</u>	<u>\$ —</u>	<u>\$ 37,989</u>

	As at December 31, 2018						
	Accrued and Current	30-89 Days	90+ Days	Billed Financing Receivables	Related Unbilled Recorded Investment	Related Allowance	Recorded Investment Past Due and Accruing
Net investment in leases	\$ 28	\$ 9	\$ 246	\$ 283	\$ 1,523	\$ —	\$ 1,806
Net financed sales receivables	558	1,472	5,860	7,890	31,507	—	39,397
Total	<u>\$ 586</u>	<u>\$ 1,481</u>	<u>\$ 6,106</u>	<u>\$ 8,173</u>	<u>\$ 33,030</u>	<u>\$ —</u>	<u>\$ 41,203</u>

The Company considers financing receivables to be impaired when it believes it to be probable that it will not recover the full amount of principal or interest owing under the arrangement. The Company uses its knowledge of the industry and economic trends, as well as its prior experiences to determine the amount recoverable for impaired financing receivables. The following table discloses information regarding the Company's impaired financing receivables:

	As at December 31, 2019				
	Recorded Investment	Unpaid Principal	Related Allowance	Average Recorded Investment	Interest Income Recognized
<u>Recorded investment for which there is a related allowance:</u>					
Net investment in leases	\$ —	\$ —	\$ —	\$ —	\$ —
Net financed sales receivables	708	80	(732)	818	—
<u>Recorded investment for which there is no related allowance:</u>					
Net investment in leases	—	—	—	—	—
Net financed sales receivables	—	—	—	—	—
<u>Total recorded investment in impaired loans:</u>					
Net investment in leases	\$ —	\$ —	\$ —	\$ —	\$ —
Net financed sales receivables	\$ 708	\$ 80	\$ (732)	\$ 818	\$ —
	As at December 31, 2018				
	Recorded Investment	Unpaid Principal	Related Allowance	Average Recorded Investment	Interest Income Recognized
<u>Recorded investment for which there is a related allowance:</u>					
Net investment in leases	\$ —	\$ —	\$ —	\$ —	\$ —
Net financed sales receivables	869	98	(739)	930	—
<u>Recorded investment for which there is no related allowance:</u>					
Net investment in leases	—	—	—	—	—
Net financed sales receivables	—	—	—	—	—
<u>Total recorded investment in impaired loans:</u>					
Net investment in leases	\$ —	\$ —	\$ —	\$ —	\$ —
Net financed sales receivables	\$ 869	\$ 98	\$ (739)	\$ 930	\$ —

The Company's activity in the allowance for credit losses for the period and the Company's recorded investment in financing receivables is as follows:

	Year Ended December 31, 2019	
	Net Investment in Leases	Net Financed Sales Receivables
<u>Allowance for credit losses:</u>		
Beginning balance	\$ 155	\$ 839
Charge-offs	—	—
Recoveries	—	—
Provision	—	76
Ending balance	<u>\$ 155</u>	<u>\$ 915</u>
Ending balance: individually evaluated for impairment	<u>\$ 155</u>	<u>\$ 915</u>
<u>Financing receivables:</u>		
Ending balance: individually evaluated for impairment	<u>\$ 15,761</u>	<u>\$ 113,347</u>
	Year Ended December 31, 2018	
	Net Investment in Leases	Net Financed Sales Receivables
<u>Allowance for credit losses:</u>		
Beginning balance	\$ 155	\$ 922
Charge-offs	—	(183)
Recoveries	—	—
Provision	—	100
Ending balance	<u>\$ 155</u>	<u>\$ 839</u>
Ending balance: individually evaluated for impairment	<u>\$ 155</u>	<u>\$ 839</u>
<u>Financing receivables:</u>		
Ending balance: individually evaluated for impairment	<u>\$ 9,597</u>	<u>\$ 118,829</u>

(d) Foreign Exchange Risk Management

The Company is exposed to market risk from changes in foreign currency rates. A significant portion of the Company's revenues is denominated in U.S. dollars while a substantial portion of its costs and expenses is denominated in Canadian dollars. A portion of the net U.S. dollar cash flows of the Company is periodically converted to Canadian dollars to fund Canadian dollar expenses through the spot market. In China and Japan, the Company has ongoing operating expenses related to its operations in Chinese Renminbi and Japanese yen, respectively. Net cash flows are converted to and from U.S. dollars through the spot market. The Company also has cash receipts under leases denominated in Chinese Renminbi, Japanese yen, Canadian dollars and Euros which are converted to U.S. dollars through the spot market. In addition, because IMAX films generate box-office in 81 different countries, unfavourable exchange rates between applicable local currencies, and the U.S. dollar affect the Company's reported gross box-office and revenues, further impacting the Company's results of operations. The Company's policy is to not use any financial instruments for trading or other speculative purposes.

The Company entered into a series of foreign currency forward contracts to manage the Company's risks associated with the volatility of foreign currencies. Certain of these foreign currency forward contracts met the criteria required for hedge accounting under the Derivatives and Hedging Topic of the FASB ASC at inception, and continue to meet hedge effectiveness tests at December 31, 2019 (the "Foreign Currency Hedges"), with settlement dates throughout 2020 and 2021. Foreign currency derivatives are recognized and measured in the balance sheet at fair value. Changes in the fair value (gains or losses) are recognized in the consolidated statement of operations except for derivatives designated and qualifying as foreign currency hedging instruments. For foreign currency hedging instruments, the effective portion of the gain or loss in a hedge of a forecasted transaction is reported in other comprehensive income and reclassified to the consolidated statement of operations when the forecasted transaction occurs. The Company currently does not hold any derivatives which are not designated as hedging instruments and therefore no gain or loss pertaining to an ineffective portion has been recognized.

The following tabular disclosures reflect the impact that derivative instruments and hedging activities have on the Company's consolidated financial statements:

Notional value of foreign exchange contracts:

	As at December 31,	
	2019	2018
Derivatives designated as hedging instruments:		
Foreign exchange contracts — Forwards	\$ 36,052	\$ 50,828

Fair value of derivatives in foreign exchange contracts:

	Balance Sheet Location	As at December 31,	
		2019	2018
Derivatives designated as hedging instruments:			
Foreign exchange contracts — Forwards	Other assets	\$ 602	\$ 649
	Accrued and other liabilities	\$ (72)	\$ (1,851)
		\$ 530	\$ (1,202)

Derivatives in Foreign Currency Hedging relationships are as follows:

		Years Ended December 31,		
		2019	2018	2017
Foreign exchange contracts - Forwards	Derivative Gain (Loss) Recognized in OCI (Effective Portion)	\$ 552	\$ (2,219)	\$ 2,545
		\$ 552	\$ (2,219)	\$ 2,545

	Location of Derivative (Loss) Gain Reclassified from AOCI into Income (Effective Portion)	Years Ended December 31,		
		2019	2018	2017
Foreign exchange contracts - Forwards	Selling, general and administrative expenses	\$ (1,109)	\$ 408	\$ 824
	Inventory	(42)	—	—
	Property, plant and equipment	(32)	—	—
		\$ (1,183)	\$ 408	\$ 824

		Years Ended December 31,		
		2019	2018	2017
Foreign exchange contracts - Forwards	Derivative (Loss) Gain Recognized In and Out of OCI (Effective Portion)	\$ (22)	\$ 21	\$ —

The Company's estimated net amount of the existing gains as at December 31, 2019 is \$0.4 million, which is expected to be reclassified to earnings within the next twelve months.

(e) Investments in New Business Ventures

The Company accounts for investments in new business ventures using the guidance of the FASB ASC 323 and the FASB ASC 320, as appropriate.

As at December 31, 2019, the equity method of accounting is being utilized for investments with a total carrying value of \$nil (December 31, 2018 — \$nil). The Company's accumulated losses in excess of its equity investment were \$1.5 million as at December 31, 2019 (December 31, 2018 — \$1.6 million) and are classified in Accrued and other liabilities. For the year ended December 31, 2019, gross revenues, cost of revenue and net loss for the investment were \$2.0 million, \$1.2 million and \$1.5 million, respectively (2018 — \$1.9 million, \$3.0 million, and \$1.8 million, respectively). The Company has determined it is not the primary beneficiary of this VIE, and therefore this entity has not been consolidated. In a prior year, the Company issued a convertible loan of \$1.5 million to this entity with a term of 3 years with an annual effective interest rate of 5.0%. The instrument is classified as an available-for-sale investment due to certain features that allow for conversion to common stock in the entity in the event of certain triggers occurring.

In addition, the Company has an investment in preferred stock of another business venture of \$1.5 million which meets the criteria for classification as a debt security under the FASB ASC 320 and is recorded at a fair value of \$nil at December 31, 2019 (December 31, 2018 — \$nil).

Furthermore, the Company has an investment of \$1.0 million (December 31, 2018 — \$1.0 million) in the shares of an exchange traded fund. This investment is classified as an equity investment.

For the year ended December 31, 2019, the Company held investments with a total value of \$3.5 million in the preferred shares of enterprises which meet the criteria for classification as an equity security under FASB ASC 325, carried at historical cost, net of impairment charges. The carrying value of these equity security investments was \$1.0 million at December 31, 2019 (December 31, 2018 — \$1.0 million).

On January 17, 2019, IMAX China (Hong Kong), Limited, a wholly-owned subsidiary of IMAX China, as an investor entered into a cornerstone investment agreement with Maoyan Entertainment ("Maoyan") (as the issuer) and Morgan Stanley Asia Limited (as a sponsor, underwriter and the underwriters' representative). Pursuant to this agreement, IMAX China (Hong Kong), Limited agreed to invest \$15.2 million to subscribe for a certain number of shares of Maoyan at the final offer price pursuant to the global offering of the share capital of Maoyan, and this investment would be subject to a lock-up period of six months following the date of the global offering. On February 4, 2019, Maoyan completed its global offering, upon which, IMAX China (Hong Kong), Limited became a less than 1% shareholder in Maoyan. This investment is classified as an equity security under the FASB ASC 321, with a readily determinable market value through the Hong Kong Stock Exchange. The changes in fair value are recorded in the Change in fair value of equity investment line item in the Company's consolidated statement of operations. For the year ended December 31, 2019, the Company has recorded a net unrealized loss of \$0.5 million.

The total carrying value of investments in new business ventures at December 31, 2019 and 2018 is \$2.5 million and \$2.5 million, respectively, and is recorded in Other Assets.

The investment in shares of an exchange traded fund and the investment in Maoyan are recorded in Investment in equity securities.

23. Employee's Pension and Postretirement Benefits

(a) Defined Benefit Plan

The Company has an unfunded U.S. defined benefit pension plan, the SERP, covering Richard L. Gelfond, Chief Executive Officer ("CEO") of the Company. The SERP provides for a lifetime retirement benefit from age 55 determined as 75% of Mr. Gelfond's best average 60 consecutive months of earnings over his employment history. The benefits were 50% vested as at July 2000, the SERP initiation date. The vesting percentage increased on a straight-line basis from inception until age 55. The benefits of Mr. Gelfond are 100% vested. Upon a termination for cause, prior to a change of control, Mr. Gelfond shall forfeit any and all benefits to which he may have been entitled, whether or not vested.

Under the terms of the SERP, if Mr. Gelfond's employment terminated other than for cause (as defined in his employment agreement), he is entitled to receive SERP benefits in the form of a lump sum payment. SERP benefit payments to Mr. Gelfond are subject to a deferral for six months after the termination of his employment, at which time Mr. Gelfond will be entitled to receive interest on the deferred amount credited at the applicable federal rate for short-term obligations. Pursuant to an amendment dated November 1, 2019 to the existing employment agreement, the term of Mr. Gelfond's employment was extended through December 31, 2022, although Mr. Gelfond has not informed the Company that he intends to retire at that time. Under the terms of the amendment to his employment agreement, the total amount of benefit payable to Mr. Gelfond under the SERP has been fixed at \$20.3 million. The increase in SERP obligation under the amendment was accounted for as prior service costs arising during the year and recognized in other comprehensive income. The prior service costs arising from the amendment are amortized over the remaining employment agreement term of 36 months on a straight-line basis. The amortization expenses of prior service costs are recorded within the retirement benefits non-service expense in the consolidated statements of operations.

The following assumptions were used to determine the obligation and cost of the Company's SERP at the plan measurement dates:

	As at December 31,		
	2019	2018	2017
Discount rate	2.00%	3.14%	2.22%
Lump sum interest rate:			
First 25 years	2.12%	—	—
First 20 years	—	3.09%	2.39%
Thereafter	2.26%	2.84%	2.60%
Cost of living adjustment on benefits	1.20%	1.20%	1.20%

The amounts accrued for the SERP are determined as follows:

	Years Ended December 31,	
	2019	2018
Obligation, beginning of period	\$ 17,977	\$ 19,003
Prior service cost	456	—
Interest cost	564	422
Actuarial gain	(157)	(1,448)
Obligation, end of period and unfunded status	<u>\$ 18,840</u>	<u>\$ 17,977</u>

The following table provides disclosure of the pension benefit obligation recorded in the consolidated balance sheets:

	As at December 31,	
	2019	2018
Accrued benefits cost	\$ (18,840)	\$ (17,977)
Accumulated other comprehensive gain	(988)	(1,287)
Net amount recognized in the consolidated balance sheets	<u>\$ (19,828)</u>	<u>\$ (19,264)</u>

The following table provides disclosure of pension expense for the SERP for the years ended December 31:

	Years ended December 31,		
	2019	2018	2017
Interest cost	\$ 564	\$ 422	\$ 427
Pension expense	<u>\$ 564</u>	<u>\$ 422</u>	<u>\$ 427</u>

The accumulated benefit obligation for the SERP was \$18.8 million at December 31, 2019 (2018 — \$18.0 million).

The following amounts were included in accumulated other comprehensive income and will be recognized as components of net periodic benefit cost in future periods:

	As at December 31,		
	2019	2018	2017
Unrealized actuarial (gain) loss	\$ (1,444)	\$ (1,287)	\$ 161
Unamortized prior service cost	456	—	—
Net periodic benefit costs to be recognized in future periods	<u>\$ (988)</u>	<u>\$ (1,287)</u>	<u>\$ 161</u>

No contributions were made for the SERP during 2019. The Company expects interest costs of \$0.6 million to be recognized as a component of net periodic benefit cost in 2020.

The following benefit payments are expected to be made as per the current SERP assumptions and the terms of the SERP in each of the next five years, and in the aggregate:

2020	\$ —
2021	—
2022	—
2023	20,298
2024	—
Thereafter	—
	<u>\$ 20,298</u>

(b) Defined Contribution Pension Plan

The Company also maintains defined contribution pension plans for its employees, including its executive officers. The Company makes contributions to these plans on behalf of employees in an amount up to 5% of their base salary subject to certain prescribed maximums. During 2019, the Company contributed and expensed an aggregate of \$1.2 million (2018 — \$1.2 million; 2017 — \$1.2 million) to its Canadian plan and an aggregate of \$0.6 million (2018 — \$0.5 million; 2017 — \$0.7 million) to its defined contribution employee pension plan under Section 401(k) of the U.S. Internal Revenue Code.

(c) Postretirement Benefits - Executives

The Company has an unfunded postretirement plan for Messrs. Gelfond and Bradley J. Wechsler, Chairman of the Company's Board of Directors. The plan provides that the Company will maintain health benefits for Messrs. Gelfond and Wechsler until they become eligible for Medicare and, thereafter, the Company will provide Medicare supplemental coverage as selected by Messrs. Gelfond and Wechsler.

The amounts accrued for the plan are determined as follows:

	As at December 31,	
	2019	2018
Obligation, beginning of year	\$ 639	\$ 698
Interest cost	26	24
Benefits paid	—	(24)
Actuarial gain	—	(59)
Obligation, end of year	<u>\$ 665</u>	<u>\$ 639</u>

The following details the net cost components, all related to continuing operations, and underlying assumptions of postretirement benefits other than pensions:

	Years Ended December 31,		
	2019	2018	2017
Interest cost	\$ 26	\$ 24	\$ 26
Pension expense	\$ 26	\$ 24	\$ 26

The following amounts were included in accumulated other comprehensive income and will be recognized as components of net periodic benefit cost in future periods:

	As at December 31,		
	2019	2018	2017
Unrealized actuarial (gain) loss	\$ (50)	\$ (50)	\$ 9

Weighted average assumptions used to determine the benefit obligation are:

	As at December 31,		
	2019	2018	2017
Discount rate	3.13%	4.15%	3.55%

Weighted average assumption used to determine the net postretirement benefit expense are:

	Years Ended December 31,		
	2019	2018	2017
Discount rate	4.15%	3.55%	4.10%

The following benefit payments are expected to be made as per the current plan assumptions in each of the next five years:

2020	\$ 8
2021	9
2022	9
2023	19
2024	20
Thereafter	600
Total	\$ 665

(d) Postretirement Benefits – Canadian Employees

The Company has an unfunded postretirement plan for its Canadian employees upon meeting specific eligibility requirements. The Company will provide eligible participants, upon retirement, with health and welfare benefits.

The amounts accrued for the plan are determined as follows:

	As at December 31,	
	2019	2018
Obligation, beginning of year	\$ 1,487	\$ 1,678
Interest cost	49	53
Benefits paid	(108)	(104)
Actuarial loss (gain)	153	(26)
Unrealized foreign exchange (gain) loss	0	(114)
Obligation, end of year	\$ 1,581	\$ 1,487

The following details the net cost components, all related to continuing operations, and underlying assumptions of postretirement benefits other than pensions:

	Years Ended December 31,		
	2019	2018	2017
Interest cost	\$ 49	\$ 53	\$ 65
Pension expense	\$ 49	\$ 53	\$ 65

The following amounts were included in accumulated other comprehensive income and will be recognized as components of net periodic benefit cost in future periods:

	As at December 31,		
	2019	2018	2017
Unrealized actuarial loss	\$ 309	\$ 156	\$ 182

The Company expects interest costs of less than \$0.1 million to be recognized as a component of net periodic benefit cost in 2020.

Weighted average assumptions used to determine the benefit obligation are:

	As at December 31,		
	2019	2018	2017
Discount rate	3.05%	3.35%	3.35%

Weighted average assumptions used to determine the net postretirement benefit expense are:

	Years Ended December 31,		
	2019	2018	2017
Discount rate	3.80%	3.35%	3.65%

The following benefit payments are expected to be made as per the current plan assumptions in each of the next five years:

2020	\$	100
2021		105
2022		104
2023		104
2024		103
Thereafter		1,065
Total	\$	1,581

(e) Deferred Compensation Benefit Plan

The Company maintained a nonqualified deferred compensation benefit plan (the “Retirement Plan”) covering the former CEO of IMAX Entertainment and Senior Executive Vice President of the Company. Under the terms of his agreement with the Company, the plan will vest in full if he incurs a separation of service (as defined therein). In the fourth quarter of 2018, he incurred a separation from service, and as such, his Retirement Plan benefits became fully vested in 2018 and the accelerated costs were recognized and reflected in the executive transition costs line on the consolidated statement of operations. As at December 31, 2019, the Company had a funded benefit obligation recorded of \$3.6 million (December 31, 2018 — unfunded benefit obligation of \$3.6 million). Subsequent to year end, the retirement benefit obligation was fully funded. During 2018, the Company expensed an aggregate of \$2.6 million (2017 — \$0.5 million), of which \$0.7 million was recorded in selling, general and administrative expenses as it relates to service performed in 2018, the remaining \$1.9 million is recorded in executive transition costs. The Company did not recognize any additional expenses in the year ended December 31, 2019.

24. Non-Controlling Interests

(a) IMAX China Non-Controlling Interest

The Company indirectly owns approximately 69.74% of IMAX China, whose shares trade on the Hong Kong Stock Exchange. IMAX China remains a consolidated subsidiary of the Company. The balance of non-controlling interest in IMAX China as at December 31, 2019 is \$89.5 million. The net income attributable to non-controlling interest in IMAX China for the year ended December 31, 2019 is \$13.3 million.

(b) Other Non-Controlling Interests

The Company's Original Film Fund was established in 2014 to co-finance a portfolio of 10 original large-format films. The initial investment in the Original Film Fund was committed to by a third party in the amount of \$25.0 million, with the possibility of contributing additional funds. The Company has contributed \$9.0 million to the Original Film Fund since 2014, and has reached its maximum contribution. The Company sees the Original Film Fund as a vehicle designed to generate a continuous, steady flow of high-quality documentary content. As at December 31, 2019, the Original Film Fund invested \$22.3 million toward the development of original films. The related production, financing and distribution agreement includes put and call rights relating to change of control of the rights, title and interest in the co-financed pictures.

The Company also established its VR Fund among the Company, its subsidiary IMAX China and other strategic investors to help finance the creation of interactive VR content experiences for use across all VR platforms, including in the pilot IMAX VR Centers. The VR Fund helped finance the production of one interactive VR experience, which debuted exclusively in the pilot IMAX VR Centers in November 2017 before being made available to other VR platforms. As at December 31, 2018, the Company invested \$4.0 million toward the development of VR content. In December 2018, the Company announced, in connection with its strategic review of its VR pilot initiative, that it had decided to close its remaining VR locations and write-off certain VR content investments. Subsequent to year end, the Company has also decided dissolve the VR Fund and not actively pursue any additional VR opportunities at this time. For additional details see note 26.

The following summarizes the movement of the non-controlling interest in temporary equity, in the Company's subsidiary for the years ended December 31, 2019, 2018 and 2017.

Balance as at January 1, 2017	\$	4,980
Net loss		(3,627)
Balance as at December 31, 2017	\$	1,353
Issuance of subsidiary shares to non-controlling interests		7,796
Net loss		(2,710)
Balance as at December 31, 2018	\$	6,439
Return of capital to non-controlling interests		(243)
Share issuance costs from the issuance of subsidiary shares to a non-controlling interest		1,350
Net loss		(1,638)
Balance as at December 31, 2019	\$	5,908

25. Executive Transition Costs

In 2018, the Company recognized executive transition costs of \$3.0 million associated with the separation of the former CEO of IMAX Entertainment and Senior Executive Vice President of the Company. The costs include \$1.9 million of accelerated costs related to retirement benefits which became vested in full. Additional expenses of \$1.1 million have been recorded for severance, bonus and stock-based compensation which relate to the exit of the executive and other executives. No such charges were incurred in the year ended December 31, 2019.

26. Exit Costs, Restructuring Charges and Associated Impairments

The Company recognized the following charges in its consolidated statements of operations for the year ended December 31:

	2019	2018	2017
Restructuring charges	\$ 628	\$ 2,405	\$ 9,895
Asset impairments	—	6,432	5,553
Costs to exit lease and restore facilities	222	619	726
Other	—	86	—
	<u>\$ 850</u>	<u>\$ 9,542</u>	<u>\$ 16,174</u>

(a) Costs to exit an operating lease

In December 2018, the Company announced that it would be closing all remaining VR locations. As the premises lease was non-cancellable until the end of the term and pursuant to FASB ASC 420 “Exit or Disposal Cost Obligations”, the Company recognized a new business segment expense of \$0.2 million and \$0.6 million for the years ended December 31, 2019 and December 31, 2018, respectively.

In September 2017, the Company relocated its New York office employees and operations as the existing leased space was not suitable to accommodate all current business needs. As the premises lease is non-cancellable to the end of the term, the Company entered into a sublease arrangement to reduce the expected losses over the remaining term of the lease. Pursuant to FASB ASC 420 “Exit or Disposal Cost Obligations”, the Company recognized a corporate segment expense of \$0.7 million for the year ended December 31, 2017.

(b) Restructuring charges

Restructuring charges are comprised of employee severance costs including benefits and stock-based compensation, costs of consolidating facilities and contract termination costs. Restructuring charges are based upon plans that have been committed to by the Company but may be refined in subsequent periods. These charges are recognized pursuant to FASB ASC 420. A liability for a cost associated with an exit or disposal activity is recognized and measured at its fair value in the consolidated statement of operations in the period in which the liability is incurred. When estimating the value of facility restructuring activities, assumptions are applied regarding estimated sub-lease payments to be received, which can differ from actual results.

In December 2018, the Company performed a strategic review of its virtual reality pilot initiative and has decided to close its remaining VR locations. In addition, as part of the Company’s ongoing efforts to decrease costs, the Company has reduced certain functions and has realigned resources.

In June 2017, the Company implemented a cost reduction plan with the goal of increasing profitability, operating leverage and free cash flow. The cost reduction plan included the exit from certain non-core businesses or initiatives, as well as a one-time reduction in workforce.

In connection with the Company’s restructuring initiatives, the Company incurred \$0.6 million (2018 — \$2.4 million, 2017 — \$9.9 million) in restructuring charges for the year ended December 31, 2019. A summary of the restructuring costs by reporting groups identified by nature of product sold, or service provided as disclosed in note 21 recognized during the year ended December 31 are as follows:

	2019	2018	2017
Corporate	\$ 628	\$ 1,529	\$ 5,369
New business	—	611	1,699
Other	—	215	930
IMAX DMR	—	50	662
Theater system maintenance	—	—	546
IMAX systems	—	—	120
Joint revenue sharing arrangements	—	—	21
Film post-production	—	—	548
	<u>\$ 628</u>	<u>\$ 2,405</u>	<u>\$ 9,895</u>

The following table sets forth a summary of restructuring accrual activities for the year ended December 31:

		Employee Severance and Benefits
Balance as at December 31, 2017	\$	2,221
Restructuring charges		2,405
Cash payments		(2,690)
Balance as at December 31, 2018	\$	1,936
Restructuring charges		628
Cash payments		(2,211)
Balance as at December 31, 2019	\$	353

(c) Associated Impairments

As a result of the cost reduction plan discussed above, the Company recognized costs associated with the retirement of certain long-lived assets pursuant to the FASB ASC 410-20, “Asset retirement and environmental obligations” and ASC 360-10, “Property, plant and equipment”. The following impairments for the years ended December 31, 2019, 2018 and 2017 are a direct result of the exit activities described in (a) above.

	2019	2018	2017
Property, plant and equipment	\$ —	\$ 3,680	\$ 3,696
Other assets	—	2,565	1,522
Prepaid expenses	—	121	—
Intangible assets	—	66	—
Film assets	—	—	335
	\$ —	\$ 6,432	\$ 5,553

In the year ended December 31, 2019, the Company did not recognize any exit costs or associated impairments.

27. Selected Quarterly Financial Information (Unaudited)

(in thousands of U.S. dollars, except per share amounts)

	2019			
	Q1	Q2	Q3	Q4
Revenues	\$ 80,198	\$ 104,797	\$ 86,390	\$ 124,279
Costs and expenses applicable to revenues	35,058	45,244	39,270	61,920
Gross margin	\$ 45,140	\$ 59,553	\$ 47,120	\$ 62,359
Net income	\$ 12,487	\$ 13,836	\$ 10,896	\$ 21,352
Net income attributable to common shareholders	\$ 8,265	\$ 11,397	\$ 9,033	\$ 18,171
Net income per share attributable to common shareholders:				
Net income per share - basic & diluted	\$ 0.13	\$ 0.19	\$ 0.15	\$ 0.29

	2018			
	Q1	Q2	Q3	Q4
Revenues	\$ 84,984	\$ 98,345	\$ 82,108	\$ 108,964
Costs and expenses applicable to revenues	34,292	37,941	39,917	54,322
Gross margin	\$ 50,692	\$ 60,404	\$ 42,191	\$ 54,642
Net income	\$ 12,067	\$ 10,255	\$ 7,502	\$ 3,771
Net income attributable to common shareholders	\$ 8,505	\$ 7,625	\$ 5,020	\$ 1,694
Net income per share attributable to common shareholders:				
Net income per share - basic & diluted	\$ 0.13	\$ 0.12	\$ 0.08	\$ 0.03

28. Prior Period's Figures

In the current year, the Company reclassified certain amounts from “Other Assets” on the consolidated balance sheet. Variable consideration receivable from contracts and Investment in equity securities are presented as separate lines on the consolidated balance sheet as at December 31, 2019 and 2018.

29. Subsequent event

Subsequent to December 31, 2019, in response to the public health risks associated with an outbreak of coronavirus in Wuhan, China, Chinese exhibitors temporarily closed more than 70,000 movie theaters, including all of the approximately 700 IMAX theaters in mainland China. The theaters have been closed since late January 2020, including over the Lunar New Year holiday, and have not yet reopened as of the date of this report. Chinese movie studios also postponed the release of multiple films, including those originally scheduled to be released over this holiday, five of which were scheduled to be shown in IMAX theaters. The repercussions of this health crisis in China will have a material adverse impact on the revenues generated by IMAX theatre systems in the first quarter of 2020.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None

Item 9A. Controls and Procedures**EVALUATION OF DISCLOSURE CONTROLS AND PROCEDURES**

The Company maintains disclosure controls and procedures designed to ensure that information required to be disclosed in reports filed under the Securities Exchange Act of 1934, as amended, is recorded, processed, summarized and reported within the specified time periods and that such information is accumulated and communicated to management, including the CEO and Chief Financial Officer (“CFO”), to allow timely discussions regarding required disclosure. There are inherent limitations to the effectiveness of any system of disclosure controls and procedures, including the possibility of human error and the circumvention or overriding of the controls and procedures. Accordingly, even effective disclosure controls and procedures can only provide reasonable assurance of achieving their control objectives.

The Company’s management, with the participation of its CEO and its CFO, has evaluated the effectiveness of the Company’s “disclosure controls and procedures” (as defined in the Securities Exchange Act of 1934 Rules 13a-15(e) or 15d-15(e)) as at December 31, 2019 and has concluded that, as at the end of the period covered by this report, the Company’s disclosure controls and procedures were effective. The Company will continue to periodically evaluate its disclosure controls and procedures and will make modifications from time to time as deemed necessary to ensure that information is recorded, processed, summarized and reported within the time periods specified in the SEC’s rules and forms.

MANAGEMENT’S ANNUAL REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Management is responsible for establishing and maintaining adequate internal control over financial reporting for the Company.

Management has used the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”) framework in Internal Control-Integrated Framework (2013) to assess the effectiveness of the Company’s internal control over financial reporting.

Management has assessed the effectiveness of the Company’s internal control over financial reporting, as at December 31, 2019, and has concluded that such internal control over financial reporting were effective as at that date.

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

PricewaterhouseCoopers LLP, an independent registered public accounting firm, audited the effectiveness of the Company’s internal control over financial reporting as of December 31, 2019, as stated in their report, which appears in Item 8 of Part II of this 2019 Form 10-K.

CHANGES IN INTERNAL CONTROL OVER FINANCIAL REPORTING

There were no changes in the Company’s internal control over financial reporting which occurred during the three months ended December 31, 2019, that have materially affected, or are reasonably likely to materially affect, the Company’s internal control over financial reporting.

Item 9 B. Other Information

None.

Item 10. Directors, Executive Officers and Corporate Governance

The information required by Item 10 is incorporated by reference from the information under the following captions in the Company's Proxy Statement: "Item No. 1 - Election of Directors;" "Executive Officers;" "Section 16(a) Beneficial Ownership Reporting Compliance;" "Code of Business Conduct and Ethics;" and "Audit Committee."

Item 11. Executive Compensation

The information required by Item 11 is incorporated by reference from the information under the following captions in the Company's Proxy Statement: "Compensation Discussion and Analysis;" "Summary Compensation Table;" "Grants of Plan-Based Awards;" "Outstanding Equity Awards at Fiscal Year-End;" "Option Exercise and Stock Vested;" "Pension Benefits;" "Employment Agreements and Potential Payments upon Termination or Change-in-Control;" "Compensation of Directors;" and "Compensation Committee Interlocks and Insider Participation."

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information required by Item 12 is incorporated by reference from the information under the following captions in the Company's Proxy Statement: "Equity Compensation Plans;" "Principal Shareholders of Voting Shares;" and "Security Ownership of Directors and Management."

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required by Item 13 is incorporated by reference from the information under the following caption in the Company's Proxy Statement: "Certain Relationships and Related Transactions," "Review, Approval or Ratification of Transactions with Related Persons," and "Director Independence."

Item 14. Principal Accounting Fees and Services

The information required by Item 14 is incorporated by reference from the information under the following captions in the Company's Proxy Statement: "Audit Fees;" "Audit-Related Fees;" "Tax Fees;" "All Other Fees;" and "Audit Committee's Pre-Approval Policies and Procedures."

Item 15. Exhibits and Financial Statement Schedules**(a)(1) Financial Statements**

The consolidated financial statements filed as part of this Report are included under Item 8 in Part II.

Report of Independent Registered Public Accounting Firm, which covers the financial statements, the financial statement schedule in (a)(2) and the Company's internal control over financial reporting, is included under Item 8 in Part II of this 2019 Form 10-K.

(a)(2) Financial Statement Schedules

Financial statement schedule for each year in the three-year period ended December 31, 2019.

II. Valuation and Qualifying Accounts.

(a)(3) Exhibits

The items listed as Exhibits 10.1 to 10.39, 10.43, 10.44 and 10.46 relate to management contracts or compensatory plans or arrangements.

Exhibit No.	Description	Form	File No	Exhibit	Filing Date
3.1	Restated Articles of Incorporation of IMAX Corporation, dated July 30, 2013.	10-Q	001-35066	3.1	10/24/13
3.2	By-Law No. 1 of IMAX Corporation, enacted on June 2, 2014.	8-K	001-35066	3.2	6/3/14
4.1	Shareholders' Agreement, dated as of January 3, 1994, among WGIM Acquisition Corporation, the Selling Shareholders as defined therein, Wasserstein Perella Partners, L.P., Wasserstein Perella Offshore Partners, L.P., Bradley J. Wechsler, Richard L. Gelfond and Douglas Trumbull (the "Selling Shareholders' Agreement").	10-K	001-35066	4.1	2/21/13
4.2	Amendment, dated as of March 1, 1994, to the Selling Shareholders' Agreement.	10-K	001-35066	4.2	2/21/13
4.3	Registration Rights Agreement, dated as of February 9, 1999, by and among IMAX Corporation, Wasserstein Perella Partners, L.P., Wasserstein Perella Offshore Partners, L.P., WPPN Inc., the Michael J. Biondi Voting Trust, Bradley J. Wechsler and Richard L. Gelfond.	10-K	001-35066	4.3	2/21/13
*4.4	Description of IMAX Corporation's Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934.				
10.1	Stock Option Plan of IMAX Corporation, dated June 18, 2008.	10-K	001-35066	10.1	2/24/16
10.2	IMAX Corporation Amended and Restated Long Term Incentive Plan, dated June 6, 2016.	8-K	001-35066	10.1	6/7/16
10.3	IMAX Corporation Form of Stock Option Award Agreement.	10-Q	001-35066	10.41	7/20/16
*10.4	IMAX Corporation Form of Restricted Stock Unit Award Agreement.				
*10.5	IMAX Corporation Form of Performance Stock Unit Award Agreement.				
10.6	IMAX Corporation Supplemental Executive Retirement Plan, as amended and restated as of January 1, 2006.	10-K	001-35066	10.2	2/21/13
10.7	Employment Agreement, dated July 1, 1998, between IMAX Corporation and Bradley J. Wechsler.	10-K	001-35066	10.3	2/21/13

Exhibit No.	Description	Form	File No	Exhibit	Filing Date
10.8	<u>Amended Employment Agreement, dated July 12, 2000, between IMAX Corporation and Bradley J. Wechsler.</u>	10-K	001-35066	10.4	2/21/13
10.9	<u>Amended Employment Agreement, dated March 8, 2006, between IMAX Corporation and Bradley J. Wechsler.</u>	10-K	001-35066	10.5	2/24/12
10.10	<u>Amended Employment Agreement, dated February 15, 2007, between IMAX Corporation and Bradley J. Wechsler.</u>	10-K	001-35066	10.6	2/24/12
10.11	<u>Amended Employment Agreement, dated December 31, 2007, between IMAX Corporation and Bradley J. Wechsler.</u>	10-K	001-35066	10.8	2/20/14
10.12	<u>Services Agreement, dated December 11, 2008, between IMAX Corporation and Bradley J. Wechsler.</u>	10-K	001-35066	10.9	2/19/15
10.13	<u>Services Agreement Amendment, dated February 14, 2011, between IMAX Corporation and Bradley J. Wechsler.</u>	10-K	001-35066	10.10	2/24/16
10.14	<u>Services Agreement Amendment, dated April 1, 2013, between IMAX Corporation and Bradley J. Wechsler.</u>	10-K	001-35066	10.11	2/20/14
10.15	<u>Employment Agreement, dated July 1, 1998, between IMAX Corporation and Richard L. Gelfond.</u>	10-K	001-35066	10.10	2/21/13
10.16	<u>Amended Employment Agreement, dated July 12, 2000, between IMAX Corporation and Richard L. Gelfond.</u>	10-K	001-35066	10.11	2/21/13
10.17	<u>Amended Employment Agreement, dated March 8, 2006, between IMAX Corporation and Richard L. Gelfond.</u>	10-K	001-35066	10.12	2/24/12
10.18	<u>Amended Employment Agreement, dated February 15, 2007, between IMAX Corporation and Richard L. Gelfond.</u>	10-K	001-35066	10.13	2/24/12
10.19	<u>Amended Employment Agreement, dated December 31, 2007, between IMAX Corporation and Richard L. Gelfond.</u>	10-K	001-35066	10.16	2/20/14
10.20	<u>Amended Employment Agreement, dated December 11, 2008, between IMAX Corporation and Richard L. Gelfond.</u>	10-K	001-35066	10.17	2/19/15
10.21	<u>Amended Employment Agreement, dated December 20, 2010, between IMAX Corporation and Richard L. Gelfond.</u>	10-K	001-35066	10.18	2/24/16
10.22	<u>Amended Employment Agreement, dated December 12, 2011, between IMAX Corporation and Richard L. Gelfond.</u>	10-K	001-35066	10.17	2/24/12
10.23	<u>Employment Agreement, dated January 1, 2014, between IMAX Corporation and Richard L. Gelfond.</u>	10-Q	001-35066	10.12	10/23/14
10.24	<u>First Amending Agreement, dated December 9, 2015, between IMAX Corporation and Richard L. Gelfond.</u>	10-K	001-35066	10.21	2/24/16
10.25	<u>Employment Agreement, dated November 8, 2016, between IMAX Corporation and Richard L. Gelfond.</u>	10-K	001-35066	10.24	2/23/17
*10.26	<u>Amendment to Employment Agreement, dated November 1, 2019, between IMAX Corporation and Richard L. Gelfond.</u>				
10.27	<u>Employment Agreement, dated September 1, 2016, between IMAX Corporation and Greg Foster.</u>	10-Q	001-35066	10.43	10/23/16
10.28	<u>First Amending Agreement, dated January 25, 2018, between IMAX Corporation and Greg Foster.</u>	10-K	001-35066	10.26	2/27/18

Exhibit No.	Description	Form	File No	Exhibit	Filing Date
10.29	Letter of Agreement, dated December 7, 2018, between IMAX Corporation and Greg Foster.	10-Q	001-35066	10.40	4/26/19
10.30	Nonqualified Retirement Plan Agreement, dated June 6, 2017, between IMAX Corporation and Greg Foster.	10-Q	001-35066	10.42	7/26/17
10.31	Amendment No. 1 to Nonqualified Retirement Plan Agreement, dated September 27, 2017, between IMAX Corporation and Greg Foster.	10-Q	001-35066	10.43	10/26/17
10.32	Split-Dollar Agreement, dated July 1, 2017, between IMAX Corporation and Greg Foster.	10-Q	001-35066	10.44	10/26/17
10.33	Employment Agreement, dated December 18, 2017, between IMAX Corporation and Robert D. Lister.	10-K	001-35066	10.30	2/27/18
10.34	Employment Agreement, dated June 6, 2016 between IMAX Corporation and Patrick McClymont.	10-Q	001-35066	10.40	7/20/16
10.35	Amendment to Employment Agreement, dated August 2, 2019, between IMAX Corporation and Patrick McClymont.	10-Q	001-35066	10.41	10/31/19
10.36	Second Amendment to Employment Agreement, dated October 21, 2019, between IMAX Corporation and Patrick McClymont.	10-Q	001-35066	10.42	10/31/19
*10.37	Third Amendment to Employment Agreement, dated December 5, 2019, between IMAX Corporation and Patrick McClymont.				
*10.38	Employment Agreement, dated December 17, 2019, between IMAX Corporation and Patrick McClymont.				
10.39	Statement of Directors' Compensation, dated June 11, 2013.	10-Q	001-35066	10.26	7/25/13
10.40	Construction Loan Agreement, dated October 6, 2014, between IMAX PV Development, Inc., Wells Fargo Bank, National Association and the financial institutions referred to therein.	10-Q	001-35066	10.45	10/23/14
10.41	Securities Purchase Agreement, dated as of May 5, 2008, by and between IMAX Corporation, Douglas Family Trust, James Douglas and Jean Douglas Irrevocable Descendants' Trust, James E. Douglas, III, and K&M Douglas Trust.	10-K	001-35066	10.43	2/20/14
10.42	Amendment No. 1 to Securities Purchase Agreement, dated December 1, 2008, by and between IMAX Corporation, Douglas Family Trust, James Douglas and Jean Douglas Irrevocable Descendants' Trust, James E. Douglas, III, and K&M Douglas Trust.	10-K	001-35066	10.35	2/19/15
10.43	Employment Agreement, dated March 23, 2018, between IMAX Corporation and Don Savant.	10-Q	001-35066	10.37	5/1/18
10.44	Amended Employment Agreement, dated September 28, 2018, between IMAX Corporation and Don Savant.	10-Q	001-35066	10.40	10/25/18
10.45	Fifth Amended and Restated Credit Agreement, dated June 28, 2018, by and between IMAX Corporation, the Guarantors referred to therein, the Lenders referred to therein, and Wells Fargo Bank, National Association, as Administrative Agent.	10-Q	001-35066	10.38	7/25/18
10.46	Form of Director Indemnification Agreement.	10-Q	001-35066	10.39	7/25/18
*21	Subsidiaries of IMAX Corporation.				
*23	Consent of PricewaterhouseCoopers LLP.				
*24	Power of Attorney of certain directors.				

Exhibit No.	Description	Form	File No	Exhibit	Filing Date
*31.1	Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, dated February 19, 2020, by Richard L. Gelfond.				
*31.2	Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, dated February 19, 2020, by Patrick McClymont.				
*32.1	Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, dated February 19, 2020, by Richard L. Gelfond.				
*32.2	Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, dated February 19, 2020, by Patrick McClymont.				
*101.INS	XBRL Instance Document – The instance document does not appear in the interactive data file because its XBRL tags are embedded within the Inline XBRL document.				
*101.SCH	XBRL Taxonomy Extension Schema Document				
*101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document				
*101.DEF	XBRL Taxonomy Extension Definition Linkbase Document				
*101.LAB	XBRL Taxonomy Extension Label Linkbase Document				
*101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document				
*104	Cover Page Interactive Data File (formatted as inline XBRL and contained in Exhibit 101)				

* Filed herewith

Item 16. Form 10-K Summary

Not applicable.

SIGNATURES

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

IMAX CORPORATION

By /s/ PATRICK MCCLYMONT
Patrick McClymont
Chief Financial Officer & Executive Vice President

Date: February 19, 2020

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities indicated on February 19, 2020.

<u>/s/ RICHARD L. GELFOND</u> Richard L. Gelfond Chief Executive Officer & Director (Principal Executive Officer)	<u>/s/ PATRICK MCCLYMONT</u> Patrick McClymont Chief Financial Officer & Executive Vice President (Principal Financial Officer)	<u>/s/ JEFFREY VANCE</u> Jeffrey Vance Senior Vice President, Finance (Principal Accounting Officer)
<u>*</u> Bradley J. Wechsler Chairman of the Board & Director	<u>*</u> Neil S. Braun Director	<u>*</u> Eric A. Demirian Director
<u>*</u> Kevin Douglas Director	<u>*</u> David W. Leebron Director	<u>*</u> Michael MacMillan Director
<u>*</u> Dana Settle Director	<u>*</u> Darren D. Throop Director	

By /s/ PATRICK MCCLYMONT
Patrick McClymont
(as attorney-in-fact)

IMAX CORPORATION
Schedule II
Valuation and Qualifying Accounts
(In thousands of U.S. dollars)

	Balance at beginning of year	Additions/ (recoveries) charged to expenses	Other additions/ (deductions) ⁽¹⁾	Balance at end of year
Allowance for net investment in leases				
Year ended December 31, 2017	\$ 672	\$ (517)	\$ —	\$ 155
Year ended December 31, 2018	\$ 155	\$ —	\$ —	\$ 155
Year ended December 31, 2019	\$ 155	\$ —	\$ —	\$ 155
Allowance for financed sale receivables				
Year ended December 31, 2017	\$ 494	\$ 428	\$ —	\$ 922
Year ended December 31, 2018	\$ 922	\$ (83)	\$ —	\$ 839
Year ended December 31, 2019	\$ 839	\$ 76	\$ —	\$ 915
Allowance for doubtful accounts receivable				
Year ended December 31, 2017	\$ 1,250	\$ 1,967	\$ (1,604)	\$ 1,613
Year ended December 31, 2018	\$ 1,613	\$ 3,030	\$ (1,469)	\$ 3,174
Year ended December 31, 2019	\$ 3,174	\$ 2,354	\$ (390)	\$ 5,138
Inventories valuation allowance				
Year ended December 31, 2017	\$ 3,342	\$ 500	\$ 44	\$ 3,886
Year ended December 31, 2018	\$ 3,886	\$ 250	\$ (251)	\$ 3,885
Year ended December 31, 2019	\$ 3,885	\$ 446	\$ (1,115)	\$ 3,216
Deferred income tax valuation allowance				
Year ended December 31, 2017	\$ 197	\$ —	\$ —	\$ 197
Year ended December 31, 2018	\$ 197	\$ —	\$ —	\$ 197
Year ended December 31, 2019	\$ 197	\$ —	\$ —	\$ 197

(1) Deductions represent write-offs of amounts previously charged to the provision.

DESCRIPTION OF REGISTRANT'S SECURITIES REGISTERED UNDER SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934

The following is a description of IMAX Corporation's (the "Company," "we" or "us") shares of common stock, no par value per share ("Common Shares") registered under Section 12 of the Securities Exchange Act of 1934, as amended. This description is a summary and does not purport to be complete. It is subject to and qualified in its entirety by reference to the Company's Restated Articles of Incorporation (the "Articles") and the Company's By-Law No. 1 (the "By-Laws"), each of which is incorporated by reference as an exhibit to the Annual Report on Form 10-K of which this Exhibit is a part. We encourage you to read the Articles, the By-Laws and the applicable provisions of the Canada Business Corporations Act (the "CBCA"), for additional information.

DESCRIPTION OF COMMON SHARES

Our authorized capital shares include an unlimited number of Common Shares. The outstanding shares of our Common Shares are fully paid and nonassessable.

Voting Rights

Each holder of our Common Shares is entitled to one vote for each share on all matters submitted to a vote of our stockholders, including the election of our directors. The rights attached to the Common Shares do not provide for cumulative voting rights or preemptive rights. Accordingly, the holders of a majority of our outstanding Common Shares entitled to vote in any election of directors can elect all of the directors standing for election, if they should so choose. Subject to the Articles and the By-Laws, at all meetings of the Board, every question shall be decided by a majority of the votes cast.

Dividend Rights

The holders of Common Shares are entitled to receive dividends if, as and when declared by our Board of Directors (the "Board"), subject to the rights of the holders of any other class of our shares entitled to receive dividends in priority to the Common Shares. Certain of the instruments governing our existing indebtedness restrict our rights to pay dividends to the holders of the Common Shares.

Liquidation, Dissolution or Winding Up

If we liquidate, dissolve or wind up, the holders of our Common Shares are entitled to share ratably in all assets legally available for distribution to shareholders after payment of any liquidation or distribution preference payable with respect to any other then outstanding classes of stock entitled to such preference.

Rights and Preferences

Our Common Shares have no preemptive, conversion or subscription rights. There are no redemption or sinking fund provisions applicable to our Common Shares.

Board Classification

Under our Articles, members of our Board are elected on an annual basis. Our Board is not classified.

Anti-Takeover Provisions of the Articles, By-Laws and the CBCA

Provisions of the Articles, By-Laws and the CBCA may delay or discourage transactions involving an actual or potential change in control of the Company or change in its management, including transactions in which shareholders might otherwise receive a premium for their Common Shares, or transactions that its shareholders might otherwise deem to be in their best interests. Among other things, such provisions include the following:

- Under Canadian law, the affirmative vote of two-thirds of the votes cast in person or by proxy at a meeting of shareholders is required for shareholder approval of an amalgamation (other than certain short form amalgamations), for any sale, lease or exchange of all, or substantially all, of our assets, if not in the ordinary course of our business, voluntary liquidation and dissolution and certain other fundamental changes including amendments to the Articles. Other shareholder action is generally decided by a majority of the votes cast at a meeting of shareholders.
 - Pursuant to the Articles, the Board may from time to time, without shareholder approval, issue one or more series of special shares issuable in series, no par value per share (“Special Shares”) having rights, privileges, restrictions and conditions attaching thereto. The authorization of undesignated Special Shares in our Articles makes it possible for our Board to issue Special Shares with rights or preferences that could impede the success of any attempt to change control of the Company. These and other provisions may have the effect of deterring hostile takeovers or delaying changes in control or management of the Company.
 - The CBCA requires that 25% of the directors of the Board be resident Canadians. Directors must be nominated in accordance with the procedures set out in Section 4.1 of the By-Laws and are elected by a majority of the votes cast at meeting of the shareholders.
 - There is no limitation imposed by the Articles or other charter documents on the right of a non-resident to hold or vote Common Shares. However, notification and, in certain cases, advance review and approval by the Government of Canada of the acquisition by a non-Canadian of control of a Canadian business may be required under Canadian law.
-

Listing

The Common Shares are traded on The New York Stock Exchange under the trading symbol “IMAX.”



IMAX CORPORATION

**AMENDED AND RESTATED LONG-TERM INCENTIVE PLAN
FORM OF RESTRICTED SHARE UNIT AWARD AGREEMENT**

THIS RESTRICTED SHARE UNIT AGREEMENT (the “**Agreement**”) is made effective as of _____ (the “**Date of Grant**”) between IMAX Corporation, a Canadian corporation (the “**Company**”), and _____ (the “**Participant**”).

This Agreement sets forth the general terms and conditions of Restricted Share Units (“**RSUs**”). By accepting the RSUs, the Participant agrees to the terms and conditions set forth in this Agreement and the IMAX Corporation Amended and Restated Long-Term Incentive Plan (the “**IMAX LTIP**”) as well as the Employment Agreement between _____ and the Company, dated as of _____ (the “**Employment Agreement**”).

Capitalized terms not otherwise defined herein shall have the same meanings as in the IMAX LTIP.

1. **Grant of the RSUs.** Subject to the provisions of this Agreement and the IMAX LTIP, the Company hereby grants to the Participant an aggregate of _____ RSUs, subject to adjustment as set forth in the IMAX LTIP. Each RSU gives the Participant the unsecured right to receive, subject to the terms and conditions of the IMAX LTIP and this Agreement, one Common Share. The Participant shall not be required to pay any additional consideration for the issuance of the Common Shares upon settlement of the RSUs.

2. **Vesting Schedule.** Subject to the terms and conditions hereof, the Participant shall vest in the RSUs as follows, unless previously vested or cancelled in accordance with the provisions of the IMAX LTIP or this Agreement (each applicable date, a “**Scheduled Vesting Date**”):

<u>Scheduled Vesting Date</u>	<u>RSUs Vesting on Such Date</u>
First Vesting Date	TBD
Second Vesting Date	TBD
Third Vesting Date	TBD
Fourth Vesting Date	TBD

3. **Settlement.** Each RSU shall be settled by delivery of one Common Share within thirty (30) days following the applicable Scheduled Vesting Date or such earlier date on which the RSUs vest pursuant to Sections 4, 5 or 6 (each, a “**Settlement Date**”); provided, however, that in no event shall settlement occur later than March 15th of the year following the applicable vesting date.

4. **Termination of Employment Generally.** In the event that the Participant’s employment with the Company terminates for any reason, including termination with or without Cause, resignation with or without Good Reason, death, Disability or retirement (each term as defined in the Employment Agreement), the RSUs shall be treated as set forth in the Employment Agreement.

5. Termination upon Achievement of Service Factor. If the Participant's employment with the Company terminates prior to the Scheduled Vesting Date as a result of the Participant's resignation after the achievement of the Service Factor, the RSUs shall continue to vest in accordance with the Scheduled Vesting Dates. For purposes of this Agreement, "**Service Factor**" shall mean the Participant's resignation (i) at or after attaining age 55 and (ii) following the Participant's continuous service with the Company or any of its Subsidiaries and Affiliates for at least ten (10) years, or such other resignation by the Participant that is deemed by the Committee to be an achievement of the Service Factor, provided that the Participant provides the Company a six (6)-month written notice of the Participant's intent to resign.

6. Change of Control. In the event of a Change of Control, the RSUs shall be treated as set forth in the Employment Agreement or the IMAX LTIP, as applicable.

7. Nontransferability of RSUs. Unless otherwise determined by the Committee pursuant to the terms of the IMAX LTIP, the RSUs may not be transferred, pledged, alienated, assigned or otherwise attorned other than by last will and testament or by the laws of descent and distribution or pursuant to a domestic relations order, as the case may be.

8. Rights as a Shareholder. The Participant shall have no rights as a shareholder with respect to the RSUs. Upon settlement, the Participant shall have all rights as a shareholder with respect to the Common Shares delivered to the Participant, if any, including, without limitation, voting rights and the right to receive dividends.

9. Dividend Equivalents. If, after the Date of Grant and prior to the applicable Settlement Date, dividends with respect to the Common Shares are declared or paid by the Company, the Participant shall be entitled to receive dividend equivalents in an amount, without interest, equal to the cumulative dividends declared or paid on a Common Share, if any, during such period multiplied by the number of RSUs being settled. Dividend equivalents will be subject to the same terms and conditions of this Agreement applicable to the RSUs. The dividend equivalents will be paid on the applicable Settlement Date for the underlying RSUs in cash or Common Shares, as determined by the Company in its discretion. If the underlying RSUs are cancelled prior to the applicable Settlement Date for any reason, any accrued and unpaid dividend equivalents shall be cancelled.

10. No Entitlements.

(a) No Right to Continued Employment. This Agreement does not constitute an employment agreement and nothing in the IMAX LTIP or this Agreement shall modify the terms of the Participant's employment, including, without limitation, the Participant's status as an "at will" employee of the Company, if applicable. None of the IMAX LTIP, the Agreement, the grant of RSUs, nor any action taken or omitted to be taken shall be construed (i) to create or confer on the Participant any right to be retained in the employ of the Company, (ii) to interfere with or limit in any way the right of the Company to terminate the Participant's employment at any time and for any reason or (iii) to give the Participant any right to be reemployed by the Company following a termination of employment for any reason.

(b) No Right to Future Awards. This award of RSUs and all other equity-based awards under the IMAX LTIP are discretionary. This award does not confer on the Participant any right or entitlement to receive another award of RSUs or any other equity-based award at any time in the future or in respect of any future period.

11. Taxes and Withholding. The Participant must satisfy any federal, state, provincial, local or foreign tax withholding requirements applicable with respect to the settlement of the RSUs. The Company may require or permit the Participant to satisfy such tax withholding obligations through the Company withholding Common Shares that would otherwise be received by such individual upon settlement of the RSUs. The obligations of the Company to deliver the Common Shares under this Agreement shall be conditioned upon the Participant's payment of all applicable taxes and the Company shall, to the extent permitted by law, have the right to deduct any such taxes from any payment of any kind otherwise due to the Participant.

12. Breach of Restrictive Covenants. If the Participant materially breaches any of the restrictive covenants set forth in the Employment Agreement or any other agreement with the Company or any of its Subsidiaries or Affiliates (including, without limitation, any restrictive covenants relating to non-competition, non-solicitation or confidentiality), then all of the RSUs (whether or not vested) shall terminate and be cancelled without consideration being paid therefor.

13. Securities Laws. The Company shall not be required to issue Common Shares in settlement of or otherwise pursuant to the RSUs unless and until (i) the Common Shares have been duly listed upon each stock exchange on which the Common Shares are then registered; (ii) a registration statement under the Securities Act of 1933, as amended, with respect to such Common Shares is then effective; and (iii) the issuance of the Common Shares would comply with such legal or regulatory provisions of such countries or jurisdictions outside the United States as may be applicable in respect of the RSUs. In connection with the grant or vesting of the RSUs, the Participant will make or enter into such written representations, warranties and agreements as the Committee may reasonably request in order to comply with applicable securities laws or with this Agreement.

14. Miscellaneous Provisions.

(a) Notices. Any notice necessary under this Agreement shall be addressed to the Company in care of its Corporate Secretary at the principal executive office of the Company and to the Participant at the address appearing in the records of the Company for the Participant or to either party at such other address as either party hereto may hereafter designate in writing to the other. Notwithstanding the foregoing, the Company may deliver notices to the Participant by means of email or other electronic means that are generally used for employee communications. Any such notice shall be deemed effective upon receipt thereof by the addressee.

(b) Headings. The headings of sections and subsections are included solely for convenience of reference and shall not affect the meaning of the provisions of this Agreement.

(c) Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed to be an original but all of which together will constitute one and the same instrument.

(d) Incorporation of IMAX LTIP; Entire Agreement. This Agreement and the RSUs shall be subject to the IMAX LTIP, the terms of which are incorporated herein by reference, and in the event of any conflict or inconsistency between the IMAX LTIP and this Agreement or the Employment Agreement, the IMAX LTIP shall govern. This Agreement, the Employment Agreement and the IMAX LTIP constitute the entire agreement between the parties hereto with regard to the subject matter hereof. They supersede all other agreements, representations or understandings (whether oral or written and whether express or implied) that relate to the subject matter hereof. The Participant acknowledges receipt of the IMAX LTIP, and represents that the Participant is familiar with its terms and provisions.

(e) Amendments. Subject to all applicable laws, rules and regulations, the Committee shall have the power to amend this Agreement at any time provided that such amendment does not adversely affect, in any material respect, the Participant's rights under this Agreement without the Participant's consent. Notwithstanding the foregoing, the Company shall have broad authority to alter or amend this Agreement and the terms and conditions applicable to the RSUs without the consent of the Participant to the extent it deems necessary or desirable in its sole discretion (i) to comply with or take into account changes in, or rescissions or interpretations of, applicable tax laws, securities laws, employment laws, accounting rules or standards and other applicable laws, rules, regulations, guidance, ruling, judicial decision or legal requirement, (ii) to ensure that the RSUs are not subject to taxes, interest and penalties under Section 409A of the Internal Revenue Code of 1986, as amended (the "**Code**"), (iii) to take into account unusual or nonrecurring events or market conditions, or (iv) in any other manner set forth in Section 15 of the IMAX LTIP. Any amendment, modification or termination shall, upon adoption, become and be binding on all persons affected thereby without requirement for consent or other action with respect thereto by any such person. The Committee shall give written notice to the Participant in accordance with Section 13(a) of any such amendment, modification or termination as promptly as practicable after the adoption thereof. The foregoing shall not restrict the

ability of the Participant and the Company by mutual consent to alter or amend the terms of the RSUs in any manner that is consistent with the IMAX LTIP and approved by the Committee.

(f) Section 409A.

(i) The RSUs are intended to constitute “short-term deferrals” for purposes of Section 409A of the Code and the regulations and guidance promulgated thereunder (“**Section 409A**”). If any provision of the IMAX LTIP or this Agreement would, in the reasonable good faith judgment of the Committee, result or likely result in the imposition on the Participant, a beneficiary or any other person of a penalty tax under Section 409A, the Committee may modify the terms of the IMAX LTIP or this Agreement, without the consent of the Participant, beneficiary or such other person, in the manner that the Committee may reasonably and in good faith determine to be necessary or advisable to avoid the imposition of such penalty tax. This Section 13(f) does not create an obligation on the part of the Company to modify the IMAX LTIP or this Agreement and does not guarantee that the RSUs will not be subject to taxes, interest and penalties under Section 409A.

(ii) Notwithstanding anything to the contrary in the IMAX LTIP or this Agreement, to the extent that the RSUs constitute deferred compensation for purposes of Section 409A and Participant is a “**Specified Employee**” (within the meaning of the Committee’s established methodology for determining “**Specified Employees**” for purposes of Section 409A), no payment or distribution of any amounts with respect to the RSUs that are subject to Section 409A may be made before the first business day following the six (6) month anniversary from the Participant’s Separation from Service from the Company Group (as defined in Section 409A) or, if earlier, the date of the Participant’s death.

(g) Successor. Except as otherwise provided herein, this Agreement shall be binding upon and shall inure to the benefit of any successor or successors of the Company, and to any Permitted Transferee pursuant to Section 7.

(h) Choice of Law. Except as to matters of federal law, this Agreement and all actions taken thereunder shall be governed by and construed in accordance with the laws of the State of New York (other than its conflict of law rules).

(i) Clawback. Any awards made pursuant to the IMAX LTIP shall be subject to clawback or recoupment as permitted or mandated in the Employment Agreement and by applicable law, rules, regulations or any Company policy as enacted, adopted or modified from time to time.

[Signatures on Following Page].

IMAX CORPORATION

By: _____
Name: Robert Lister
Title: Chief Legal Officer and Senior Executive Vice President

By: _____
Name: Kenneth Weissman
Title: Senior Vice President, Legal Affairs & Corporate Secretary

The undersigned hereby acknowledges having read the IMAX LTIP and this Agreement, and hereby agrees to be bound by all the provisions set forth in the IMAX LTIP and this Agreement.

Name (Printed): _____
Signature: _____
Date: _____



IMAX CORPORATION

**AMENDED AND RESTATED LONG-TERM INCENTIVE PLAN
FORM OF PERFORMANCE STOCK UNIT AWARD AGREEMENT**

THIS PERFORMANCE STOCK UNIT AGREEMENT (the “**Agreement**”) is made effective as of _____ (the “**Date of Grant**”) between IMAX Corporation, a Canadian corporation (the “**Company**”), and _____ (the “**Participant**”).

This Agreement sets forth the general terms and conditions of performance stock units that vest upon the achievement of performance criteria (“**PSUs**”). By accepting the PSUs, the Participant agrees to the terms and conditions set forth in this Agreement and the IMAX Corporation Amended and Restated Long-Term Incentive Plan (the “**IMAX LTIP**”) as well as the Employment Agreement between _____ and the Company, dated as of _____ (the “**Employment Agreement**”).

Capitalized terms not otherwise defined herein shall have the same meanings as in the IMAX LTIP.

1. **Grant of the PSUs.** Subject to the provisions of this Agreement and the IMAX LTIP, the Company hereby grants to the Participant a target award comprised of _____ PSUs subject to the performance measure or performance measures detailed in Exhibit A (collectively, the “**Target Award**”), subject to adjustment as set forth in the IMAX LTIP. The number of PSUs to which the Participant will be entitled as of the Scheduled Vesting Date (defined below) (the “**Earned PSUs**”) will be based on (i) the Target Award and (ii) the Company’s performance against the performance measures set forth on Exhibit A over a three-year performance period extending from January 1 of the year of grant to December 31 of the second year following the year of grant (the “**Performance Period**”), as well as other terms and conditions of this Agreement. Each Earned PSU gives the Participant the unsecured right to receive, subject to the terms and conditions of the IMAX LTIP and this Agreement, one Common Share. The Participant shall not be required to pay any additional consideration for the issuance of the Common Shares upon settlement of the Earned PSUs.

2. **Vesting Schedule.** Subject to the terms and conditions hereof, the Earned PSUs shall vest in full promptly following the public disclosure of the Company’s financial results for the second year following the year of grant (the “**Scheduled Vesting Date**”), unless previously cancelled or forfeited in accordance with the provisions of the IMAX LTIP or this Agreement.

3. **Settlement.** Each Earned PSU shall be settled by delivery of one Common Share within thirty (30) days following the Scheduled Vesting Date (the “**Settlement Date**”); provided, however, that in no event shall settlement occur later than March 15th of the year following the Scheduled Vesting Date.

4. **Termination of Employment Generally.** In the event that the Participant’s employment with the Company terminates for any reason, including termination with or without Cause, resignation with or without Good Reason, death, Disability or retirement (each term as defined in the Employment Agreement), the Target Award shall be treated as set forth in the Employment Agreement._

5. **Termination upon Achievement of Service Factor.** If the Participant’s employment with the Company terminates prior to the Scheduled Vesting Date as a result of the Participant’s resignation after the achievement of the

Service Factor, the PSUs shall continue to vest in accordance with the Scheduled Vesting Dates. For purposes of this Agreement, “**Service Factor**” shall mean the Participant’s resignation (i) at or after attaining age 55 and (ii) following the Participant’s continuous service with the Company or any of its Subsidiaries and Affiliates for at least ten (10) years, or such other resignation by the Participant that is deemed by the Committee to be an achievement of the Service Factor, provided that the Participant provides the Company a six (6)-month written notice of the Participant’s intent to resign.

6. **Change of Control.** In the event of a Change of Control, the Target Award shall be treated as set forth in the Employment Agreement or the IMAX LTIP, as applicable.

7. **Nontransferability of PSUs.** Unless otherwise determined by the Committee pursuant to the terms of the IMAX LTIP, the PSUs may not be transferred, pledged, alienated, assigned or otherwise attorned other than by last will and testament or by the laws of descent and distribution or pursuant to a domestic relations order, as the case may be.

8. **Rights as a Shareholder.** The Participant shall have no rights as a shareholder with respect to the Common Shares underlying the PSUs. Upon settlement, the Participant shall have all rights as a shareholder with respect to the Common Shares delivered to the Participant, if any, including, without limitation, voting rights and the right to receive dividends.

9. **Dividend Equivalents.** If, after the Date of Grant and prior to the applicable Settlement Date, dividends with respect to the Common Shares are declared or paid by the Company, the Participant, upon settlement of Earned PSUs in accordance with Section 3, shall be entitled to receive dividend equivalents in an amount, without interest, equal to the cumulative dividends declared or paid on a Common Share, if any, during such period multiplied by the number of Earned PSUs. Dividend equivalents will be subject to the same terms and conditions of this Agreement applicable to the Earned PSUs. The dividend equivalents will be paid on the applicable Settlement Date for the underlying Earned PSUs in cash or Common Shares, as determined by the Company in its discretion. If the underlying Earned PSUs are cancelled prior to the applicable Settlement Date for any reason, any accrued and unpaid dividend equivalents shall be cancelled.

10. **No Entitlements.**

(a) **No Right to Continued Employment.** This Agreement does not constitute an employment agreement and nothing in the IMAX LTIP or this Agreement shall modify the terms of the Participant’s employment, including, without limitation, the Participant’s status as an “at will” employee of the Company, if applicable. None of the IMAX LTIP, the Agreement, the grant of the PSUs, nor any action taken or omitted to be taken shall be construed (i) to create or confer on the Participant any right to be retained in the employ of the Company, (ii) to interfere with or limit in any way the right of the Company to terminate the Participant’s employment at any time and for any reason or (iii) to give the Participant any right to be reemployed by the Company following a termination of employment for any reason.

(b) **No Right to Future Awards.** This award of PSUs and all other equity-based awards under the IMAX LTIP are discretionary. This award does not confer on the Participant any right or entitlement to receive another award of PSUs or any other equity-based award at any time in the future or in respect of any future period.

11. **Taxes and Withholding.** The Participant must satisfy any federal, state, provincial, local or foreign tax withholding requirements applicable with respect to the settlement of the Earned PSUs. The Company may require or permit the Participant to satisfy such tax withholding obligations through the Company withholding Common Shares that would otherwise be received by such individual upon settlement of the Earned PSUs. The obligations of the Company to deliver the Common Shares under this Agreement shall be conditioned upon the Participant’s payment of all applicable taxes and the Company shall, to the extent permitted by law, have the right to deduct any such taxes from any payment of any kind otherwise due to the Participant.

12. Breach of Restrictive Covenants. If the Participant materially breaches any of the restrictive covenants set forth in the Employment Agreement or any other agreement with the Company or any of its Subsidiaries or Affiliates (including, without limitation, any restrictive covenants relating to non-competition, non-solicitation or confidentiality), then all of the PSUs (whether or not vested) shall terminate and be cancelled without consideration being paid therefor.

13. Securities Laws. The Company shall not be required to issue Common Shares in settlement of or otherwise pursuant to the Earned PSUs unless and until (i) the Common Shares have been duly listed upon each stock exchange on which the Common Shares are then registered; (ii) a registration statement under the Securities Act of 1933, as amended, with respect to such Common Shares is then effective; and (iii) the issuance of the Common Shares would comply with such legal or regulatory provisions of such countries or jurisdictions outside the United States as may be applicable in respect of the Earned PSUs. In connection with the grant of the PSUs or vesting of the Earned PSUs, the Participant will make or enter into such written representations, warranties and agreements as the Committee may reasonably request in order to comply with applicable securities laws or with this Agreement.

14. Miscellaneous Provisions.

(a) Notices. Any notice necessary under this Agreement shall be addressed to the Company in care of its Corporate Secretary at the principal executive office of the Company and to the Participant at the address appearing in the records of the Company for the Participant or to either party at such other address as either party hereto may hereafter designate in writing to the other. Notwithstanding the foregoing, the Company may deliver notices to the Participant by means of email or other electronic means that are generally used for employee communications. Any such notice shall be deemed effective upon receipt thereof by the addressee.

(b) Headings. The headings of sections and subsections are included solely for convenience of reference and shall not affect the meaning of the provisions of this Agreement.

(c) Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed to be an original but all of which together will constitute one and the same instrument.

(d) Incorporation of IMAX LTIP; Entire Agreement. This Agreement, the Target Award and the Earned PSUs shall be subject to the IMAX LTIP, the terms of which are incorporated herein by reference, and in the event of any conflict or inconsistency between the IMAX LTIP and this Agreement or the Employment Agreement, the IMAX LTIP shall govern. This Agreement, the Employment Agreement and the IMAX LTIP constitute the entire agreement between the parties hereto with regard to the subject matter hereof. They supersede all other agreements, representations or understandings (whether oral or written and whether express or implied) that relate to the subject matter hereof. The Participant acknowledges receipt of the IMAX LTIP, and represents that the Participant is familiar with its terms and provisions.

(e) Amendments. Subject to all applicable laws, rules and regulations, the Committee shall have the power to amend this Agreement at any time provided that such amendment does not adversely affect, in any material respect, the Participant's rights under this Agreement without the Participant's consent. Notwithstanding the foregoing, the Company shall have broad authority to alter or amend this Agreement and the terms and conditions applicable to the PSUs without the consent of the Participant to the extent it deems necessary or desirable in its sole discretion (i) to comply with or take into account changes in, or rescissions or interpretations of, applicable tax laws, securities laws, employment laws, accounting rules or standards and other applicable laws, rules, regulations, guidance, ruling, judicial decision or legal requirement, (ii) to ensure that the Earned PSUs are not subject to taxes, interest and penalties under Section 409A of the Internal Revenue Code of 1986, as amended (the "**Code**"), (iii) to take into account unusual or nonrecurring events or market conditions, or (iv) in any other manner set forth in Section 15 of the IMAX LTIP. Any amendment, modification or termination shall, upon adoption, become and be binding on all persons affected thereby without requirement for consent or other action with respect thereto by any such person. The Committee shall give written notice to the Participant in accordance with Section 13(a) of any such amendment, modification or termination as promptly as practicable after the adoption thereof. The foregoing shall not restrict the ability of the Participant and

the Company by mutual consent to alter or amend the terms of the PSUs in any manner that is consistent with the IMAX LTIP and approved by the Committee.

(f) Section 409A.

(i) The PSUs are intended to constitute “short-term deferrals” for purposes of Section 409A of the Code and the regulations and guidance promulgated thereunder (“**Section 409A**”). If any provision of the IMAX LTIP or this Agreement would, in the reasonable good faith judgment of the Committee, result or likely result in the imposition on the Participant, a beneficiary or any other person of a penalty tax under Section 409A, the Committee may modify the terms of the IMAX LTIP or this Agreement, without the consent of the Participant, beneficiary or such other person, in the manner that the Committee may reasonably and in good faith determine to be necessary or advisable to avoid the imposition of such penalty tax. This Section 13(f) does not create an obligation on the part of the Company to modify the IMAX LTIP or this Agreement and does not guarantee that the Earned PSUs will not be subject to taxes, interest and penalties under Section 409A.

(ii) Notwithstanding anything to the contrary in the IMAX LTIP or this Agreement, to the extent that the PSUs constitute deferred compensation for purposes of Section 409A and Participant is a “**Specified Employee**” (within the meaning of the Committee’s established methodology for determining “**Specified Employees**” for purposes of Section 409A), no payment or distribution of any amounts with respect to the Earned PSUs that are subject to Section 409A may be made before the first business day following the six (6) month anniversary from the Participant’s Separation from Service from the Company Group (as defined in Section 409A) or, if earlier, the date of the Participant’s death.

(g) Successor. Except as otherwise provided herein, this Agreement shall be binding upon and shall inure to the benefit of any successor or successors of the Company, and to any Permitted Transferee pursuant to Section 7.

(h) Choice of Law. Except as to matters of federal law, this Agreement and all actions taken thereunder shall be governed by and construed in accordance with the laws of the State of New York (other than its conflict of law rules).

(i) Clawback. Any awards made pursuant to the IMAX LTIP shall be subject to clawback or recoupment as permitted or mandated in the Employment Agreement and by applicable law, rules, regulations or any Company policy as enacted, adopted or modified from time to time.

[Signatures on Following Page].

IMAX CORPORATION

By: _____
Name: Robert Lister
Title: Chief Legal Officer and Senior Executive Vice President

By: _____
Name: Kenneth Weissman
Title: Senior Vice President, Legal Affairs & Corporate Secretary

The undersigned hereby acknowledges having read the IMAX LTIP and this Agreement, and hereby agrees to be bound by all the provisions set forth in the IMAX LTIP and this Agreement.

Name (Printed): _____
Signature: _____
Date: _____

Exhibit A: Performance Vesting Criteria

[Note: To be included separately]

AMENDMENT TO EMPLOYMENT AGREEMENT

This agreement (this “**Amendment**”) amends, effective as of January 1, 2020 (the “**Effective Date**”), the employment agreement between Richard L. Gelfond (the “**Executive**”) and IMAX Corporation (the “**Company**”), dated November 8, 2016 (the “**Agreement**”), in accordance with the provisions of Section 15 of the Agreement. Except as otherwise expressly set forth below in this Amendment from and after the Effective Date, the Agreement shall continue in full force and effect on the same terms and conditions. Capitalized terms used but not otherwise defined herein shall have the meanings ascribed to such terms in the Agreement.

1. **Term.** Section 2 of the Agreement shall be amended to replace references to “December 31, 2019” with references to “December 31, 2022”.

2. **Base Salary.** Section 3(a) of the Agreement shall be deleted in its entirety and replaced with the following:

“During the Term, the Company shall pay to the Executive an annual salary (the “**Base Salary**”) at the rate of no less than \$1,200,000, subject to increases at the discretion of the Board, payable in substantially equal installments in accordance with the Company’s ordinary payroll practices as established from time to time.

3. **Annual Bonus.** Section 3(b) of the Agreement shall be deleted in its entirety and replaced with the below:

(b) **Bonus.** The Executive shall be eligible to receive an incentive bonus of up to 200% of his Base Salary for each calendar year during the Term (the “**Bonus**”). The Executive’s target bonus shall be 100% of his Base Salary (“**Target Bonus**”). For each year of the Term, as well as for 2019, 80% of Executive’s Bonus shall be calculated based on achievement of non-discretionary criteria (the “**Formula Bonus**”) established by the Compensation Committee of the Board (the “**Compensation Committee**”) for the applicable year and 20% shall be determined at the end of the applicable year in the discretion of the Compensation Committee. The discretionary component of the Bonus will be a judgment-based assessment by the Compensation Committee looking at performance in non-quantifiable areas of performance that are clearly connected to the business strategy and strategic drivers of Company performance. The Formula Bonus shall be comprised of goals in quantifiable areas that are either financial metrics or drivers of financial performance, and shall be established and developed reasonably and in good faith by the Compensation Committee after meaningful consultation with Executive and communicated to Executive within the first quarter of each calendar year. The Executive’s performance against each such goal shall be measured on a sliding scale basis using linear interpolation, with performance ranges developed for each such measure; provided, that (i) 0% of the applicable portion of the Formula Bonus will be paid for performance below threshold; (ii) 50% of the applicable portion of the Formula Bonus will be paid for performance at threshold; (iii) 100% of the applicable portion

of the Formula Bonus will be paid for performance at target; and (iv) a maximum of 200% of the applicable portion of the Formula Bonus will be paid for performance at or above maximum. Schedule A of the Amendment contains the performance criteria that the Compensation Committee has developed for Executive for 2019. The Bonus (if any) shall be paid on the date on which the Company pays out bonuses to Company management (but not later than March 15th of the year following the year in respect of which the Bonus is earned), subject to the Executive's continued employment through such date except otherwise provided herein; provided, that the Bonus, if any is earned, for calendar year 2022 shall be subject to the Executive's continued employment only through December 31, 2022.

4. **Prior Grants.** Exhibit A of the Agreement is amended to read as attached hereto, effective as of the date hereof.

5. **SERP.** Section 3(g)(i) shall be deleted in its entirety and replaced with the following:

The Executive shall continue to participate in the Company's Supplemental Executive Retirement Plan (the "**SERP**") in accordance with the terms and conditions set forth therein, as amended from time to time. Notwithstanding anything herein or in the SERP or otherwise to the contrary, the Company and the Executive agree that the total amount of benefit payable to Executive under the SERP shall be fixed at \$20,298,168.

6. **Annual Long-Term Incentive Compensation.** A new Section 3(l) shall be added to the Agreement as follows:

(l) As soon as practicable after each of January 1, 2020, January 1, 2021 and January 1, 2022, Executive shall be granted a total of \$5,500,000 worth of stock-based awards, as follows:

(i) **Time-Based RSUs:** The Executive shall be granted RSUs having a grant date value of \$2,750,000 (the "**Time-Based RSUs**"). The number of Time-Based RSUs granted shall be determined by dividing (i) \$2,750,000 by (ii) the closing price of the Company's common stock on the New York Stock Exchange on the date thereof. The Time-Based RSU's shall vest in three (3) equal installments on each of the first, second and third anniversaries of the grant date, subject to Executive's employment with the Company on each such date, except as otherwise provided in this Agreement. The Time-Based RSUs shall be granted on the terms and conditions set forth in the LTIP, the grant agreement to be entered into between the Company and the Executive and otherwise in accordance with this Section 3(l)(i).

(ii) **PSUs:** The Executive shall be granted RSUs that vest based upon the achievement of performance criteria (the "**PSUs**") having a grant date value of \$2,750,000. 60% of the PSUs, or \$1,650,000 in value, shall be subject to the "EBITDA Performance Condition" and 40% of the PSUs, or \$1,100,000 in grant date value, shall be subject to the "Relative TSR Performance Condition" (both as defined in Schedule B). The performance shall be measured as set forth on Schedule B on a sliding scale basis using linear

interpolation and based upon a three-year performance period extending from January 1 of the year of grant to December 31 of the second year following the year of grant, except as otherwise provided in this Agreement, the LTIP or the grant agreement to be entered into. The number of EBITDA Performance Condition PSUs granted shall be determined by dividing (i) \$1,650,000 by (ii) the closing price of the Company's common stock on the New York Stock Exchange on the date thereof. For determining the number of Relative TSR Performance Condition PSUs to be granted pursuant to this section, the Company shall value the PSUs in manner consistent with the Company's financial statement reporting and, specifically, pursuant to a "Monte Carlo" simulation.

7. **Treatment of Equity Awards Upon Termination Without Cause; Resignation for Good Reason.** The first paragraph of Section 4(c)(iii) of the Agreement shall be deleted in its entirety and replaced with the following:

(iii) The Executive's outstanding equity awards will be treated as follows: (1) with respect to outstanding Unvested Equity Awards that are subject to time-based vesting only (including without limitation RSUs and stock options), the portion of each such Unvested Equity Award that shall vest upon the Executive's Separation from Service under this Section 4(c) shall be with respect to a number of Common Shares underlying such award equal to the excess of (A) over (B), where (A) is the total number of Common Shares underlying the original award multiplied by a fraction, the numerator of which is the number of calendar days of the entire vesting period applicable to the award in which the Executive was employed by the Company and the denominator of which is the total number of days in such period (such fraction, the "**Pro Rata Fraction**"), and (B) is the number of Common Shares underlying the portion of the award that has already vested as of the Executive's Separation from Service; and (2) with respect to outstanding Unvested Equity Awards that are subject to performance-based vesting criteria (including without limitation the PSUs), the percentage of each such Unvested Equity Award that shall vest at the end of the applicable performance period shall equal the Pro Rata Fraction multiplied by the percentage corresponding to the achievement of the performance conditions enumerated in Schedule B, measured at the dates designated thereon. Any Unvested Equity Awards that do not vest in accordance with the foregoing shall be forfeited and cancelled and the Executive shall have no further rights with respect thereto. All outstanding stock options granted to the Executive prior to Executive's Separation from Service shall remain exercisable as follows:

8. **Severance Upon Termination Without Cause; Resignation for Good Reason.** Section 4(c)(iv) of the Agreement shall be deleted in its entirety and replaced with the following:

(iv) The Company shall pay the Executive an amount equal to 200% of Base Salary for each remaining year or partial year of the Term, if any, but not to exceed two years (the "**Severance Amount**") for the period (the "**Severance Period**") beginning on the day following the Executive's Separation from Service and continuing until the later of (x) December 31, 2022 and (y) the first anniversary of the Executive's Separation from Service, payable on the following schedule: (1) 50% of the Severance Amount shall be

paid in equal installments over the Severance Period, in accordance with the Company's ordinary payroll practices in effect from time to time, and (2) the remaining 50% of the Severance Amount will be payable as follows: (A) if the Executive's Separation from Service occurs in the 2020 calendar year, one-sixth (1/6th) of the Severance Amount will be payable on each of March 1, 2021, March 1, 2022 and March 1, 2023; (B) if the Executive's Separation from Service occurs in the 2021 calendar year, one-fourth (1/4th) of the Severance Amount will be payable on each of March 1, 2022 and March 1, 2023; or (3) if the Executive's Separation from Service occurs in the 2022 calendar year, one-half (1/2) of the Severance Amount will be payable on March 1, 2023.

9. **Other Terminations.** Section 4(d) of the Agreement shall be deleted in its entirety and replaced with the following:

(d) Resignation without Good Reason; Death or Disability. If, prior to the expiration of the Term, the Executive incurs a Separation from Service by reason of the Executive's resignation other than for Good Reason, or as the result of the Executive's death or "disability," as such term is defined in the Company's long-term disability policy applicable to the Executive, the following provisions shall apply: (i) the Executive will receive the Other Accrued Compensation and Benefits, payable in accordance with Company policies and practices and in no event later than thirty (30) days after the Executive's Separation from Service, unless otherwise expressly set forth in the applicable plan, program or agreement; (ii) (A) in the case of a Separation from Service resulting from the Executive's resignation other than for Good Reason, all then outstanding Unvested Equity Awards shall be cancelled immediately, and the Executive will cease to have any further right thereto, and (B) in the case of a Separation from Service resulting from the Executive's death or disability, 100% of the outstanding Unvested Equity Awards shall immediately vest (it being understood that with respect to any PSUs, vesting shall be at target and the Executive will forfeit any right to additional vesting based on actual performance), and in either case all vested Options shall remain exercisable until the shorter of (x) their original term and (y) two (2) years from Executive's Separation from Service; (iii) in the case of a Separation from Service resulting from the Executive's death or disability, the Target Bonus, paid when bonuses are otherwise paid to Company management; and (iv) other than pursuant to those provisions that survive termination of this Agreement, the Executive shall have no further right to receive any other compensation or benefits following his termination of employment pursuant to this Section 4(d).

10. **Retirement.** The first paragraph of Section 4(e) of the Agreement shall be deleted in its entirety and replaced with the following:

(e) Non-Renewal of Agreement; Retirement. If, upon the expiration of the Term, the Company does not offer to continue the Executive's employment on substantially similar terms to those set forth herein, or if the Executive elects to retire from employment with the Company following expiration of the Term, and in either such case upon the expiration of the Term the Executive incurs a Separation from Service, the Executive shall be entitled to a pro-rated bonus, based on the number of calendar days of such year

that have elapsed as of the Separation from Service, under the Company's annual bonus plan for the year in which the termination occurs, to the extent not already paid, based upon actual performance and paid when annual bonuses are otherwise paid to Company management, and the Executive's outstanding equity awards will be treated as follows: (1) with respect to outstanding Unvested Equity Awards that are subject to time-based vesting only (including without limitation RSUs and stock options), the percentage of each such Unvested Equity Award that shall vest upon the Executive's Separation from Service shall equal 100%; and (2) with respect to outstanding Unvested Equity Awards that are subject to performance-based vesting criteria (including without limitation the PSUs), the percentage of each such Unvested Equity Awards that shall vest upon the end of the applicable performance period shall equal the Pro Rata Fraction multiplied by the percentage corresponding to the achievement of the performance conditions enumerated in Schedule B, measured at the dates designated thereon, and the remainder shall be forfeited and cancelled. All outstanding stock options granted to the Executive prior to Executive's Separation from Service shall remain exercisable as follows:

11. **Consultancy.** Section 4(g) of the Agreement shall be deleted in its entirety and replaced with the following:

(g) Consultancy. At the end of Executive's employment (for whatever reason), Executive agrees to consult with the Company on such issues and items as requested by the Company including, but not limited to, theatre signings, management issues, film strategy issues, technological issues and/or issues with respect to management transition, subject to the Executive's other commitments and the parties entering into a written agreement on terms to be negotiated by the Company and the Executive in good faith; provided, that notwithstanding the foregoing, the parties agree that if Executive incurs a Separation of Service by reason of the Company's termination of the Executive's employment without Cause or the Executive's Resignation for Good Reason, then the above-referenced consultancy shall be for a period of one (1) year from the date of such Separation of Service at a total compensation for such year of \$1,000,000, payable in accordance with the Company's ordinary payroll practices as established from time to time.

12. **Change of Control.** New Sections 5(e) and 5(f) shall be added to the Agreement as follows:

(e) (i) Notwithstanding anything to the contrary in Section 4(c)(iii) or 4(e) of the Agreement, which shall be superseded, to the extent necessary, by this Section 5(e)(i), with respect to outstanding Unvested Equity Awards that are subject to time-based vesting only (including, without limitation, RSUs and stock options), 100% of each such Unvested Equity Award shall vest and be settled upon the Executive's Separation from Service by reason of the Company's termination of the Executive's employment without Cause or the Executive's resignation for Good Reason, in either case within two years following a Change of Control; and (ii) with respect to outstanding Unvested Equity Awards that are subject to performance-based vesting (including, without limitation, PSUs), the number of each such Unvested Equity Award that may become vested and

settled in accordance with the terms thereof at the end of the applicable performance period shall be, with respect to each of the EBITDA Performance Condition and the Relative TSR Performance Condition, the greater of performance (x) as of the last trading day immediately preceding the date upon which the Change of Control is consummated or (y) to the extent the EBITDA Performance Condition and/or the Relative TSR Condition remains applicable to the Company following the Change of Control, as determined in good faith by the Board, actual performance as of the end of the applicable performance period (it being understood that if the EBITDA Performance Condition or the Relative TSR Performance Condition does not remain applicable following the Change of Control, then clause (x) shall determine the number of EBITDA Performance Condition PSUs or Relative TSR Performance Condition PSUs, as applicable, that may vest); provided, that, with respect to clause (ii), in the event Executive's Separation from Service pursuant to either Sections 4(c) or 4(e) is within two years following a Change of Control that constitutes a "change in control event" under Section 409A of the Code, the vesting and settlement of a number of PSUs as determined in clause (ii) hereof shall occur upon such Separation from Service and the references to "performance period" in this clause (ii) shall instead be a reference to the date upon which the Separation from Service occurs. Any Unvested Equity Awards that do not vest in accordance with the foregoing shall be forfeited and cancelled and the Executive shall have no further rights with respect thereto

(f) Any Bonus payable with respect to the year in which a Change of Control occurs shall be paid based on achievement of the applicable metrics as of the consummation of such Change of Control, annualized over the full year, and excluding any costs incurred in connection with or otherwise attributable to such Change of Control.

13. **Clawback; Stock Ownership Guidelines.** Section 9 of the Agreement shall be deleted in its entirety and replaced with the following:

(a) Recovery of Compensation. All payments and benefits provided under this Agreement shall be subject to any compensation recovery, clawback or similar policy as required under law and which is thereafter adopted by the Company from time to time. Notwithstanding the foregoing, (a) if the Company is required to file a material adverse restatement of its financials (regardless of whether such restatement is due to actions taken by the Executive or actions the Executive knew or should have known) and (b) the original reporting of such financials resulted in compensation to the Executive with respect to his Bonus or the vesting of his equity awards that otherwise would not have been earned, vested or paid, then the Company's Board may require the Executive to repay (or may withhold from future payments to Executive to the maximum extent permitted by Section 409A, as defined below) the amount by which his Bonus or equity award vesting or payment would have been reduced had the original financial statements not been reported.

(b) Stock Ownership Guidelines. The Executive's required share ownership under the Company's share ownership requirement shall equal or exceed (i) 400% of Base Salary, following the grant pursuant to this Agreement of RSUs and PSUs in 2020, and (ii) 500%

of Base Salary, following the grant pursuant to this Agreement of RSUs and PSUs in 2021.

14. The entering into this Amendment shall not prejudice any rights or waive any obligations under the Agreement or any other agreement between the Executive and the Company.

DATED as of November 1, 2019.

AGREED AND ACCEPTED:

/s/ Richard L. Gelfond
Richard L. Gelfond

IMAX CORPORATION

Per: /s/ Darren Throop
Name: Darren Throop
Title: Director

Schedule A

2019 Formula Bonus Criteria

I.	<u>Financial</u>	<u>Weighting</u>	<u>Target</u>	<u>Threshold</u>	<u>Max</u>
	a. EPS (up 26% from 2018)	25%	\$1.16	down 15%	Up 20%
	b. EBITDA (up 20% from 2018)	25%	\$150MM	down 15%	Up 20%
	c. Free Cash Flow (Budget)	10%	\$50MM	down 10%	Up 20%
II.	<u>Backlog</u>				
	a. Signings of 125	10%	125	down 10%	Up 20%
III.	<u>GBO</u>				
	a. GBO (up 7% from 2018)	10%	\$1.1B	down 15%	Up 25%

Schedule B

EBITDA and TSR Performance Conditions

- **EBITDA (Applies to 60% of PSUs)**

Average Annual EBITDA Growth Over Performance Period	# PSUs Earned as % of Target at end of Performance Cycle
< 5%	0%
5%	50%
10%	75%
12.5%	100%
15.0%	125%
17.5%	150%
≥ 20%	175%

- **Relative TSR vs. Russell 2000 (Applies to 40% of PSUs)**

3-Year Relative TSR vs. Russell 2000 Over Performance Period	# PSUs Earned as % of Target at end of Performance Cycle
< 40th Percentile	0%
40th Percentile	37.5%
50th Percentile	50%
60th Percentile	75%
70th Percentile	100%
80th Percentile	125%
≥ 90th Percentile	175%

THIRD AMENDMENT TO EMPLOYMENT AGREEMENT

This THIRD AMENDMENT TO EMPLOYMENT AGREEMENT (the “**Third Amendment**”) dated as of December 5, 2019 is entered into by and between IMAX CORPORATION, a corporation organized under the laws of Canada (the “**Company**”), and PATRICK MCCLYMONT (the “**Executive**”).

WHEREAS, the Company and the Executive wish to amend that certain Employment Agreement between them dated as of June 6, 2016, as previously amended by an Amendment to Employment Agreement dated as of August 2, 2019 and a Second Amendment to Employment Agreement dated as of October 21, 2019 (collectively, the “**Agreement**”), as hereinafter set forth.

NOW, THEREFORE, in consideration of the premises and of the mutual covenants and agreements herein contained, the parties hereto agree as follows:

1. Term. Section 2 of the Agreement is hereby amended by deleting the first sentence thereof in its entirety and replacing it with the following:

“The Executive’s employment pursuant to this Agreement shall be effective as of August 8, 2016 (the “**Effective Date**”), and shall terminate upon the earlier to occur of (i) the Executive’s termination of employment pursuant to Section 4 hereunder and (ii) January 8, 2020 (the “**End Date**”).”

2. No Further Changes. Except with respect to the change made by Section 1 above, all of the terms and conditions of the Agreement remain in full force and effect.

3. Counterparts. This Third Amendment may be executed by either of the parties hereto in counterparts, each of which shall be deemed to be an original, but all such counterparts shall together constitute one and the same instrument.

IN WITNESS WHEREOF, the Company and the Executive have duly executed this Third Amendment as of December 5, 2019.

IMAX CORPORATION

PATRICK MCCLYMONT

By: /s/ Kenneth Weissman
Name: Kenneth Weissman
Title: Senior Vice President, Legal
Affairs and Corporate Secretary

/s/ Patrick McClymont

By: /s/ Robert D. Lister
Name: Robert D. Lister
Title: Chief Legal Officer and Senior
Executive Vice President

EMPLOYMENT AGREEMENT

EMPLOYMENT AGREEMENT (the “Agreement”), dated as of December 17, 2019, between IMAX CORPORATION, a corporation organized under the laws of Canada (the “Company”), and PATRICK MCCLYMONT (the “Executive”).

WHEREAS, the Executive currently serves as Chief Financial Officer and Executive Vice President of the Company pursuant to an Employment Agreement with the Company dated June 6, 2016, as amended by a First Amendment to Employment Agreement dated as of August 2, 2019 by a Second Amendment to Employment Agreement dated as of October 21, 2019, and by a Third Amendment to Employment Agreement dated as of December 5, 2019 (collectively, the “Prior Agreement”); and

WHEREAS, the Company wishes to enter into this Agreement to continue to engage the Executive to provide services to the Company, and the Executive wishes to be so engaged, pursuant to the terms and conditions hereinafter set forth.

NOW, THEREFORE, in consideration of the premises and of the mutual covenants and agreements herein contained, the parties hereto agree as follows:

1. Employment and Duties.

(a) General. Subject to the terms and conditions hereof, the Executive shall serve as Chief Financial Officer and Executive Vice President, IMAX Corporation, reporting solely to the Company’s Chief Executive Officer (the “CEO”). The Executive shall perform the duties and services for the Company commensurate with the Executive’s position as directed by the CEO from time to time. The Executive’s principal place of employment shall be the offices of the Company in New York, New York, subject to regular domestic and international travel as required by the performance of his duties and the business of the Company.

(b) Exclusive Services. For so long as the Executive is employed by the Company, the Executive shall devote his full business working time to his duties hereunder, shall faithfully serve the Company, shall conform to and comply with the lawful and good faith directions and instructions given to him by the CEO, and shall use his reasonable best efforts to promote and serve the interests of the Company. Further, the Executive shall not, directly or indirectly, render material services to any other person or organization without the consent of the CEO or otherwise engage in activities that would impede his ability to fully perform his obligations hereunder. The foregoing shall not restrict the Executive from:

(i) serving as a director for (x) the companies or charitable organizations listed on Exhibit A attached hereto; or (y) with the CEO’s prior written consent (not to be unreasonably withheld), other companies or charitable organizations;

(ii) carrying on personal investments subject to the restrictions contained in Section 2 of the Employee Confidentiality, Non-Competition and Intellectual Property Agreement dated as of June 6, 2016 by and between the Company and the Executive (the “**Non- Competition Agreement**”) and the Company’s Code of Ethics and Business Conduct; or

(iii) engaging in charitable activities.

2. Term. The Executive’s employment pursuant to this Agreement shall be effective as of August 8, 2019 (the “**Effective Date**”), and shall terminate upon the earlier of (i) the Executive’s termination of employment pursuant to Section 4 hereunder and (ii) August 8, 2022 (the “**End Date**”). The period commencing as of the Effective Date and ending on the End Date is hereinafter referred to as the “**Term**”. The Company shall notify the Executive at least 180 days prior to the End Date of its intentions with respect to renewing the Agreement; provided that, except for Other Accrued Compensation and Benefits (as defined in Section 4(a)) and rights to indemnification under Section 3(k), the Executive shall not be entitled to any additional compensation or benefits as a result of a non-renewal of this Agreement.

3. Compensation and Other Benefits. Subject to the provisions of this Agreement, the Company shall pay and provide the following compensation and other benefits to the Executive during the Term as compensation for services rendered hereunder:

(a) Base Salary. The Company shall pay to the Executive an annual salary (the “**Base Salary**”) of \$750,000, less applicable withholdings and deductions. The Base Salary will be payable in substantially equal installments in accordance with the Company’s regular payroll practices as established from time to time. The increase in the Executive’s Base Salary for the period from the Effective Date through the date of this Agreement shall be paid to the Executive in the first regular payroll cycle occurring after the date of this Agreement.

(b) Bonus. The Executive shall be eligible to receive a discretionary incentive bonus as determined in the sole discretion of the Company (the “**Bonus**”). The target amount of the Bonus shall be 80% of the Base Salary (the “**Target Bonus**”), with the potential to overachieve. The Target Bonus shall apply to Executive’s 2019 Bonus, without proration. The 2019 Bonus shall be based on the performance goals and objectives and weightings established at the beginning of the 2019 fiscal year under the Prior Agreement. Commencing with the 2020 Bonus, the actual amount of the Bonus shall be based upon the attainment of individual and Company performance goals and objectives consistent with the Company’s practices with respect to similarly-situated executives and approved by the Compensation Committee of the Board of Directors of the Company in its sole discretion. The Bonus (if any) shall be paid on the date on which the Company pays out bonuses to senior executives generally; provided, however, that (i) the Bonus will be prorated for partial years of service; and (ii) except as provided in Section 4, the Executive must remain employed by the Company on the payout date.

(c) Equity Awards.

(i) Each year during the Term, commencing with the Company's annual equity grant process in or around March 2020, the Executive shall receive an equity award (the "**Annual Grants**"). The Annual Grants for each of 2020, 2021, and 2022 will have an aggregate grant date fair market value equal to \$1,450,000.

(ii) The vehicles, mix of nonqualified stock options ("**Options**"), Performance Stock Units ("**PSUs**"), and Restricted Stock Units ("**RSUs**"), vesting schedules, and valuation for the Options, PSUs, and/or RSUs for the Annual Grants will be consistent with the Company's standard process and grants given to other senior executives at the time. The Annual Grants shall be granted on or about the time that awards are generally granted to the Company's senior executives. Except as otherwise provided herein, the Executive must be employed by the Company on the date of grant in order to receive an Annual Grant. If the Executive's employment ends for any reason, all Annual Grants that remain ungranted at that time will be forfeited without any compensation to the Executive.

(iii) The Options, PSUs, and RSUs to be granted pursuant to this Section 3(c) shall be granted on the terms and conditions set forth in the IMAX Corporation Long-Term Incentive Plan (as amended from time to time, the "**LTIP**"), the grant agreements to be entered into between the Company and the Executive pursuant to the LTIP, and this Agreement.

(d) Benefit Plans. During the Term, the Executive shall be entitled to participate, on the same basis and at the same level as generally available to other senior executives of the Company, in any group insurance, hospitalization, medical, health and accident, disability, fringe benefit and deferred compensation plans or programs of the Company (including executive supplemental health benefits) now existing or hereafter established, as in effect from time to time. In addition, the Executive shall be entitled to participate in the Company's lifestyle allowance program, pursuant to which the Executive shall be entitled to reimbursement of up to \$2,500 annually for qualifying expenses.

(e) Automobile. The Company shall provide the Executive with an automobile allowance of \$1,100 per month (the "**Automobile Payment**"). In addition, the Company shall reimburse Executive for the costs of gasoline, insurance, and reasonable operating expenses for that automobile, in accordance with Company policies in effect for senior executives from time to time, up to a maximum of \$11,800 per annum.

(f) Vacation. The Executive shall be entitled to vacation time of twenty (20) days per year, subject to proration based on partial years of service.

(g) Expenses. The Company shall reimburse the Executive for reasonable travel and other business-related expenses incurred by him in the fulfillment of his duties hereunder upon presentation of written documentation thereof, in accordance with the

business expense reimbursement policies and procedures of the Company as in effect from time to time; *provided, however*, that the level of travel and hotel accommodations shall be no less favorable than those arrangements made available to other senior executives of the Company. Payments with respect to reimbursements of expenses shall be made consistent with the Company's reimbursement policies and procedures and in no event later than the last day of the calendar year following the calendar year in which the relevant expense is incurred.

(h) Life Insurance. The Company shall pay up to \$10,000 per year toward a premium for a term life insurance policy for the benefit of a beneficiary (or beneficiaries) designated by the Executive. This shall be a taxable benefit to the Executive.

(i) Charitable Contributions or Sponsorships. The Company shall pay up to \$10,000 per year for charitable contributions or sponsorships designated by the Executive. The recipients of such contributions or sponsorships shall be subject to the approval of the Company's CEO. This shall not be a taxable benefit to the Executive.

(j) Other Benefits. The Company shall reimburse the Executive for up to \$15,000 per year for legal, financial, estate, and tax planning services. This shall be a taxable benefit to the Executive.

(k) Indemnification. To the fullest extent permitted by law and the Company's governing documents, the Company will indemnify and save the Executive harmless from and against all costs, charges and expenses, including any amount paid to settle an action or satisfy a judgement, reasonably incurred by the Executive in respect of any civil, criminal, administrative, investigative or other proceeding in which the Executive is involved by reason of being or having been a director or officer of the Company (or by reason of the fact that he is or was serving at the request of the Company or any of its subsidiaries or affiliates as a director or officer, or an individual acting in a similar capacity, of another entity), whether before or during the Term, if: (i) the Executive acted honestly and in good faith with a view to the best interests of the Company (or, as the case may be, to the best interests of the other entity for which the Executive acted as director or officer or in a similar capacity at the Company's request); and (ii) in the case of a criminal or administrative action or proceeding that is enforced by a monetary penalty, the Executive had reasonable grounds for believing that his conduct was lawful. The Company will advance moneys to the Executive for the costs, charges and expenses of a proceeding referred to in the preceding sentence; *provided, however*, that the Executive will repay the moneys if he does not fulfill the conditions referred to in the preceding sentence. The Executive shall be entitled to coverage under the Company's directors' and officers' liability insurance policies in effect from time to time on the same terms and conditions (including, without limitation, with respect to scope, exclusions, amounts and deductibles) as are available to other current senior officers of the Company. Nothing in this Agreement shall require the Company to purchase or maintain any such insurance policy.

4. Termination of Employment. Subject to this Section 4, the Company shall have the right to terminate the Executive's employment at any time, with or without Cause (as defined in Section 5), and the Executive shall have the right to terminate his employment at any time and for any reason.

(a) Termination Due to Death or Disability. The Executive's employment under this Agreement will terminate upon the Executive's death or the Executive's Disability (as defined in Section 5). In the event the Executive's employment terminates as a result of the Executive's death or Disability, the Company shall pay to the Executive (or his estate, as applicable) (i) the Base Salary and Automobile Payment through and including the date of termination, (ii) an amount equal to the Executive's accrued and unused vacation pay as of the date of termination, (iii) any other amounts or benefits required to be paid or provided by law or under any plan, program, policy or practice of the Company (including unreimbursed business expenses properly incurred through the date of termination) ((i) through (iii) collectively the "**Other Accrued Compensation and Benefits**"), (iv) any Bonus earned, but unpaid, for the year prior to the year of termination, and (v) a prorated Target Bonus for the year in which the termination occurs. The Other Accrued Compensation and Benefits will be payable within thirty (30) days of the Executive's termination of employment by reason of death or Disability (or as otherwise expressly set forth in the applicable plan, program or agreement). Items (iv) and (v) will be payable on the date on which the Company pays out bonuses to senior executives generally. Furthermore, upon a termination of employment as a result of the Executive's death or Disability, a portion of the Executive's Options, PSUs, and RSUs that have already been granted pursuant to this Agreement shall vest such that, when combined with previously vested Options, PSUs, and RSUs granted under this Agreement, an aggregate of 50% of all of the Options, PSUs, and RSUs that have been granted pursuant to this Agreement shall have vested. Any vested Options shall continue to be exercisable for a period of 180 days following the date of the Executive's death or Disability (but in no event later than the expiration of the term of such Options). All Options not exercised within such 180-day period shall be cancelled and shall revert back to the Company for no consideration and the Executive or his estate, as applicable, shall have no further right or interest therein. Except for rights to indemnification under Section 3(k) or as provided in this Section 4(a), the Executive shall have no further right to receive any other compensation or benefits after a termination of employment due to the Executive's death or Disability.

(b) Termination for Cause; Resignation without Good Reason. The Executive's employment may be terminated by the Company immediately at any time for Cause (as defined in Section 5). If the Executive's employment is terminated by the Company for Cause or if the Executive resigns from his employment other than for Good Reason (as defined in Section 5), (A) the Executive shall be entitled to payment of his Other Accrued Compensation and Benefits, payable within thirty (30) days after the Executive's termination of employment (or as otherwise expressly set forth in the applicable plan, program or agreement) and (B) all outstanding equity will be treated in accordance with the terms of the LTIP and/or the applicable award letters. Except for rights to indemnification under Section 3(k) and the rights set forth in this Section 4(b),

the Executive shall have no further right to receive any other compensation or benefits after his termination for Cause or resignation of employment other than for Good Reason. The Executive shall provide thirty (30) days' written notice to the Company prior to resigning his employment without Good Reason.

(c) Termination Without Cause; Resignation for Good Reason.

(i) If the Executive's employment with the Company is terminated by the Company without Cause, or as a result of his resignation for Good Reason (as defined in Section 5), then the Executive shall receive the Other Accrued Compensation and Benefits, any Bonus earned, but unpaid, for the year prior to the year of termination and, subject to Section 4(d):

(A) the Company shall continue to pay the Executive the Base Salary in accordance with the Company's ordinary payroll practices in effect from time to time for a period equal to fourteen (14) months (such 14-month period, the "**Severance Period**"), with payments commencing on the 60th day following the Executive's termination of employment;

(B) the Company shall provide the Executive with a cash amount equal to a prorated Bonus, in an amount based on the Executive's performance, in respect of the number of days, if any, worked by the Executive in the year of termination without Cause, or resignation for Good Reason, for which a bonus has not already been paid. The Company shall also provide the Executive with a Target Bonus for the Severance Period. Both amounts described in this Section 4(c)(i)(B) will be payable on the date on which the Company pays out bonuses to senior executives generally;

(C) the Company shall continue to provide the Executive with the compensation and benefits set forth in Sections 3(d), (e), (f), (g), (h), (i), and (j) for the duration of the Severance Period. In the event that continued participation by the Executive and his eligible dependents in the Company's group medical plans during the Severance Period is not permitted, the Company will provide the Executive with a cash payment equal to the value of the benefit continuation, payable in three semi-annual installments beginning sixty (60) days following the Executive's termination of employment. The Executive shall continue to be obligated to pay his share of premiums, deductibles and co-payments which may be deducted from the payment made pursuant to this Section 4(c)(i)(C) in the same manner as if the Executive was actively employed. In the event that the Executive obtains subsequent employment and is eligible to participate in the group medical plans of his new employer, the Executive agrees to notify the Company promptly, and any coverage provided under the Company's group medical plans shall terminate when coverage under the new employer's medical plans become effective; and

(D) all outstanding equity will be treated in accordance with the terms of the LTIP or the applicable award letters; *provided, however*, that (a) granted Options, PSUs and RSUs shall continue to vest on schedule during the Severance Period (in the case of PSUs, subject to the achievement of the applicable performance conditions), and (b) all vested Options shall remain exercisable until the first to occur of (i) the passage of six (6) months beyond the end of the Severance Period, and (ii) the expiration of the remaining term of the vested Options.

(ii) The Executive agrees that the provisions of Section 4(c) are fair and reasonable and that if his employment is terminated without Cause, or if the Executive resigns for Good Reason, except for rights to indemnification under Section 3(k) or as otherwise provided in this Agreement, he shall have no further right to receive any other compensation or benefits.

(d) Change in Control.

(i) Notwithstanding anything to the contrary in Section 4(c)(i)(D) above, if the Executive is terminated without Cause or resigns with Good Reason within twenty-four (24) months following a Change in Control, then Executive's outstanding equity will be treated in accordance with the terms of the LTIP or the applicable award letters.

(ii) If, within twenty-four (24) months following a Change in Control, the Company elects not to renew this Agreement and the Executive has not been earlier terminated for Cause or resigned without Good Reason, and Executive's employment with the Company actually terminates on the End Date, then:

(A) All of the Executive's granted and outstanding Options and RSUs shall be subject to acceleration on the End Date.

(B) With respect to Executive's granted and outstanding PSUs, any requirement for continued service through the end of the applicable performance period shall be waived, and the number of Executive's PSUs that may become vested and settled in accordance with the terms thereof at the end of the applicable performance period shall be measured by the greater of (x) the Company's performance on the last trading day immediately preceding the date upon which the Change in Control is consummated, or (y) to the extent that the performance conditions remain applicable to the Company following the Change in Control, as determined in good faith by the Board, then the actual performance of the Company against those performance conditions as of the end of the applicable performance period will determine the number of PSUs that vest. To the extent that the performance conditions no longer apply to the Company following a Change of Control, then clause (x) shall determine the number of PSUs that may vest. Any unvested PSUs that do not vest in accordance with the foregoing shall be forfeited and canceled and the Executive shall have no further rights with respect thereto.

(e) Execution and Delivery of Release; Restrictive Covenants. The Company shall not be required to make the payments and provide the benefits under Section 4(c) (other than the Other Accrued Compensation and Benefits and any Bonus earned, but unpaid, for the year prior to the year of termination) unless (i) the Executive executes and delivers to the Company, within sixty (60) days following the Executive's termination of employment, a mutual general waiver and release of claims substantially in the form attached hereto as Exhibit B and the release has become effective and irrevocable in its entirety, and (ii) the Executive remains in material compliance with the Non-Competition Agreement. The Executive's failure or refusal to sign the release (or the revocation of such release in accordance with applicable laws) or the Executive's failure to materially comply with the Non-Competition Agreement shall result in the forfeiture of the payments and benefits payable under Section 4(c).

(f) No Duty to Mitigate. The Executive shall have no obligation or duty to mitigate damages by seeking other employment or otherwise.

(g) Notice of Termination. Any termination of employment by the Company or the Executive shall be communicated by a written "**Notice of Termination**" to the other party hereto given in accordance with Section 22 of this Agreement, except that the Company may waive the requirement for such Notice of Termination by the Executive. Subject to any applicable notice and cure rights, the date of the Executive's termination of employment shall be the date specified in the Notice of Termination.

(h) Resignation from Directorships and Officerships. The termination of the Executive's employment for any reason shall constitute the Executive's resignation from

(i) any director, officer or employee position the Executive has with the Company and its subsidiaries and affiliates, and (ii) all fiduciary positions (including as a trustee) the Executive may hold with respect to any employee benefit plans or trusts established by the Company and its subsidiaries and affiliates. The Executive agrees that this Agreement shall serve as written notice of his resignation in this circumstance.

5. Definitions.

(a) Cause. For purposes of this Agreement, "**Cause**" shall mean the termination of the Executive's employment because of:

(i) the cessation of the Executive's ability to work legally in the United States or Canada other than for reasons not within the Executive's reasonable control;

(ii) any act or omission that constitutes a material breach by the Executive of any of his material obligations under this Agreement;

(iii) the continued failure or refusal of the Executive to perform the duties reasonably required of him in his role (other than on account of illness or incapacity);

(iv) the Executive's conviction of, or plea of *nolo contendere* to, (A) any felony or (B) any crime involving dishonesty or moral turpitude or which has a material adverse effect on the Company or otherwise materially impairs or impedes its operations;

(v) the Executive's engaging in any willful misconduct, gross negligence, violence or threat of violence that is materially injurious to the Company and its subsidiaries and affiliates taken as a whole; or

(vi) the Executive's material breach of the Non-Competition Agreement or any material written policy of the Company or any of its subsidiaries or affiliates; *provided, however*, that no event or condition described in clauses (i), (ii), (iii), (v) or (vi) shall constitute Cause unless (A) the Company first gives the Executive written notice of its intention to terminate his employment for Cause and the grounds for such termination, (B) such grounds for termination (if susceptible to correction) are not corrected by the Executive within thirty (30) days of his receipt of such notice (or, in the event that such grounds cannot be corrected within such thirty (30)-day period, the Executive has not taken all reasonable steps within such thirty (30)-day period to correct such grounds as promptly as practicable thereafter) and (C) the Company actually terminates the Executive's employment with the Company within thirty (30) days following the expiration of the thirty (30) day cure period.

(b) Disability. For purposes of this Agreement, "**Disability**" means a physical or mental disability or infirmity of the Executive that prevents the normal performance of substantially all of his duties under this Agreement as an Executive of the Company, which disability or infirmity shall exist for any continuous period of 180 days.

(c) Change in Control. For purposes of this Agreement, "**Change in Control**" shall have the meaning set forth in the LTIP.

(d) Good Reason. For purposes of this agreement, "**Good Reason**" shall mean the Executive's resignation as a result of (i) a reduction in the Executive's Base Pay or Annual Grant amount ; (ii) a material reduction in the Executive's responsibilities, positions, titles or reporting responsibilities from those set forth in this Agreement; (iii) the Executive ceasing to serve as Chief Financial Officer of a publicly-traded company or ceasing to report solely to the CEO; (iv) the Company requiring the Executive to be based at any office or location more than fifty (50) miles from New York City; or (v) any act of omission that constitutes a material breach by the Company of any of its material obligations under this Agreement; *provided, however*, that no such event shall constitute Good Reason unless (A) the Executive first gives the Company written notice of his intention to resign his employment for Good Reason and the grounds for such resignation, (B) such grounds for resignation (if susceptible to correction) are not

corrected by the Company within thirty (30) days of its receipt of such notice and (C) the Executive actually resigns his employment with the Company within thirty (30) days following the expiration of the thirty (30) day cure period.

6. Nondisparagement. The Company and the Executive agree that at no time during the Executive's employment by the Company or thereafter shall the Company or Executive make, or cause or assist any other person to make, any statement or other communication to any third party that impugns or attacks, or is otherwise critical of, the reputation, business, or character of (i) the Company, its subsidiaries and affiliates, and their respective directors, officers or employees (in the case of the Executive); or (ii) the Executive (in the case of the Company). Nothing in this Section 6 shall bar the Company or the Executive, as the case may be, from providing truthful testimony in any legal proceeding or in communicating with any governmental agency or representative thereof or from making any truthful disclosure required under law or from making any statement in arbitration or court proceedings involving any dispute between the Company and its subsidiaries and affiliates, on the one hand, and Executive, on the other hand.

7. Recovery of Compensation. All payments and benefits provided under this Agreement shall be subject to any compensation recovery or clawback as required under law.

8. Section 409A of the Code.

(a) The payments and benefits provided under this Agreement are intended to comply with, or be exempt from, Section 409A of the Internal Revenue Code ("Section 409A") and shall be interpreted or construed consistent with that intent. The Company shall not accelerate any payment or the provision of any benefits under this Agreement or make or provide any such payment or benefits if such payment or provision of such benefits would, as a result, be subject to tax under Section 409A. If, in the good faith judgment of the Company or the Executive, any provision of this Agreement could cause the Executive to be subject to adverse or unintended tax consequences under Section 409A, such provision shall be modified by the Company and the Executive to maintain, to the maximum extent practicable, the original intent of the applicable provision without contravening the requirements of Section 409A. This Section 8(a) does not guarantee that the amounts or benefits owed under this Agreement will not be subject to tax, interest and penalties under Section 409A.

(b) Anything in this Agreement to the contrary notwithstanding, each payment of compensation made to the Executive shall be treated as a separate and distinct installment payment from all other such payments for purposes of Section 409A. With regard to any provision herein that provides for reimbursement of costs and expenses or in-kind benefits, except as permitted by Section 409A: (i) the right to reimbursement or in-kind benefits shall not be subject to liquidation or exchange for another benefit; (ii) the amount of expenses eligible for reimbursement, or in-kind benefits, provided during any taxable year shall not affect the expenses eligible for reimbursement, or in-kind benefits to be provided, in any other taxable year; and (iii) such payments shall be made on or before the last day of the Executive's taxable year following the taxable year in which the expense occurred, or such earlier date as required hereunder.

(c) Any payment to be made under this Agreement upon a termination of employment shall only be made upon a “separation from service” under Section 409A. Notwithstanding any other provision of this Agreement, to the extent that the right to any payment (including the provision of benefits) to be made hereunder upon the Executive’s separation from service provides for the “deferral of compensation” within the meaning of Section 409A(d)(1), if the Executive is a “Specified Executive” within the meaning of Section 409A(a)(2)(B)(i) on the date of the Executive’s separation from service, then no such payment shall be made or commence during the period beginning on the date of the Executive’s separation from service and ending on the date that is six (6) months following the Executive’s separation from service or, if earlier, on the date of the Executive’s death. The amount of any payment that would otherwise be paid to the Executive during this period shall instead be paid to the Executive on the fifteenth (15th) day of the first calendar month following the end of the six (6)-month period.

9. Source of Payments. All payments provided under this Agreement, other than payments made pursuant to a plan which provides otherwise, shall be paid in cash from the general funds of the Company, and no special or separate fund shall be established, and no other segregation of assets shall be made, to assure payment. The Employee shall have no right, title or interest whatsoever in or to any investments which the Company may make to aid the Company in meeting its obligations hereunder. To the extent that any person acquires a right to receive payments from the Company hereunder, such right shall be no greater than the right of an unsecured creditor of the Company.

10. Representation and Warranty. The Executive represents and warrants that he is not subject to any non-competition covenant or any other agreement with any party that would in any manner restrict or limit his ability to render the services required of him hereunder.

11. Assignment. This Agreement may be assigned by the Company in connection with a sale of all or substantially all of the Company’s assets. The Executive may not assign or delegate his duties under this Agreement.

12. Binding Agreement. This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective heirs, successors and permitted assigns.

13. Withholding. Any payments made or benefits provided to the Executive under this Agreement shall be reduced by any applicable withholding taxes or other amounts required or permitted to be withheld by law or contract.

14. Amendment; Waiver. This Agreement may not be modified, amended or waived in any manner, except by an instrument in writing signed by both parties hereto. The waiver by either party of compliance with any provision of this Agreement by the other party (including the failure to insist upon strict compliance with any term, covenant or condition) shall not operate or be construed as a waiver of (i) any other provision of this Agreement, or (ii) any subsequent breach by such party of a provision of this Agreement.

15. Governing Law. All matters affecting this Agreement, including the validity thereof, are to be subject to, and interpreted and construed in accordance with, the laws of the State of New York applicable to contracts executed in and to be performed in that State.

16. Arbitration. Any dispute or controversy arising under or in connection with this Agreement or otherwise in connection with the Executive's employment by the Company that cannot be mutually resolved by the parties to this Agreement and their respective advisors and representatives shall be settled exclusively by arbitration in New York County, New York in accordance with the rules of the American Arbitration Association before one arbitrator of exemplary qualifications and stature, who shall be selected jointly by an individual to be designated by the Company and an individual to be selected by the Executive, or if such two individuals cannot agree on the selection of the arbitrator, who shall be selected by the American Arbitration Association. The prevailing party shall be entitled to recover fees and costs.

17. Survival of Certain Provisions. The rights and obligations set forth in this Agreement that, by their terms, extend beyond the Term shall survive the Term.

18. Entire Agreement. This Agreement, together with the equity award agreements referenced in Section 3(c) of this Agreement and the Non-Competition Agreement, contain the entire agreement and understanding of the parties hereto with respect to the matters covered herein, and supersede all prior or contemporaneous negotiations, commitments, agreements and writings with respect to the subject matter hereof, including the Prior Agreement. All such other negotiations, commitments, agreements and writings shall have no further force or effect, and the parties to any such other negotiation, commitment, agreement or writing shall have no further rights or obligations thereunder. Notwithstanding the foregoing, no provision in this Agreement shall be construed to adversely affect (i) any of Executive's rights to compensation, expense reimbursement or benefits (including equity compensation) accrued under the terms of the Prior Agreement (and applicable equity award agreements) before the date of this Agreement, which shall remain payable in accordance with the terms of the Prior Agreement (and applicable equity award agreements) or (ii) any of Executive's rights to indemnification or coverage under applicable directors' and officers' insurance policies with respect to Executive's service under the Prior Agreement, all of which are expressly agreed to survive the execution of this Agreement.

19. Severability. In the event any provision or part of this Agreement is found to be invalid or unenforceable, only that particular provision or part so found, and not the entire Agreement, will be inoperative.

20. Counterparts. This Agreement may be executed by either of the parties hereto in counterparts, each of which shall be deemed to be an original, but all such counterparts shall together constitute one and the same instrument.

21. Headings. The headings of sections herein are included solely for convenience of reference and shall not control the meaning or interpretation of any of the provisions of this Agreement.

22. Notices. All notices or communications hereunder shall be in writing, addressed as follows:

if to the Company:

IMAX Corporation 902 Broadway
20th Floor
New York, NY 10010 Attention: Chief Legal Officer

if to the Executive:

Patrick McClymont
[Address On File with the Company]

All such notices shall be conclusively deemed to be received and shall be effective (i) if sent by hand delivery or overnight courier, upon receipt or (ii) if sent by electronic mail, upon receipt by the sender of confirmation of such transmission; provided, however, that any electronic mail will be deemed received and effective only if followed, within 48 hours, by a hard copy sent by certified United States mail.

[SIGNATURE PAGE FOLLOWS]

17, 2019.

IN WITNESS WHEREOF, the Company and the Executive have duly executed this Agreement as of December

IMAX CORPORATION

By: /s/ Robert D. Lister
Name: Robert D. Lister
Title: Chief Legal Officer and
Senior Executive Vice President

By: /s/ Kenneth Weissman
Name: Kenneth Weissman
Title: Senior Vice President, Legal
Affairs and Corporate Secretary

PATRICK MCCLYMONT

/s/ Patrick McClymont

IMAX CORPORATION
Exhibit 21

SUBSIDIARIES OF IMAX CORPORATION

Company Name	Place of Incorporation	Percentage Held - Indirect
3183 Films Ltd.	Canada	100
12582 Productions Inc.	Delaware	100
1329507 Ontario Inc.	Ontario	100
2328764 Ontario Ltd.	Ontario	100
4507592 Canada Ltd.	Canada	100
6822967 Canada Ltd.	Canada	100
7096267 Canada Ltd.	Canada	100
7103077 Canada Ltd.	Canada	100
7109857 Canada Ltd.	Canada	100
7214316 Canada Ltd.	Canada	100
7550391 Canada Ltd.	Canada	100
7550405 Canada Ltd.	Canada	100
7742266 Canada Ltd.	Canada	100
7742274 Canada Ltd.	Canada	100
9733248 Canada Ltd.	Canada	100
Animal Orphans 3D Ltd.	Ontario	100
Arizona Big Frame Theatres, L.L.C.	Arizona	100
Baseball Tour, LLC	Delaware	15.625
ILW Productions Inc.	Delaware	100
IMAX II U.S.A. Inc.	Delaware	100
IMAX 3D TV Ventures, LLC	Delaware	100
IMAX (Barbados) Holding, Inc.	Barbados	100
IMAX Chicago Theatre LLC	Delaware	100
IMAX China Holding, Inc.	Cayman Islands	69.74
IMAX China (Hong Kong), Limited	Hong Kong	69.74
IMAX Documentary Films Capital, LLC	Delaware	40.46
IMAX Fei Er Mu (Shanghai) Investment Management Co., Ltd.	People's Republic of China	34.87
IMAX Fei Er Mu (Shanghai) Investment Partnership (Limited Partnership).	People's Republic of China	38.35
IMAX Fei Er Mu YiKai (Shanghai) Equity Investment Management Partnership Enterprise (Limited Partnership)	People's Republic of China	34.87
IMAX Film Holding Co.	Delaware	100
IMAX (Hong Kong) Holding, Limited	Hong Kong	100
IMAX Indianapolis LLC	Indiana	100
IMAX International Sales Corporation	Canada	100
IMAX Investment Management, LLC	Delaware	100
IMAX Japan Inc.	Japan	100
IMAX Minnesota Holding Co.	Delaware	100
IMAX Music Ltd.	Ontario	100
IMAX Post/DKP Inc.	Delaware	100
IMAX Providence General Partner Co.	Delaware	100
IMAX Providence Limited Partner Co.	Delaware	100
IMAX PV Development Inc.	Delaware	100
IMAX Rhode Island Limited Partnership	Rhode Island	100
IMAX (Rochester) Inc.	Delaware	100
IMAX Scribe Inc.	Delaware	100
IMAX (Shanghai) Commerce and Trade Co., Ltd.	People's Republic of China	69.74
IMAX (Shanghai) Multimedia Technology Co., Ltd.	People's Republic of China	69.74
IMAX (Shanghai) Digital Media Co., Ltd.	People's Republic of China	69.74
IMAX (Shanghai) Theatre Technology Services Co., Ltd.	People's Republic of China	69.74
IMAX Space Productions Ltd.	Canada	100

Company Name	Place of Incorporation	Percentage Held - Indirect
IMAX Spaceworks Ltd.	Canada	100
IMAX Theatre Holding (California I) Co.	Delaware	100
IMAX Theatre Holding (California II) Co.	Delaware	100
IMAX Theatre Holding Co.	Delaware	100
IMAX Theatre Holdings (OEI), Inc.	Delaware	100
IMAX Theatre Holding (Nyack I) Co.	Delaware	100
IMAX Theatre Holding (Nyack II) Co.	Delaware	100
IMAX Theatre Services Ltd.	Ontario	100
IMAX Theatres International Limited	Ireland	100
IMAX (Titanic) Inc. (50 % owned by 3183 Films Ltd.)	Delaware	100
IMAX U.S.A. Inc.	Delaware	100
IMAX VR, LLC	Delaware	100
IMAX Virtual Reality Content Fund, LLC	Delaware	33.1
IMAXSHIFT, LLC	Delaware	38
Line Drive Films Inc.	Delaware	100
Madagascar Doc 3D Ltd.	Canada	100
Night Fog Productions Ltd.	Canada	100
Nyack Theatre LLC	New York	100
Plymouth 135-139, LLC	Delaware	38
Raining Arrows Productions Ltd.	Canada	100
Ridefilm Corporation	Delaware	100
Ruth Quentin Films Ltd.	Canada	100
Sacramento Theatre LLC	Delaware	100
Suzhou IMAX Fei Er Mu Project Investment Partnership Enterprise (Limited Partnership)	People's Republic of China	52.31
Sonics Associates, Inc.	Alabama	100
Starboard Theatres Ltd.	Canada	100
Strategic Sponsorship Corporation	Delaware	100
Taurus-Littrow Productions Inc.	Delaware	100
TCL-IMAX Entertainment Co., Limited	Hong Kong	50
TCL-IMAX (Shanghai) Digital Technology Co. Ltd.	People's Republic of China	50
Walking Bones Pictures Ltd.	Canada	100

IMAX CORPORATION

EXHIBIT 23

Consent of Independent Registered Public Accounting Firm

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (No. 333-2076; No. 333-5720; No. 333-30970; No. 333-44412; No. 333-155262, No. 333-165400; No. 333-189274; No. 333-211888) of our report dated February 19, 2020 relating to the financial statements, financial statement schedule and the effectiveness of internal control over financial reporting, which appears in IMAX Corporation's Annual Report on Form 10-K for the year ended December 31, 2019.

/s/ PricewaterhouseCoopers LLP

Chartered Professional Accountants, Licensed Public Accountants

Toronto, Canada

February 19, 2020

IMAX CORPORATION

EXHIBIT 24

POWER OF ATTORNEY

Each of the persons whose signature appears below hereby constitutes and appoints Patrick McClymont and Robert D. Lister, and each of them severally, as his true and lawful attorney or attorneys with power of substitution and re-substitution to sign in his name, place and stead in any and all such capacities the Form 10-K, including the French language version thereof, and any and all amendments thereto and documents in connection therewith, and to file the same with the United States Securities Exchange Commission (the “SEC”) and such other regulatory authorities as may be required, each of said attorneys to have power to act with and without the other, and to have full power and authority to do and perform, in the name and on behalf of each of the directors of the Corporation, every act whatsoever which such attorneys, or either of them, may deem necessary or desirable to be done in connection therewith as fully and to all intents and purposes as such directors of the Corporation might or could do in person.

Dated this 19th day of February, 2020.

<u>Signature</u>	<u>Title</u>
<u>/s/ Bradley Wechsler</u> <i>Bradley Wechsler</i>	Chairman of the Board & Director
<u>/s/ Richard Gelfond</u> <i>Richard Gelfond</i>	Chief Executive Officer & Director (Principal Executive Officer)
<u>/s/ Neil Braun</u> <i>Neil Braun</i>	Director
<u>/s/ Eric Demirian</u> <i>Eric Demirian</i>	Director
<u>/s/ Kevin Douglas</u> <i>Kevin Douglas</i>	Director
<u>/s/ David Leebron</u> <i>David Leebron</i>	Director
<u>/s/ Michael MacMillan</u> <i>Michael MacMillan</i>	Director
<u>/s/ Dana Settle</u> <i>Dana Settle</i>	Director
<u>/s/ Darren Throop</u> <i>Darren Throop</i>	Director
<u>/s/ Patrick McClymont</u> <i>Patrick McClymont</i>	Chief Financial Officer (Principal Financial Officer)
<u>/s/ Jeffrey Vance</u> <i>Jeffrey Vance</i>	Senior Vice President, Finance (Principal Accounting Officer)

IMAX CORPORATION

EXHIBIT 31.1

Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Richard L. Gelfond, certify that:

1. I have reviewed this Annual Report on Form 10-K for the year ended December 31, 2019 of the registrant, IMAX Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 19, 2020

By: /s/ Richard L. Gelfond
Richard L. Gelfond
Chief Executive Officer

IMAX CORPORATION

EXHIBIT 31.2

Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Patrick McClymont, certify that:

1. I have reviewed this Annual Report on Form 10-K for the year ended December 31, 2019 of the registrant, IMAX Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 19, 2020

By: /s/ Patrick McClymont
Patrick McClymont
Chief Financial Officer &
Executive Vice President

IMAX CORPORATION

EXHIBIT 32.1

CERTIFICATIONS

**Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
(Subsections (A) and (B) of Section 1350, Chapter 63 of Title 18, United States Code)**

Pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, chapter 63 of title 18, United States Code), I, Richard L. Gelfond, Chief Executive Officer of IMAX Corporation, a Canadian corporation (the “Company”), hereby certify, to my knowledge, that:

The Annual Report on Form 10-K for the year ended December 31, 2019 (the “Form 10-K”) of the Company fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, and information contained in the Form 10-K fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 19, 2020

/s/ Richard L. Gelfond

Richard L. Gelfond

Chief Executive Officer

IMAX CORPORATION

EXHIBIT 32.2

CERTIFICATIONS

**Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
(Subsections (A) and (B) of Section 1350, Chapter 63 of Title 18, United States Code)**

Pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, chapter 63 of title 18, United States Code), I, Patrick McClymont, Chief Financial Officer of IMAX Corporation, a Canadian corporation (the “Company”), hereby certify, to my knowledge, that:

The Annual Report on Form 10-K for the year ended December 31, 2019 (the “Form 10-K”) of the Company fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, and information contained in the Form 10-K fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 19, 2020

/s/ Patrick McClymont

Patrick McClymont
Chief Financial Officer &
Executive Vice President