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

FORM 10-K

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

For the fiscal year ended December 31, 2020

Commission file number: 001-13425

Ritchie Bros. Auctioneers Incorporated

(Exact Name of Registrant as Specified in its Charter)

Canada	**98-0626225**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
9500 Glenlyon Parkway **Burnaby, British Columbia, Canada V5J 0C6**	**(778) 331-5500**
(Address of Principal Executive Offices)	(Registrant's Telephone Number, including Area Code)

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

Title of Each Class	Trading Symbol	Name of Exchange on Which Registered
Common Shares	RBA	New York Stock Exchange
Common Share Purchase Rights	N/A	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: **Restricted Share Units**

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, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer", "accelerated filer", "smaller reporting company", and "emerging growth company" in Rule 12b-2 of the Exchange Act.:

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

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

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

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

At June 30, 2020 (the last business day of the registrant's most recently completed second fiscal quarter), the aggregate market value of the registrant's common shares held by non-affiliates of the registrant (assuming for these purposes, but without conceding, that all executive officers and directors are "affiliates" of the registrant) was approximately $3,573,759,165. The number of common shares of the registrant outstanding as of February 17, 2021, was 109,908,443.

Documents Incorporated by Reference

Certain portions of the registrant’s definitive proxy statement to be filed with the Securities and Exchange Commission (“SEC”) pursuant to Regulation 14A not later than 120 days after the registrant’s fiscal year ended December 31, 2020, in connection with the registrant’s 2020 Annual and Special Meeting of Shareholders, are incorporated herein by reference into Part III of this Annual Report on Form 10-K.

RITCHIE BROS. AUCTIONEERS INCORPORATED
FORM 10-K
For the year ended December 31, 2020

INDEX

PART I

PART II

PART III

PART IV

SIGNATURES

Cautionary Note Regarding Forward-Looking Statements

The information discussed in this Annual Report on Form 10-K of Ritchie Bros. Auctioneers Incorporated (“Ritchie Bros.”, the “Company”, “we”, or “us”) includes “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933 (the “Securities Act”) and Section 21E of the Securities Exchange Act of 1934 (the “Exchange Act”) and Canadian securities laws. These statements are based on our current expectations and estimates about our business and markets, and include, among others, statements relating to:

- the severity, magnitude and duration of the COVID-19 pandemic and the direct and indirect impact of such pandemic, as well as responses to the pandemic by the government, business and consumers, on our operations and personnel, commercial activity and demand across our business and our customers' businesses;
- our future strategy, objectives, targets, projections, performance, and key enablers;
- our ability to drive shareholder value;
- market opportunities;
- our internet initiatives and the level of participation in our auctions by internet bidders, and the success of IronPlanet, Marketplace-E, and our other online marketplaces;
- our ability to grow our businesses, acquire new customers, enhance our sector reach, drive geographic depth, and scale our operations;
- the impact of our initiatives, services, investments, and acquisitions on us and our customers;
- the acquisition or disposition of properties;
- our ability to integrate our acquisitions;
- our ability to add new business and information solutions, including, among others, our ability to maximize and integrate technology to enhance our existing services and support additional value-added service offerings;
- the supply trend of equipment in the market and the anticipated price environment for late model equipment, as well as the resulting effect on our business and Gross Transaction Value (“GTV”) (defined under “Part I, Item 1: Business” of this Annual Report on Form 10-K);
- fluctuations in our quarterly revenues and operating performance resulting from the seasonality of our business;
- our compliance with all laws, rules, regulations, and requirements that affect our business;
- effects of various economic, financial, industry, and market conditions or policies, including the supply and demand for property, equipment, or natural resources;
- the behavior of equipment pricing;
- the relative percentage of GTV represented by straight commission or underwritten (guarantee and inventory) contracts, and its impact on revenues and profitability;
- the projected increase to our fee revenues as a result of the harmonization of our fee structure;
- our future capital expenditures and returns on those expenditures;
- the effect of any currency exchange and interest rate fluctuations on our results of operations;
- the grant and satisfaction of equity awards pursuant to our compensation plans;
- any future declaration and payment of dividends, including the tax treatment of any such dividends;
- financing available to us, our ability to refinance borrowings, and the sufficiency of our working capital to meet our financial needs; and
- our ability to satisfy our present operating requirements and fund future growth through existing working capital and credit facilities.

Forward-looking statements may appear throughout this report, including the following section "Management's Discussion and Analysis of Financial Condition and Results of Operations". Forward-looking statements are typically identified by such words as “aim”, “anticipate”, “believe”, “could”, “continue”, “estimate”, “expect”, “intend”, “may”, “ongoing”, “plan”, “potential”, “predict”, “will”, “should”, “would”, “could”, “likely”, “generally”, “future”, “long-term”, or the negative of these terms, and similar expressions intended to identify forward-looking statements. Forward-looking statements are based on current expectations and assumptions that are subject to risks and uncertainties that may cause actual results to differ materially.

While we have not described all potential risks related to our business and owning our common shares, the important factors discussed in “Part I, Item 1A: Risk Factors” of this Annual Report on Form 10-K for the year ended December 31, 2020 are among those that we consider may affect our performance materially or could cause our actual financial and operational results to differ significantly from our expectations. Except as required by applicable securities law and regulations of relevant securities exchanges, we do not intend to update publicly any forward-looking statements, even if our expectations have been affected by new information, future events or other developments. You should consider our forward-looking statements in light of the factors listed or referenced under “Risk Factors” herein and other relevant factors.

PART I

ITEM 1: BUSINESS

Company Overview

Ritchie Bros. Auctioneers Incorporated ("Ritchie Bros.", the "Company", "we", or "us") (NYSE & TSX: RBA) was founded in 1958 in Kelowna, British Columbia, Canada and is a world leader in asset management technologies and disposition of commercial assets, selling $5.41 billion of used equipment and other assets during 2020. Our expertise, unprecedented global reach, market insight, and trusted portfolio of brands provide us with a unique position in the used equipment market. We sell used equipment for our customers through live, unreserved auctions at over 40 auction sites worldwide, which are also simulcast online to reach a global bidding audience and through our online marketplaces.

Through our unreserved auctions, online marketplaces, and private brokerage services, we sell a broad range of used and unused commercial assets, including earthmoving equipment, truck tractors, truck trailers, government surplus, oil and gas equipment and other industrial assets. Construction and heavy machinery comprise the majority of the equipment sold. Customers selling equipment through our sales channels include end users (such as construction companies), equipment dealers, original equipment manufacturers ("OEMs") and other equipment owners (such as rental companies). Our customers participate in a variety of sectors, including heavy construction, transportation, agriculture, energy, and mining.

We also provide our customers with a wide array of other services aligned with our growth strategy to create a global marketplace for used equipment services and solutions. Our other services include equipment financing, asset appraisals and inspections, online equipment listing, logistical services, and ancillary services such as equipment refurbishment. Additionally, we offer our customers asset technology solutions to manage the end to end disposition process of their assets and provide market data intelligence to make more accurate and reliable business decisions.

We operate globally with locations in more than 12 countries, including the U.S., Canada, Australia, the United Arab Emirates, and the Netherlands, and employ more than 2,600 full-time employees worldwide.

Acquisition of Rouse

On December 8, 2020, we completed the acquisition of Rouse Services LLC ("Rouse"), a privately-held California limited liability company that is a leading provider of data intelligence and performance benchmarking solutions to help customers make better decisions. Rouse provides appraisals to asset backed lenders, market intelligence and software to rental companies, contractors, and dealers to optimize the used equipment sales process, and comparisons of rental rates, utilization, and other key performance metrics to industry benchmarks for rental companies and dealers. We acquired Rouse for $275 million. After adjustments for indebtedness, net working capital and closing items, we paid cash of $250.3 million and issued 312,913 common shares valued at approximately $22 million. Of the fair value of the common shares issued, $1.5 million was part of the purchase price, and $20.7 million is owed to certain continuing employees subject to their continuing employment through various vesting dates up to three years from the acquisition date. As a result, the total purchase price of Rouse was $251.7 million, comprised of $250.3 million in cash and $1.5 million in equity consideration.

The acquisition of Rouse is aligned with our accelerated growth efforts and with our strategy of becoming the trusted global marketplace for insights, services and transaction solutions for commercial assets. Rouse will enhance the data analytics and service offerings available to our customers by providing them with more robust data, better service, and innovative solutions to help their businesses run more efficiently. Beyond data and analytics, Rouse also offers highly rated equipment sales support and fleet appraisals. Rouse will continue to maintain its physical presence in Los Angeles, United States for the foreseeable future.

Impact of COVID-19 to our Business

In March 2020, the World Health Organization declared the outbreak of COVID-19 as a pandemic, which continues to spread throughout the world. The COVID-19 pandemic has resulted in significant global economic disruption and has materially impacted several countries and regions in which we operate, including the United States, Canada, Europe, the Middle East, Australia and Asia. It has resulted in travel restrictions, economic uncertainty, and business slowdowns or shutdowns in affected areas and has negatively disrupted global manufacturing and workforce participation, including our own.

In 2020, our ability to move equipment to and from our auction sites, foremost in Asia and Europe, was negatively impacted as regional governments issued orders requiring persons who were not engaged in essential activity to remain at home or ordering non-essential businesses to close in response to the pandemic to limit the spread of infections. Our European region experienced some constraints by the cross-border quarantine requirements making equipment transport challenging and consequently impacting our overall auction volumes during the year. Certain other regions throughout the year, including our North America region, went into and subsequently lifted lockdown policies impacting our businesses, however unlike Europe and Asia, the dependency to move equipment across country borders within Canada and the US was not as large a factor in our ability to operate our businesses.

Our top priority regarding the COVID-19 pandemic remains the health and welfare of our employees, customers, suppliers and others with whom we partner to run our business activities. We are strictly enforcing all local government and jurisdictional safety guidelines, and, in some instances, we are applying additional over-and-above safety measures. In the first quarter of 2020, we implemented our business continuity plans and instructed employees at many of our offices across the globe (including our corporate headquarters) to work from home on a temporary basis and implemented travel restrictions. These work-from-home orders and travel restrictions continued to be observed and were enforced throughout the year.

In 2020, we were able to operate and serve our customers' equipment and immediate liquidity needs through our platform of auction technology solutions and online auction capabilities. In addition to running our IronPlanet weekly featured online auction, our online Marketplace-E solution and our GovPlanet online auctions, we modified our live operations in March 2020 to transition all of our traditional live on site industrial auctions to online bidding. Buyers are still able to visit our live auction sites in advance of the virtual auctions to conduct inspections and pick up equipment post auction, but we are no longer holding live auction events in our theatres. We are enforcing rigid guidelines for equipment drop off, buyer inspections and post auction pickup of equipment to ensure the highest regard for the safety of our employees and customers. In addition, in 2020 we implemented Time Auctioned Lots (TAL) solution for selected events.

We have actively taken steps to be prudent on expenses and other cash outflows during the year, while taking steps to maximize our positive cash flows while still investing for future growth. Our priority is to support our employees, and we are actively monitoring the situation and changing dynamics in each of our respective regions and adjusting our operations as necessary. To this date, layoffs or furlough activities related to the COVID-19 pandemic have been limited in scope. As at the end of the year, after completing the acquisition of Rouse on December 8, 2020 with $250.3 million of cash consideration, we held a solid balance sheet and strong liquidity position. As of December 31, 2020, we have $278.8 million of unrestricted cash and $455.1 million of unused committed capacity under our long term revolving credit facilities. On August 14, 2020 we successfully amended and extended our credit facilities totaling US$630.0 million to expire in October 2023. We have also developed comprehensive contingency plans should the COVID-19 pandemic have a prolonged adverse impact on our business impeding our ability to generate revenue.

The extent of the ongoing impact of the COVID-19 pandemic on our operational and financial performance, including our ability to execute our business strategies and initiatives, will depend on future developments, including the duration and spread of the pandemic, time of mass vaccine distribution, and any related restrictions placed by respective global governments, as well as supply and demand impacts driven by our consignor and buyer base, all of which are uncertain and cannot be easily predicted. Although at the time of this filing, we continue to operate our modified live site operations in all regions, there is no assurance that our operations could not be impacted in the future.

We are actively monitoring the impact COVID-19 is having in the world and remain ready to take additional actions based on any new governmental guidance or recommendations. We continue to review and assess the pandemic's impacts on our customers, our suppliers and our business so that we can address the effect on our business and service our customers. It is unknown how long the pandemic will last, how many people are ultimately going to be affected by it, and the long-term implications to local or global economies. Equally, it is still not easily discernable to understand the real effects of the COVID-19 pandemic on equipment supply, buyer demand, and potential pricing volatility, or the potential impact on our buyers' ability to pay or secure financing. Additionally, there is a level of uncertainty over the impact the COVID-19 pandemic may have on our third party vendors, partners and the service providers with whom we currently do business with today. Their ability to partner with us may be temporarily or permanently constrained and for some, the business terms under which they continue to partner with us could change as they manage their business through these unprecedented times. As such, given the ongoing nature of the COVID-19 pandemic, we are not able to reasonably estimate the future impacts on our business operations, results of operations, cash flows, financial performance or our ability to pay dividends.

Strategy

In August 2020 we formalized a new strategy to address the large and fragmented used equipment marketplace that we operate in today. We believe our new strategy will help us unlock significant growth opportunities by building on Ritchie Bros.' core business and expanding into additional services. We offer a wide range of sales channels and formats to our customers providing unprecedented choice including live auction, online simulcast auction, featured online auctions, marketplaces as well as private contract negotiations. We are building on our position as a trusted advisor to our customers by evolving from transactional selling to meeting the needs of our customers through solution selling.

We see significant growth opportunities ahead by becoming *the trusted global marketplace for insights, services, and transaction solutions for commercial assets*. This represents not a shift, but an expansion of our former vision and the transaction solutions for which we are already well known. We value our long-tenured relationships with our customers, and the trust they have in our brand and platform. We are leveraging our sales channels to create a global marketplace for services and solutions that help our customers gain the insights they need to make decisions and run their businesses. We also intend to offer complimentary third party services on our platform where it will help our customers.

This strategy is supported by five strategic pillars on which we will build our future success:

Customer Experience - At Ritchie Bros., we have a long history, culture and passion for helping our customers. We continue to find ways to enrich our customers' experience by making our processes easier, our offerings more complete and our brands simpler.

Employee Experience - We cannot deliver a great customer experience without great employees. We continue to strive to create the best workplace for all employees and to create a place where they want to build a career. We encourage open and honest dialogue and are committed to robust communications from management to employees and creating channels for them to give feedback, as well as fixing processes and technology to improve the work environment for the benefit of both customers and employees.

Modern Architecture - We are transitioning to a modern architecture based in the cloud and comprised of microservices that allow us to create a single presence for our customers across all of our solutions. A modern architecture will allow flexibility and agility to enable scalable growth for us, our customers, and our partners.

Inventory Management System - We see our Inventory Management System, which integrates and tracks inventory data for selected customers, as a gateway for our customers to access our marketplaces and services. With the data, we can offer more timely and proactive advice and solutions to our customers with more ease of use.

Accelerate growth – We continually seek to identify areas to pilot improved business processes to positively impact the customer experience. We look to accelerate growth by scaling the learnings from these pilots into our global operations.

We believe our new strategy of becoming the global trusted marketplace for commercial assets will allow us to better serve our customers and will facilitate better penetration into non-auction markets and associated services. Building an integrated, easy to use marketplace, and becoming the trusted advisor to our customers opens significant potential for our business. We will start, as always, with our customers and our partners, and make sure we are building what they need.

Service Offerings

We offer our equipment buyer and seller customers multiple distinct, complementary, multi-channel brand solutions that address the range of their needs. Our global customer base has a variety of transaction options, breadth of services, and the widest selection of used equipment available to them.

Auctions and Marketplace

The tables below illustrate the various channels and brand solutions available under our Auctions and Marketplaces ("A&M") segment.

Channels	Brand Solutions	Description of Offering
Live On Site Auctions	RITCHIE BROS. Auctioneers	■ Live unreserved on site auctions, with live online simulcast, where we have care, custody and control of consignors' assets
	RITCHIE BROS. KRUSE ENERGY	■ Event-based sales of used energy equipment
Online Auctions and Marketplaces	RITCHIE BROS. IRONPLANET	■ Online marketplace for selling and buying used equipment
	RITCHIE BROS. Marketplace e	■ Online marketplace offering multiple price and timing options
	RITCHIE BROS. GOV PLANET	■ Online marketplace for the sale of government and military assets
Brokerage Service	PRIVATE TREATY A Ritchie Bros. Solution	■ Confidential, negotiated sale of large equipment

<u>Gross Transaction Value ("GTV")</u>
We record GTV for our A&M business, which represents total proceeds from all items sold at our auctions and online marketplaces. GTV is not a measure of financial performance, liquidity, or revenue, and is not presented in our consolidated financial statements.

<u>Contract options</u>
We offer consignors several contract options to meet their individual needs and sale objectives. Through our A&M business, options include:

- Straight commission contracts, where the consignor receives the gross proceeds from the sale less a pre-negotiated commission rate;
- Guarantee contracts, where the consignor receives a guaranteed minimum amount plus an additional amount if proceeds exceed a specified level; and
- Inventory contracts, where we purchase, take custody, and hold used equipment and other assets before they are resold in the ordinary course of business.

We collectively refer to guarantee and inventory contracts as underwritten or “at-risk” contracts. In 2020, our underwritten business accounted for approximately 20% of our GTV, compared to 20% in 2019 and 17% in 2018.

Value-added services

We also provide a wide array of value-added services to make the process of selling and buying equipment convenient for our customers. In addition to the other services listed in the table below, we also provide the following value-added services to our customers:

- conducting title searches, where registries are commercially available, to ensure equipment is sold free and clear of all liens and encumbrances (if we are not able to deliver clear title, we provide a full refund up to the purchase price to the buyer);
- making equipment available for inspection, testing, and comparison by prospective buyers;
- displaying high-quality, zoomable photographs of equipment on our website;
- providing free detailed equipment information on our website for most equipment;
- providing access to insurance and powertrain warranty products;
- providing access to transportation companies and customs brokerages through our logistical services;
- handling all pre-auction marketing, as well as collection and disbursement of proceeds; and
- providing equipment sales and rental data intelligence and performance benchmarking solutions.

Our IronClad Assurance equipment condition certification provides online marketplace buyers with information on the condition of the equipment that includes, but is not limited to, providing buyers with pictures and comprehensive inspection information of key systems and components.

Other Services

The tables below illustrate the various channels and brand solutions available under our other services segment.

Channels	Brand Solutions	Description of Offering
Financial Service	rb RITCHIE BROS. Financial Services	■ Loan origination service that uses a brokerage model to match loan applicants with appropriate financial lending institutions
Appraisal Service	rb RITCHIE BROS. Appraisal Services	■ Unbiased, certified appraisal services
Inspection Service	rb RITCHIE BROS. Inspection Services	■ Truck and lease return inspection services
Online Listing Service	RITCHIE BROS. MASCUS	■ Online equipment listing service and B2B dealer portal
Ancillary Services		■ Repair, paint, and other make-ready services
Logistical Service	rb RITCHIE BROS. Logistics Services	■ End-to-end transportation and customs clearance solution for sellers and buyers with shipping needs
Software Service	rb RITCHIE BROS. Asset Solutions	■ Cloud-based platform to manage end-to-end disposition
Data Service	ROUSE	■ A leading provider of construction equipment market intelligence

Intellectual Property

We believe our intellectual property has significant value and is an important factor in marketing our organization, services, and website, as well as differentiating us from our competitors. We own or hold the rights to use valuable intellectual property such as trademarks, service marks, domain names and tradenames. We protect our intellectual property in Canada, the U.S., and internationally through federal, provincial, state, and common law rights, including registration of certain trademark and service marks for many of our brands, including our core brands. We also have secured patents for inventions and have registered our domain names.

We rely on contractual restrictions and rights to protect certain of our proprietary rights in products and services. Effective protection of our intellectual property can be expensive to maintain and may require litigation. We must protect our intellectual property rights and other proprietary rights in many jurisdictions throughout the world. In addition, we may, from time to time, be subject to intellectual property claims, including allegations of infringement, which can be costly to defend. For a discussion of the risks involved with intellectual property litigation and enforcement of our intellectual property rights, see the related information in "Part I, Item 1A: Risk Factors" of this Annual Report on Form 10-K.

Competition

Competition Overview

The global used equipment market is highly fragmented with total annual global used equipment volumes estimated at more than $300 billion. We estimate the used equipment auction segment is $30 billion. Ritchie Bros. is the largest live auction company and claims approximately 20% market share of the live auction space with its $5.4 billion in GTV volume in 2020. We compete based on breadth, brand reputation, security, technology, and global reach of our services, as well as in the variety of contracts and methods and channels of selling equipment. In addition to the auction segment, two other major segments include private sales and brokers as well as the retail segment which includes OEM's, OEM dealers, rental companies and large strategic accounts. We also compete with private sales – often securing new business from equipment owners who had previously tried selling their equipment privately. Given the fragmentation in the auction market as well as upstream opportunities in private sales and retail, there is significant opportunity for growth.

Competitive advantages

Our key strengths provide distinct competitive advantages and have enabled us to achieve significant and profitable growth over the long term.

Global platform

We pride ourselves on our ability to connect buyers and sellers through our global network of over 40 auction sites in 12 countries, including the U.S., Canada, Australia, the United Arab Emirates, and the Netherlands and via multiple online sales channels. Our online bidding technology and Ritchie Bros. website are currently available in 10 and 22 languages, respectively. Our global presence ensures we generate global market pricing for our equipment sellers, as we reach international buyers and equipment demand, helping to deliver strong price realization. This global reach provides us and our selling customers with the ability to transcend local market conditions and provides buyers visibility into equipment availability all over the world.

Customer Relationships

Relationships are the core of Ritchie Bros. – delighting customers and treating them like friends while meeting their business needs. By offering an unprecedented choice of solutions that best suit our customers' needs, making their lives easier in the process, we develop relationships that can last across generations. We take a long-term approach with our customers and as such we position our sales force to act as trusted advisors to our customers.

Breadth of solutions

The acquisition of IronPlanet in 2017 provided us with the ability to meet all the buyers' and sellers' unique needs in a one-stop-shop manner. The event-driven live on site auction, which has been Ritchie Bros.' core business for nearly 60 years, is now just one—albeit powerful solution—to meet our customers' varied needs. By delivering choice, we can work with customers as a trusted advisor to provide them each with a tailored suite of equipment disposition solutions and asset management capabilities to best meet their needs.

While Ritchie Bros. has a full suite of solutions, most of its transactions are enabled through three core solutions:

1. The unreserved on site auction which provides Ritchie Bros. customers with care, custody, and control at its live auction sites.
2. IronPlanet weekly online auctions for sellers looking to manage the disposition of their assets on a more frequent basis and being able to sell from their yard or location without having to move equipment. Auctions are held every Thursday in North America; monthly in our international regions.
3. Marketplace-E is the reserved online marketplace that affords sellers with control over price and timing, and with solutions such as Make Offer, Buy Now, and Reserve Price selling formats for buyers.

In addition to transaction solutions, Ritchie Bros. offers a variety of services related to owning, maintaining and transacting equipment, including inspections, appraisals, transportations, refurbishment and more.

Delivering Insights and Services through Data & Analytics

A core part of the Ritchie Bros.' strategy is delivering insights and services through rich data and analytics. Based on the world's largest used equipment transaction dataset, we provide data products that allow customers to analyze market dynamics and value assets – these tools include Ritchie Bros. Market Trends and Ritchie Bros. Asset Valuator.

We continue to invest in Data Science to deliver asset value predictions, generate user leads, prioritize marketing investments, interpret price trends and more. Proprietary algorithmic asset pricing is used internally to set target values and optimize marketplace operations and externally to provide users of Ritchie Bros. Asset Solutions with instant asset values on inventory. The monthly Ritchie Bros. Used Equipment Market Trends Summary report features our proprietary use of Machine Learning to provide Mix-Adjusted Price Indexes for core asset groups around the globe. Correlated with other leading economic indicators, these price indexes have been quickly adopted by customers, analysts, and manufacturers as a key insight into pricing trends. Machine Learning also supports important strategic and operational decisions such as site expansion, testing marketplace performance, and experimentation with improved formats.

The acquisition of Rouse greatly expands our data and service offerings. Rouse Appraisals, Rouse Sales and Rouse Analytics are leaders in providing benchmarking and valuation services to lenders, rental companies, contractors and dealers. Rouse's business model is built upon an extensive data ecosystem, proprietary analytics and Data Science techniques, and trusted customer relationships rooted in service and confidentiality.

Our People

As of December 31, 2020, we employed 2,600 full-time employees (up 7.6% from 2019) and 2,500 part time employees worldwide, representing approximately 51% and 49%, respectively, of our global workforce. We also periodically hire contractors as needed to support our auctions, various businesses, and other projects.

Of our total full-time employees, 867 people work locally in the field to support our global auction operations and 425 people are focused on sales. During 2020, the COVID-19 pandemic created a need for us to transition all of our auctions on-line, and as a result we quickly adjusted our procedures to secure the safety of our employees and customers without layoffs and with minor furloughs in one of our business units.

In support of our new growth strategy, we restructured our customer care teams during the third quarter of 2020 to better align ourselves with our customers' experience. We created a new customer care hub in Fort Worth, Texas which resulted in a better alignment of our resources to our customers and provides our customers support before, during and post sales. This alignment provided new opportunities for our teams in both Burnaby, Canada and Fort Worth, United States. In December 2020, with the acquisition of Rouse, we also welcomed 51 new full-time employees.

As part of our five strategic pillars to *Deliver the Best Employee Experience*, we are focused on creating moments that matter as the framework of our employee experience, including: My first impression (candidate experience); My Rewards (benefits and recognition); My Development (new opportunities and skill building); My Leader (leader development and regular performance conversations); My Life Moments (work anniversaries and life events); and My Making a Difference (community giving, volunteering, and my voice). Combined, these moments create each employees' Ritchie Bros. story—#MyRBStory. During 2021 we will continue to assess satisfaction regarding the current state of our programs to support our journey of developing more employee-centric experiences for our people. We will measure our effectiveness over delivering the best employee experience through pulse-check surveys and review of employee responses to our changes and approach.

Development and Engagement

Our objective is to develop and engage our people. We invest in a variety of training, development and engagement practices as well as programs such as Personal Effectiveness, Transition to Leadership and Coaching for Success. We conduct pulse surveys and host monthly town-hall meetings to connect with our people. Overall, we measure our success in these areas through review of annual turnover rates, review of career progressions, and magnitude of internal promotions.

We provide all our employees access to a library of online learning, videos, books, and resources to help support ongoing personal and professional development. There are over 3000+ courses that range in subject matter from communication and time management skills, to resolving conflict and building effective teams. In total, during 2020 we have invested $1.7 million in training and development programs. As a result of the COVID 19 pandemic, we also curated tools and resources and developed training programs to help our employees successfully transition to working remotely and provide them with the skills to manage the challenges in these uncertain times. We checked in with our employees through pulse surveys and communicated through distribution of a twice-weekly newsletter named #RitchieStrong. Our newsletter, which comes directly from our CEO to all of our employees, promotes our successes, highlights our people and encourages social distancing and safety practices. Each newsletter ends with a reminder that employees can raise comments and ask questions directly to our CEO via email.

We continue to monitor our management-to-employee ratio, seeking to identify the most optimal structure for our business. In 2020, we began efforts to achieve an 8:1 regional sales manager to territory manager ratio to standardize the ratio across North America. This ratio and model is designed to expand the time spent by leaders in our business to coach our people and allow the regional sales managers to better assess the readiness and support the territory managers need to develop.

During 2020, we held conversations with our employees twice a year to evaluate their performance and development. Going forward in 2021, we will shift to quarterly performance conversations to drive performance and engagement. To measure the success of our people development and engagement, we conducted a pulse survey check mid-year, which identified that the 41% of our employees who responded communicated 95% satisfaction that the conversations recognized their accomplishments, clarified their priorities for the year, reinforced the Ritchie Bros. values, and adequately addressed their development plans.

Health & Safety

Our objective is to keep our people healthy and safe – to send everyone home, every day, the way they came to work.

All new employees are required to complete a safety orientation training that captures our health and safety programs, our policy statement and provides an overview of our global Employee Health and Safety (“EHS”) policies and expectations. Our 2020 completion rate for the safety orientation program was 97.4%.

We also have a risk management process to support our safety orientation programs and our health and safety commitment which ensures that our employees are exposed to the lowest possible level of risk. Our risk management process begins with an annual review of all incidents from the prior year to identify trends to see if we need to address findings through changes in our policies and procedures.

Daily, our employees conduct either a field level hazard assessment or complete a risk identification card to identify risks relating to the performance of their roles. These risk identification cards are monitored by our yard managers and/or our regional operations managers and corrective actions are taken to ensure that the risk is reduced or eliminated. During 2020 we had over 10,000 risk identification cards completed by our staff.

We also conduct annual online safety training with employees who perform certain operational tasks. In 2020 our completion rate for this training was over 98%. Additionally, in 2020 managers at our sites were also required to complete a series of online courses as part of their professional development. In 2020 we had a completion rate of over 95%.

We also measure our Total Recordable Injury Rate (“TRIR”) which measures the number of reportable incidences per 100 full-time workers during the year. Our annual TRIR goal is to meet or do better than the industrial average. Further, to assist us in our safety journey we periodically engage the services of a third-party consultant to conduct a safety perception survey.

Every region within our organization also has a Safety Steering team that provides feedback on our safety journey and assists in identifying issues or concerns that may arise. Our success in health and safety relies on everyone taking an active role in the development and implementation of our programs, participating in training and providing feedback on our progress in our safety journey.

Diversity & Inclusion

Our objective is to foster a workplace culture that actively and consistently values diversity and inclusion. Specifically, we want our teams to understand the strength of diversity, the power that comes from an inclusive environment and the effect it can have on our teams, businesses and stakeholders.

The focus of our diversity and inclusion journey began with a focus on gender diversity. Female representation at our most senior executive leadership level is at 31%, which is the highest mix in the Company’s history. At the Board of Directors level, we have more than doubled our female representation at 45% as of August 2020.

Our first employee resource group ("ERG"), Women's LINK, also focuses on gender diversity. It was launched in 2018 and membership has nearly tripled today to 190 volunteers. Although this ERG's primary goal is to support our women, the broader mandate is to make the resources and services available to all of our employees.

In 2020, we continued our journey by stating very clearly that Black Lives Matter at Ritchie Bros. We invited employees worldwide to participate in roundtable discussions about bias, racism and how we can make our doors more open to people of color. With more than 100 employee volunteers representing 5 countries, 3 provinces and 14 states, we formed a Black Lives Matter ERG. Based on employee interest, we are now creating a framework to support additional ERGs that meet our employees' diverse needs.

Productivity

Our objective is to hire and retain employees that help generate revenues. The majority of our revenue continues to be generated by our A&M segment operations. Sales force productivity within this segment is an operational statistic that we believe provides a gauge of the effectiveness of our revenue producers in increasing GTV. Revenue producers is a term used to describe our revenue-producing sales personnel which includes regional sales managers and territory managers.

Ethical Conduct

Our success and reputation are founded upon our commitment to honesty, integrity, and doing what is right—each element highlighted under our value of Integrity. Our objective is to monitor and facilitate reporting of unethical conduct. We do this by maintaining a confidential and anonymous independent third-party telephone line and web access hotline for anyone to submit concerns regarding potential code violations or other ethics-related matters without fear of repercussions. All reported matters are investigated fully and reported to the Audit Committee of our Board of Directors.

The Role of Technology

Implementing a modern architecture on which we can scale and grow profitably is a core strategic pillar for Ritchie Bros. The role of technology in our business continues to evolve and become more meaningful as buyers adopt mobile and online channels to transact their business with us while sellers further utilize our inventory management system. We continue to invest in technology to further transition to a modern cloud-based architecture driven by microservices that allows for agility, flexibility and scalability of our solutions.

We remain focused on technology enablement to transform the way we compete, the way we work and the way we leverage technology to drive future growth. Our technology capabilities are delivering choices for our customers in the form of multiple channels for buyers and sellers, meeting customer's asset management needs through information-rich software solutions and leveraging our rich data repository to drive strong sales and improved pricing decisions. We are also providing our customers with leading tools and capabilities to deliver full life-cycle asset management for used equipment.

Data Privacy and Security

As the role of technology and data in our business expands, so too does the importance of cybersecurity. We take protecting our customers, employees, brand, systems and data very seriously. We actively monitor and manage security risks and looks to mitigate them through enterprise-wide programs, employee training and vulnerability assessments. We have made – and continue to make – investments in dedicated information security resources, leadership and technology. We continue to strengthen and enhance our programs and controls around people, process and technology and apply risk-based strategies to enhance detection, protection and response efforts.

Our commitment to data security and privacy is demonstrated in our overall approach to governance. We are incorporating security and privacy by design and increasing awareness around the company with support from management and our board, which include:

- We have formed a Data Privacy Committee. The oversight of the committee is to develop and approve our general strategy and policies on data privacy and data protection, assess the data privacy risks associated with our business activities, and provide direction to, and support the initiatives of, our Data Privacy Office.
- Our Information Security and Policy committee meets on a monthly basis and advises on technology and legal and internal audit issues relating to security and risk reduction. This committee is responsible for reviewing and setting security policies, assessing risk and impacts of security incidents, and providing guidance and direction for security programs and strategy. The committee will be advised regarding information security assessment activities and will provide advice regarding education and communication that may be needed to support the information security policies and other compliance policy.

- All eligible employees complete mandatory privacy and information-security training courses, which are refreshed annually. Through continual awareness-building, such as our Cybersecurity Awareness Month every October, we work to promote a culture that understands the critical importance of data security and privacy, areas of vulnerability and how to remain vigilant when handling data.

Seasonality

Our GTV and associated A&M segment revenues are affected by the seasonal nature of our business. GTV and A&M segment revenues tend to increase during the second and fourth calendar quarters, during which time we generally conduct more business than in the first and third calendar quarters. Given the operating leverage inherent in our business model, the second and fourth quarter also tend to produce higher operating margins, given the higher volume and revenue generated in those quarters.

The restrictions imposed and effects of the overall economic environment as a result of the COVID-19 pandemic may continue to impact these trends.

Revenue Mix Fluctuations

Our revenue is comprised of service revenue and inventory sales revenue. Service revenue from A&M segment activities include commissions earned at our live auctions, online marketplaces, and private brokerage services, and various auction-related fees, including listing and buyer transaction fees. We also recognize revenues from our Other Services activities as service revenue. Inventory sales revenue is recognized as part of our A&M activities and relates to revenues earned through our inventory contracts.

Inventory sales revenue can fluctuate significantly, as it changes based on whether our customers sell using a straight or guarantee commission contract, or an inventory contract at time of selling. Straight or guarantee commission contracts will result in the commission being recognized as service revenue, while inventory contracts will result in the gross transaction value of the equipment sold being recorded as inventory sales revenue with the related cost recognized in cost of inventory sold. As a result, a change in the revenue mix between service revenues and revenue from inventory sales can have a significant impact on revenue growth percentages.

Governmental Regulations and Environmental Laws

Our operations are subject to a variety of federal, provincial, state and local laws, rules, and regulations throughout the world. We believe that we are compliant in all material respects with those laws, rules, and regulations that affect our business, and that such compliance does not impose a material impediment on our ability to conduct our business.

We believe that, among other things, laws, rules, and regulations related to the following list of items affect our business:

- Imports and exports of equipment. Particularly, there are restrictions in the U.S. and Europe that may affect the ability of equipment owners to transport certain equipment between specified jurisdictions. Also, engine emission standards in some jurisdictions limit the operation of certain trucks and equipment in those regions.
- Development or expansion of auction sites. Such activities depend upon the receipt of required licenses, permits, and other governmental authorizations. We are also subject to various local zoning requirements pertaining to the location of our auction sites, which vary among jurisdictions.
- The use, storage, discharge, and disposal of environmentally sensitive materials. Under such laws, an owner or lessee of, or other person involved in, real estate may be liable for the costs of removal or remediation of certain hazardous or toxic substances located on or in, or emanating from, such property, as well as related costs of investigation and property damage. These laws often impose liability without regard to whether the owner or lessee or other person knew of, or was responsible for, the presence of such hazardous or toxic substances.
- Worker health and safety, privacy of customer information, and the use, storage, discharge, and disposal of environmentally sensitive materials.

Available Information

The information contained on or accessible through our website is not part of this Annual Report on Form 10-K. We file required reports on Form 10-K, Form 10-Q, Form 8-K, proxy materials and other filings required under the Exchange Act. The SEC maintains an Internet site (www.sec.gov) that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC.

We maintain a website at www.rbauction.com and copies of our reports on Form 10-K, Form 10-Q and Form 8-K, proxy materials and other filings required under the Exchange Act, are available on our website, free of charge, as soon as reasonably practicable after we electronically file such reports with, or furnish those reports to, the SEC. We have an investor website at www.investor.ritchiebros.com. None of the information on our websites is incorporated into this Annual Report on Form 10-K by this or any other reference.

Also available for investors on our website in the Corporate Governance section for investors are the Code of Business Conduct and Ethics for our directors, officers and employees ("Code of Conduct"), Board Mandate, Audit Committee Charter, Nominating and Corporate Governance Charter, Compensation Committee Charter, Corporate Governance Guidelines, Diversity Policy, Shareholder Engagement Policy, Articles and Bylaws, Majority Voting Policy and Board Chair Role and Description. Additional information related to Ritchie Bros. is also available on SEDAR at www.sedar.com.

As a Canada Business Corporations Act ("CBCA") company with our principal place of business in Canada, U.S. civil liabilities may not be enforceable against us. Please see "Item 1A. Risk Factors—U.S. civil liabilities may not be enforceable against us, our directors, or our officers," which is incorporated into this Item 1 by this reference.

ITEM 1A: RISK FACTORS

An investment in our common stock involves a high degree of risk. In addition to the other information included in this Annual Report on Form 10-K, you should carefully consider each of the risks described below before purchasing our common shares. The risk factors set forth below are not the only risks that may affect our business. Our business could also be affected by additional risks not currently known to us or that we currently deem to be immaterial. If any of the following risks actually occur, our business, financial condition and results of operations could materially suffer. As a result, the trading price of our common shares could decline, and you may lose all or part of your investment. Information in this section may be considered "forward-looking statements." See "Cautionary Note Regarding Forward-Looking Statements" for a discussion of certain qualifications regarding such statements.

Risk related to our business

Our business operations, results of operations, cash flows and financial performance may be affected by the COVID-19 pandemic.

An outbreak of a novel strain of coronavirus (COVID-19) has occurred, including in all of the countries in which we operate. National, state, provincial and local governments have responded to the COVID-19 pandemic in a variety of ways, including, without limitation, by declaring states of emergency, restricting people from gathering in groups or interacting within a certain physical distance (i.e., social distancing), and in certain cases, ordering businesses to close or limit operations or people to stay at home.

The COVID-19 pandemic has caused certain disruptions to our business and operations and could cause further material disruptions to our business and operations in the future as a result of, among other things, quarantines, worker absenteeism as a result of illness or other factors, social distancing measures and other travel, health-related, business or other restrictions. For similar reasons, the COVID-19 pandemic has also adversely impacted, and may continue to adversely impact, the businesses and needs of our customers including their ability to secure financing. Depending on the extent and duration of all of the above-described effects on our business and operations and the business and operations of our customers, our costs could increase, including our costs to address the health and safety of personnel, our ability to source assets to sell may be adversely impacted, our ability to transport and/or sell the assets that we source may be adversely impacted, our ability to service certain customers could be adversely impacted, and our ability to transfer ownership to the assets that we do sell could be adversely impacted. As a result of the foregoing, our business operations, results of operations, cash flows and financial performance could be materially adversely affected.

Although we have been permitted to continue to operate our auction sites in most of the jurisdictions in which we operate, including in jurisdictions that have mandated the closure of certain businesses, we have had to either forbid customer access altogether or limit the number of customers that are able to access our auction sites; in each case leading to online-only bidding for our live auctions. There is no assurance that we will be permitted to operate under every future government order or other restriction and in every location. If we were to be subject to government orders or other restrictions on the operation of our business, we may be required to limit our operations at, or close, certain auction sites and office locations in the future. Any limitations on, or closures of, our auction sites or our customers' sites could have a material adverse impact on our ability to carry out auctions or facilitate online sales, allow customers or our inspection teams to inspect assets or allow customers to retrieve purchased assets. Any such limitations or closures could have a material adverse impact on our business operations, results of operations, cash flows and financial performance.

Any sustained disruption in the capital markets from the COVID-19 pandemic could negatively impact our ability to raise capital. As of the end of 2020 we have a strong balance sheet and do not anticipate the need to raise capital. However, we cannot predict when the macro-economic disruption stemming from the COVID-19 pandemic will ebb or when the economy will return to pre-COVID-19 pandemic levels, if at all. If the macro-economic disruption continues for prolonged periods we may need to raise additional capital and it may not be available on acceptable terms, or at all. The impact of the COVID-19 pandemic on economic activity, and its effect on our sales force and our customers are uncertain at this time and could have a material adverse effect on our results, especially to the extent these effects persist or exacerbate over an extended period of time. Additionally, any such impact could also result in financial and/or operational constraints for our service providers, buyers of the assets sold through our sales channel, as well as other counterparties, thereby increasing the risk that such counterparties default on their obligations to us.

Damage to our reputation could harm our business.

One of our founding principles is that we operate a fair and transparent business, and consistently act with integrity. Maintaining a positive reputation is key to our ability to attract and maintain customers, investors and employees. Damage to our reputation could cause significant harm to our business. Harm to our reputation could arise in a number of ways, including, but not limited to, employee conduct which is not aligned with our Code of Business Conduct and Ethics (and associated Company policies around behavioural expectations) or our Company's core values, safety incidents, failure to maintain customer service standards, loss of trust in the fairness of our sales processes, and other technology or compliance failures.

We may incur losses as a result of our guarantee and inventory contracts and advances to consignors.

Our most common type of auction contract is a straight commission contract, under which we earn a pre-negotiated, fixed commission rate on the gross sales price of the consigned equipment at auction. We use straight commission contracts when we act as agent for consignors. In recent years, a majority of our annual business has been conducted on a straight commission basis. In certain other situations, we will enter into underwritten transactions and either offer to:

- guarantee a minimum level of sale proceeds to the consignor, regardless of the ultimate selling price of the consignment; or
- purchase the equipment outright from the seller for sale through one of our sales channels.

We determine the level of guaranteed proceeds or inventory purchase price based on appraisals performed on equipment by our internal personnel. Inaccurate appraisals could result in guarantees or inventory values that exceed the realizable auction proceeds. In addition, a change in market values could also result in guarantee or inventory values exceeding the realizable auction proceeds. If auction proceeds are less than the guaranteed amount, our commission will be reduced, and we could potentially incur a loss, and, if auction proceeds are less than the purchase price we paid for equipment that we take into inventory temporarily, we will incur a loss. Because a majority of our auctions are unreserved, there is no way for us to protect against these types of losses by bidding on or acquiring any of the items at such auctions. In addition, we do not hold inventory indefinitely waiting for market conditions to improve. If our exposure to underwritten contracts increases, this risk would be compounded.

Occasionally, we advance to consignors a portion of the estimated auction proceeds prior to the auction. We generally make these advances only after taking possession of the assets to be auctioned and upon receipt of a security interest in the assets to secure the obligation. If we were unable to auction the assets or if auction proceeds were less than amounts advanced, we could incur a loss.

The availability and performance of our technology infrastructure, including our websites, is critical to our business.

The satisfactory performance, reliability and availability of our websites, online bidding service, enterprise resource planning system, processing systems, network infrastructure and customer relationship management system are important to our reputation and our business. We currently rely on both our own proprietary technology as well as third-party cloud computing platform providers located in the United States and other countries. The technology and systems we rely on may experience service interruptions or degradation because of hardware or software defects or malfunctions, computer denial of service, cyber events, human error and natural events beyond our control. Some of our systems are not fully redundant, and our recovery planning may not be sufficient for all possible disruptions.

Further, we will need to continue to expand, consolidate, and upgrade our technology, transaction processing systems and network infrastructure both to meet increased usage of our online bidding service and other new services and solutions being offered to our customers, to implement new features and functions and as a result of the acquisition of IronPlanet. Our business and results of operations could be harmed if we were unable to expand and upgrade in a timely manner our systems and infrastructure to accommodate any increases in the use of our internet services, or if we were to lose access to or the functionality of our internet systems for any reason, especially if such loss of service prevented internet bidders from effectively participating in one of our auctions. Frequent, persistent or ill-timed interruptions to our internet services could cause current or potential customers to believe that our systems are unreliable, which could lead to the loss of customers and harm our reputation.

We use both internally developed and licensed systems for transaction processing and accounting, including billings and collections processing. We continually upgrade and improve these systems to accommodate growth in our business. If we are unsuccessful in continuing to upgrade our technology, transaction processing systems or network infrastructure to accommodate increased transaction volumes, it could harm our operations and interfere with our ability to expand our business. Further, licensed hardware, software and cloud computing platforms may not continue to be available at reasonable prices, on commercially reasonable terms or at all. Any loss of the right to use any of these hardware, software or cloud computing platforms could significantly increase our expenses and otherwise result in delays in provisioning of our services until equivalent technology is either developed by us, or, if available, obtained through purchase or license and integrated into our operations.

Consumer behavior is rapidly changing, and if we are unable to successfully adapt to consumer preferences and develop and maintain a relevant and reliable inventory management and multichannel disposition experience for our customers, our financial performance and brand image could be adversely affected.

Our business continues to evolve into a one-stop inventory management and multichannel disposition company where customers can buy, sell, or list equipment, when, how, and where they choose- both on site and online, and manage their existing fleets and/or inventory using our online inventory management tools. As a result of this evolution, increasingly we interact with our customers across a variety of different channels, including live auction, online, through mobile technologies, including the Ritchie Bros. mobile app, social media, and inventory management systems. Our customers are increasingly using tablets and mobile phones to make purchases online and to get detailed equipment information for assets that they own or are interested in purchasing. Our customers also engage with us online, including through social media, by providing feedback and public commentary about all aspects of our business. Consumer shopping patterns are rapidly changing and our success depends on our ability to anticipate and implement innovations in customer experience and logistics in order to appeal to customers who increasingly rely on multiple channels to meet their equipment management and disposition needs. If for any reason we are unable to implement our inventory management, data solutions, bidding tools and other multichannel initiatives, provide a convenient and consistent experience for our customers across all channels, or provide our customers the services they want, when and where they want them at a compelling value proposition, then our financial performance and brand image could be adversely affected.

We rely on data provided by third parties, the loss of which could limit the functionality of certain of our platforms and disrupt our business.

Our analytics business relies on data provided to us by our customers and other third parties. Some of this data is provided to us pursuant to third-party data sharing policies and terms of use, under data sharing agreements by third-party providers or by customer consent. In the future, any of these parties could change its data sharing policies and terms of use, including making them more restrictive, any of which could result in the loss of, or significant impairment to, our ability to collect and provide useful data or related services to our customers.

These third parties could also interpret our data collection and use policies or practices as being inconsistent with their policies or business objectives, or lose confidence in our data protection and privacy practices, which could result in the loss of our ability to collect this data. Any such changes could impair our ability to deliver our analytics service to our customers in the manner currently anticipated or at all, impairing the return on investment that our customers derive from using our analytics platform, as well as adversely affecting our business and our ability to generate revenue.

A deterioration of general macroeconomic conditions could materially and adversely affect our business.

Our performance is subject to macroeconomic conditions and their impact on customer spending. Adverse macroeconomic conditions typically result in a general tightening in credit markets, lower levels of liquidity, increased default and bankruptcy rates, and depressed levels of activity and investment.

Challenging macroeconomic conditions may have a negative impact on the operations, financial condition and liquidity of many customers and, as a result, may negatively impact the volume of equipment listed for sale and the prices of equipment sold in our marketplace, thereby having a negative impact on our revenue and ability to grow our business. If sellers choose not to sell their assets as a result of adverse economic conditions, buyers are unable to purchase equipment based on their inability to obtain sufficient financing or are unwilling to do so given the market climate, or if customers are in general financial distress, our operations may be negatively affected and revenue from our marketplace may decrease.

Our ability to provide a high-quality customer experience may depend on third parties and external factors over which we may have little or no control.

Our ability to provide a high quality and efficient customer experience is also dependent on external factors over which we may have little or no control, including, without limitation, the reliability and performance of the equipment sold in our marketplaces and the performance of third-party carriers who transport purchased equipment on behalf of buyers. If our customers are dissatisfied with the accuracy of our appraisals and inspections, the quality of the business insights provided by our other value-added services, or do not receive the equipment they purchased in a timely manner or in the condition that they expect, customers may stop using us to purchase equipment. Failure to provide customers with high quality and efficient customer experiences could substantially harm our reputation and adversely impact our efforts to develop customer and industry trust in our brands.

Government regulation of the Internet and e-commerce is evolving, and unfavorable changes in this or other regulations could substantially harm our business and results of operations.

We are subject to general business regulations and laws as well as certain federal, provincial, state and local laws, rules and regulations, including those governing the internet and e-commerce. Existing and future laws and regulations may impede the growth of the internet, e-commerce or other services, and increase the cost of doing business, including providing online auction services. These regulations and laws may cover taxation, tariffs, user privacy, data protection, pricing, content, copyrights, distribution, electronic contracts, and other communications, consumer protection, broadband residential Internet access and the characteristics and quality of services. It is not clear how existing laws governing issues such as property ownership, sales, use and other taxes, libel, and personal privacy apply to the Internet and e-commerce. Changes to regulations and unfavorable resolution of these issues may harm our business and results of operations.

We have two vendor contracts with the U.S. Government’s Defense Logistics Agency (“DLA”) as part of our GovPlanet business unit pursuant to which we acquire a significant amount of inventory. If we are unable to sell the purchased inventory our financial results would be adversely impacted. Also, if we are unable to, or do not, renew our relationship with the DLA, our GovPlanet business unit would be adversely impacted.

We have two vendor contracts with the DLA pursuant to which we acquire, manage and resell certain assets of the DLA. One of the DLA contracts obliges the Company to purchase non-rolling stock assets in an amount and of a type over which we have limited ability to control. In many cases, the type of assets purchased are not what we typically sell through any of our other channels. Although the prices we pay for the non-rolling stock inventory are a fraction of the original acquisition value, we may not have the ability to attract buyers for those assets and we may be unable to sell those assets on a timely basis or at all. This would have an adverse effect on our financial results. In addition, the DLA has announced its intention to combine both rolling stock and non-rolling stock into a single contract (to be split into two geographical regions). Each of the two existing contracts that we currently have with the DLA expire in April of 2021 and, as such, we will need to participate in the DLA’s new bidding procedures in order to seek to continue our relationship with the DLA. We currently intend to participate in the bid process for these sales contracts but there is no guarantee that we will submit a competitive bid, or a bid at all, and nor is there a guarantee that if we do submit a bid that we would be awarded either or both sales contracts. As such, if our relationship with the DLA is impaired, we are not awarded new DLA vendor contracts when our current contracts expire, the DLA vendor contracts are terminated or the supply of inventory under such contracts is significantly decreased, our GovPlanet business unit would experience a decrease in revenue and GTV.

If our ability, or the ability of our third party service partners’, cloud computing platform providers’ or third party data center hosting facilities’, to safeguard the reliability, integrity and confidentiality of our and their information technology systems is compromised, and unauthorized access is obtained to our systems or customers’, suppliers', counterparties' and employees' confidential information, or authorized access is blocked or disabled, we may incur significant reputational harm, legal exposure, or a negative financial impact.

We rely on information technology (“IT”) resources to manage and operate our business, including maintaining proprietary databases containing sensitive and confidential information about our customers, suppliers, counterparties and employees (which may include personal information and credit information) and utilizing approved third-party technology providers to support the management and operation of IT systems and infrastructure. As the malicious tools and techniques used to breach, obtain unauthorized access to, or sabotage IT systems and infrastructure become more sophisticated and change frequently, we may not be able to anticipate these malicious tools and techniques or to implement adequate preventative measures. Unauthorized parties may also attempt to gain access to our and our providers’ systems or facilities through various means, including hacking into IT systems or facilities, fraud, trickery or other means of deceiving our and their employees or contractors. A party that is able to circumvent security measures could misappropriate our or our customers’ confidential information, cause interruption to our operations, damage our computing infrastructure or otherwise damage our reputation. Although we maintain information security measures, there can be no assurance that we will be immune from these security risks, and any breach of our IT systems may have a material adverse impact on our business and results of operations. In addition, our limited control over our customers may affect the perception of the security and integrity of our IT systems and create financial or legal exposure. For example, our customers may accidentally disclose their passwords or store them on a device that is lost or stolen, providing bad actors with access to a customer’s account and the possible means to redirect customer payments.

Under credit card payment rules and our contracts with credit card processors, if there is a breach of payment card information that we collect to process transactions, we could be liable to the payment card issuing banks for their cost of issuing new cards and related expenses. We may also be held liable for certain fraudulent credit card transactions and other payment disputes with customers. If we were unable to accept payment cards, our results of operations would be materially and adversely affected.

Security events, such as by hacking or other malicious or surreptitious activity, could damage our reputation, cause a loss of confidence in the security of our services and thereby a loss of customers, and expose us to a risk of loss or litigation and possible liability for damages. We may be required to make significant expenditures to monitor, detect and prevent security events, to remediate known or potential security vulnerabilities, or to alleviate problems caused by any security events. Additionally, if any of our third-party technology providers violate applicable laws or our contracts or policies, such violations may also put our customers' information at risk and could in turn have a material and adverse effect on our business. These issues are likely to become costlier as we expand. Our insurance policies may not be adequate to reimburse us for losses caused by security breaches, and we may not be able to fully collect, if at all, under these insurance policies. To date, identified security events have not been material or significant to us, including to our reputation or business operations, or had a material financial impact, but there can be no assurance that future cyberattacks will not be material or significant.

Our future expenses may increase significantly and our operations and ability to expand may be limited as a result of environmental and other regulations.

A variety of federal, provincial, state and local laws, rules and regulations throughout the world, including local tax and accounting rules, apply to our business. These relate to, among other things, the auction business, imports and exports of equipment, property ownership laws, licensing, worker safety, privacy of customer information, land use and the use, storage, discharge and disposal of environmentally sensitive materials. Complying with revisions to laws, rules and regulations could result in an increase in expenses and a deterioration of our financial performance. Failure to comply with applicable laws, rules and regulations could result in substantial liability to us, suspension or cessation of some or all of our operations, restrictions on our ability to expand at present locations or into new locations, requirements for the acquisition of additional equipment or other significant expenses or restrictions.

The development or expansion of auction sites depends upon receipt of required licenses, permits and other governmental authorizations. Our inability to obtain these required items could harm our business. Additionally, changes or concessions required by regulatory authorities could result in significant delays in, or prevent completion of, such development or expansion.

Under some environmental laws, an owner or lessee of, or other person involved in, real estate may be liable for the costs of removal or remediation of hazardous or toxic substances located on or in, or emanating from, the real estate, and related costs of investigation and property damage. These laws often impose liability without regard to whether the owner, lessee or other person knew of, or was responsible for, the presence of the hazardous or toxic substances.

Environmental contamination may exist at our owned or leased auction sites, or at other sites on which we may conduct auctions, or properties that we may be selling by auction, from prior activities at these locations or from neighboring properties.

In addition, auction sites that we acquire or lease in the future may be contaminated, and future use of or conditions on any of our properties or sites could result in contamination. The costs related to claims arising from environmental contamination of any of these properties could harm our financial condition and results of operations.

There are restrictions in the U.S., Canada and Europe and other jurisdictions in which we do business that may affect the ability of equipment owners to transport certain equipment between specified jurisdictions or the salability of older equipment. One example of these restrictions is environmental certification requirements in the U.S., which prevent non-certified equipment from entering into commerce in the U.S. In addition, engine emission standards in some jurisdictions limit the operation of certain trucks and equipment in those markets.

These restrictions, or changes to environmental laws, including laws in response to climate change, could inhibit materially the ability of customers to ship equipment to or from our auction sites, reducing our GTV and harming our business, financial condition and results of operations.

International bidders and consignors could be deterred from participating in our auctions if governmental bodies impose additional export or import regulations or additional duties, taxes or other charges on exports or imports. Reduced participation by international bidders and consignors could reduce GTV and harm our business, financial condition and results of operations.

Losing the services of one or more key personnel or the failure to attract, train and retain personnel could materially affect our business.
Our future success largely depends on our ability to attract, develop and retain skilled employees in all areas of our business, as well as to design an appropriate organization structure and plan effectively for succession. Although we actively manage our human resource risks, there can be no assurance that we will be successful in our efforts. If we fail to attract, develop and retain skilled employees in all areas of our business, our financial condition and results of operations may be adversely affected, and we may not achieve our growth or performance objectives.

The growth and performance of our business depends to a significant extent on the efforts and abilities of our employees. Many of our key employees have extensive experience with our business. These employees have knowledge and an understanding of our company and industry that cannot be readily duplicated. The loss of any key personnel, or the inability to replace any lost personnel with equally trained personnel, could impair our ability to execute our business plan and growth strategy, cause us to lose customers and reduce our revenues. In addition, the success of our strategic initiatives to expand our business to complimentary service offerings will require new competencies in many positions, and our management and employees will have to adapt and learn new skills and capabilities. To the extent they are unable or unwilling to make these transformational changes, we may be unable to realize the full benefits of our strategic initiatives. We do not maintain key person insurance on the lives of any of our executive officers or other key personnel. As a result, we would have no way to cover the financial loss if we were to lose the services of such employees. This uncertainty may adversely affect our ability to attract and retain key employees.

If any of our key personnel were to join a competitor or form a competing company, existing and potential customers could choose to form business relationships with that competitor instead of us. There can be no assurance that confidentiality, non-solicitation, non-competition or similar agreements signed by our former directors, officers, or employees will be effective in preventing a loss of business.

Failure to maintain safe sites could materially affect our business and reputation.
Our employees and customers are often in close proximity with mechanized equipment, moving vehicles and chemical and other industrial substances. Our auction sites and warehouses are, therefore, potentially dangerous places and involve the risk of accidents, environmental incidents and other incidents which may expose us to investigations and litigation or could negatively affect the perception of customer and employee safety, health and security. Even in the absence of any incidents, unsafe site conditions could lead to employee turnover or harm our reputation generally, each of which would affect our financial performance. While safety is a primary focus of our business and is critical to our reputation and performance, our failure to implement safety procedures or implement ineffective safety procedures, would increase this risk and our operations and results from operations may be adversely impacted.

Income and commodity tax amounts, including tax expense, may be materially different than expected and there is a trend by global tax collection authorities towards the adoption of more aggressive laws, regulations, interpretations and audit practices.
Our global operations are subject to tax interpretations, regulations, and legislation in the numerous jurisdictions in which we operate, all of which are subject to continual change.

We accrue and pay income taxes and have significant income tax assets, liabilities, and expense that are estimates based primarily on the application of those interpretations, regulations and legislation, and the amount and timing of future taxable income as well as our use of applicable accounting principles. Accordingly, we cannot be certain that our estimates and reserves are sufficient. The timing concerning the monetization of deferred income tax amounts is uncertain, as they are dependent on our future earnings and other events. Our deferred income tax amounts are valued based upon enacted income tax rates in effect at the time, which can be changed by governments in the future.

The audit and review activities of tax authorities affect the ultimate determination of the actual amounts of commodity taxes payable or receivable, income taxes payable or receivable, deferred income tax assets and liabilities, and income tax expense.

There is no assurance that taxes will be payable as anticipated or that the amount or timing of receipt or use of the tax-related assets will be as currently expected. Our experience indicates that taxation authorities are increasing the frequency and depth of audits and reviews. Future tax authority determinations, including changes to tax interpretations, regulations, legislation or jurisprudence, could have a material impact to our financial position. The fact that we operate internationally increases our exposure in this regard given the multiple forms of taxation imposed upon us.

Further and more generally, there has been increased political, media and tax authority focus on taxation in recent years; the intent of which appears to be to enhance transparency and address perceived tax avoidance. As such, in addition to tax risk from a financial perspective, our activities may expose us to reputational risk.

Our substantial international operations expose us to foreign exchange rate fluctuations that could harm our results of operations.

We conduct business in many countries around the world and intend to continue to expand our presence in international markets, including emerging markets. Fluctuating currency exchange rates may negatively affect our business in international markets and our related results of operations.

Although we report our financial results in U.S. dollars, a significant portion of our revenues and expenses are generated outside the U.S., primarily in currencies other than the U.S. dollar. In particular, a significant portion of our revenues are earned, and expenses incurred, in the Canadian dollar and the Euro. As a result, our financial results are impacted by fluctuations in foreign currency exchange rates. We do not currently engage in foreign currency hedging arrangements, and, consequently, foreign currency fluctuations may adversely affect our results of operations.

The results of operations of our foreign subsidiaries are translated from local currency into U.S. dollars for financial reporting purposes. If the U.S. dollar weakens against foreign currencies, the translation of these foreign currency denominated revenues or expenses will result in increased U.S. dollar denominated revenues and expenses. Similarly, if the U.S. dollar strengthens against foreign currencies, particularly the Canadian dollar and the Euro, our translation of foreign currency denominated revenues or expenses will result in lower U.S. dollar denominated revenues and expenses.

In addition, currency exchange rate fluctuations between the different countries in which we conduct our operations impact the purchasing power of buyers, the motivation of consignors, asset values and asset flows between various countries, including those in which we do not have operations. These factors and other global economic conditions may harm our business and our results of operations.

Our business is subject to the risks of operating internationally.

We operate in many international jurisdictions. There are risks inherent in doing business internationally, including, but not limited to:

- trade barriers, trade regulations, currency controls, import or export regulations, and other restrictions on doing business freely;
- local labor, environmental, tax, and other laws and regulations, and uncertainty or adverse changes in such laws and regulations or the interpretations thereof;
- difficulties in staffing and managing foreign operations;
- economic, political, social or labor instability or unrest, or changes in conditions;
- terrorism, war, hostage-taking, or military repression;
- corruption;
- expropriation and nationalization;
- high rates of inflation; and
- uncertainty as to litigation in foreign jurisdictions and enforcement of local laws.

If we violate the complex foreign and U.S. laws and regulations that apply to our international operations, we may face fines, criminal actions or sanctions, prohibitions on the conduct of our business and damage to our reputation. These risks inherent in our international operations increase our costs of doing business internationally and may result in a material adverse effect on our operations or profitability.

Our business operations may be subject to a number of federal and local laws, rules and regulations including export control regulations.

Our business operations may be subject to a number of federal and local laws, rules and regulations, including the Export Administration Regulations, or EAR, maintained by the U.S. Department of Commerce, the International Traffic in Arms Regulations, or ITAR, maintained by the U.S. Department of State, economic sanctions regulations maintained by the U.S. Department of the Treasury’s Office of Foreign Assets Control, or OFAC, and similar regulations in Canada and the European Union (“EU”). We have implemented procedures regarding compliance with these laws, including monitoring, on an automatic and manual basis, the potential sellers and buyers in our marketplace and restricting business from certain countries. We can offer no assurances that these procedures will always be effective.

We have implemented certain processes and procedures to prevent sellers and buyers that are located in a prohibited jurisdiction or are prohibited persons from participating in our marketplaces. Such processes and procedures are designed so that our business is in compliance with OFAC-administered sanctions regulations and other applicable sanction regulations, including those in Canada and the EU.

If we were to violate applicable export control or sanctions regulations, we could be subject to administrative or criminal penalties which, in certain circumstances, could be material. We could be subject to damages, financial penalties, denial of export privileges, incarceration of our employees, other restrictions on our operations, and reputational harm. Further, any action on the part of the U.S. Department of State, the U.S. Department of Commerce, OFAC or other applicable regulator against the company or any of our employees for potential violations of these laws could have a negative impact on our reputation and business, which might decrease stockholder value.

Failure to comply with anti-bribery, anti-corruption, and anti-money laundering laws, including the U.S. Foreign Corrupt Practices Act of 1977, as amended, or the FCPA, the Corruption of Foreign Public Officials Act, or the CFPOA, and similar laws associated with our activities outside of the U.S. could subject us to penalties and other adverse consequences.

We are subject to the FCPA, the CFPOA, the U.S. domestic bribery statute contained in 18 U.S.C. §201, the U.S. Travel Act, the USA PATRIOT Act, the United Kingdom Bribery Act of 2010, or the U.K. Bribery Act, and possibly other anti-corruption, anti-bribery and anti-money laundering laws in countries in which we conduct activities or facilitate the buying and selling of equipment. We face significant risks if we fail to comply with the FCPA, the CFPOA and other anti-corruption and anti-bribery laws that prohibit companies and their employees and third-party intermediaries from authorizing, offering or providing, directly or indirectly, improper payments or benefits to foreign government officials, political parties or candidates, employees of public international organizations, and private-sector recipients for the corrupt purpose of obtaining or retaining business, directing business to any person, or securing any advantage. In many foreign countries, particularly in countries with developing economies, it may be a local custom that businesses engage in practices that are prohibited by the FCPA, the CFPOA or other applicable laws and regulations. In addition, we leverage various third parties to sell our solutions and conduct our business abroad. We, our channel partners, and our other third-party intermediaries may have direct or indirect interactions with officials and employees of government agencies or state-owned or affiliated entities. We may be held liable for the corrupt or other illegal activities of these third-party intermediaries, our employees, representatives, contractors, partners, and agents, even if we do not explicitly authorize such activities. Our Code of Business Conduct and Ethics and other corporate policies mandate compliance with these anti-bribery laws, which often carry substantial penalties.

Any violation of the FCPA, other applicable anti-bribery, anti-corruption laws, and anti-money laundering laws could result in whistleblower complaints, adverse media coverage, investigations, loss of export privileges, severe criminal or civil sanctions and, in the case of the FCPA, suspension or debarment from U.S. government contracts, which could have a material and adverse effect on our reputation, business, operating results and prospects. In addition, responding to any enforcement action may result in a materially significant diversion of management’s attention and resources and significant defense costs and other professional fees.

We are pursuing a long-term growth strategy that may include acquisitions and developing and enhancing an appropriate sales strategy, which requires upfront investment with no guarantee of long-term returns.

We continue to pursue a long-term growth strategy, including developing and enhancing an appropriate sales strategy, that contemplates upfront investments, including (i) investments in emerging markets that may not generate profitable growth in the near term, (ii) adding new business and information solutions, and (iii) developing our people. Planning for future growth requires investments to be made now in anticipation of growth that may not materialize, and if our strategies do not successfully address the needs of current and potential customers, we may not be successful in maintaining or growing our GTV and our financial condition and results of operations may be adversely impacted. We may also not be able to improve our systems and controls as a result of increased costs, technological challenges, or lack of qualified employees. A large component of our selling, general and administrative expenses is considered fixed costs that we will incur regardless of any GTV growth. There can be no assurances that our GTV and revenues will be maintained or grow at a more rapid rate than our fixed costs.

Part of our long-term growth strategy includes growth through acquisitions, such as the acquisition of IronPlanet, which poses a number of risks. We may not be successful in identifying appropriate acquisition candidates, consummating acquisitions on satisfactory terms or integrating any newly acquired or expanded business with our current operations. Additionally, significant costs may be incurred in connection with any acquisition and our integration of such businesses with our business, including legal, accounting, financial advisory and other costs. We may also not realize the anticipated benefits of, and synergies from, such acquisition. We cannot guarantee that any future business acquisitions will be pursued, that any acquisitions that are pursued will be consummated, or that we will achieve the anticipated benefits of completed acquisitions.

We are regularly subject to general litigation and other claims, which could have an adverse effect on our business and results of operations.
We are subject to general litigation and other claims that arise in the ordinary course of our business. The outcome and impact of such litigation cannot be predicted with certainty, but regardless of the outcome, these proceedings can have an adverse impact on us because of legal costs, diversion of management resources and other factors. While the results of these claims have not historically had a material effect on our business, financial condition or results of operations, we may not be able to defend ourselves adequately against these claims in the future, and these proceedings may have a material adverse impact on our financial condition or results of operations.

In addition to other legal proceedings, we may also be subject to intellectual property claims, which are extremely costly to defend, could require us to pay significant damages, and could limit our ability to use certain technologies in the future. Companies in the Internet and technology industries are frequently subject to litigation based on allegations of infringement or other violations of intellectual property rights.

We periodically receive notices that claim we have infringed, misappropriated, or misused other parties' intellectual property rights. To the extent we gain greater public recognition, we may face a higher risk of being the subject of intellectual property claims.

Third-party intellectual property rights may cover significant aspects of our technologies or business methods or block us from expanding our offerings. Any intellectual property claim against us, with or without merit, could be time consuming and expensive to settle or litigate and could divert the attention of our management. Litigation regarding intellectual property rights is inherently uncertain due to the complex issues involved, and we may not be successful in defending ourselves in such matters.

Many potential litigants, including some patent holding companies, have the ability to dedicate substantial resources to enforcing their intellectual property rights. Any claims successfully brought against us could subject us to significant liability for damages, and we may be required to stop using technology or other intellectual property alleged to be in violation of a third party's rights. We also might be required to seek a license for third-party intellectual property. Even if a license is available, we could be required to pay significant royalties or submit to unreasonable terms, which would increase our operating expenses. We may also be required to develop alternative non-infringing technology, which could require significant time and expense. If we cannot license or develop technology for any allegedly infringing aspect of our business, we would be forced to limit our service and may be unable to compete effectively. Any of these results could harm our business.

Our operating results are subject to quarterly variations.
Historically, our revenues and operating results have fluctuated from quarter to quarter. We expect to continue to experience these fluctuations as a result of the following factors, among others:

- the size, timing, nature and frequency of our auctions;
- the seasonal nature of the auction business in general, with peak activity typically occurring in the second and fourth calendar quarters, mainly as a result of the seasonal nature of the construction and natural resources industries;
- the extent and performance of our underwritten (guarantee and outright purchase) contracts;
- general economic conditions in the geographical regions in which we operate; and
- the timing of acquisitions and development of auction facilities and related costs.

In addition, we may incur substantial costs when entering new geographies and the profitability of operations at new locations is uncertain as a result of the increased variability in the number and size of auctions at new sites. These and other factors may cause our future results to fall short of investor expectations or not to compare favorably to our past results. Further, as our results generally fluctuate from quarter to quarter, period-to-period comparisons of our results of operations may not be meaningful indicators of future performance.

Privacy concerns and evolving domestic or foreign laws and regulations regarding the processing of personal information and other data, such as collection, use, disclosure, storage, transfer and deletion may increase our costs, impact our marketing efforts, decrease adoption and use of our products and services, and expose us to liability.
Federal, provincial, state and foreign governments continue to propose and adopt new, or modify existing, laws and regulations addressing data privacy, data protection, data sovereignty and the collection, use, disclosure, storage, transfer and deletion of data, generally. Although we monitor the regulatory environment and have invested in addressing these developments, such as through our cybersecurity and privacy readiness program, these laws may require us to make changes to our practices, products and services to enable us or our customers to meet the new legal requirements, and may also increase our potential liability exposure through new or higher potential penalties for non-compliance and lawsuits for alleged violations, including as a result of data breaches. These new or proposed laws and regulations are subject to differing interpretations and may be inconsistent among jurisdictions or conflict with other laws and regulations. As a result, these requirements and other potential self-regulatory standards and industry codes of conduct could require us to take on more onerous obligations in our contracts, restrict our ability to store, transfer and process data or, in some cases, impact our ability to offer certain services in certain locations, to deploy our software or data solutions, to market to current and prospective customers, or to derive insights from customers' online activity and data globally.

We believe that the laws and regulations being proposed and adopted in the U.S., Canada, the EU and in other jurisdictions will be increasingly restrictive in the field of data privacy and protection which will in turn result in an increase in regulatory burdens for us to address to continue meeting our customers' expectations, in particular in relation to the sharing of personal information with third parties, commercial electronic messages (such as email, SMS or other mobile chat applications), and the tracking of online activities for advertising. As our capacity to process large volumes of data increases, customer sentiment towards increased transparency and control and further interpretive guidance from regulatory agencies, may require us to change our operations and practices in a manner adverse to our business. In this uncertain and shifting regulatory and trust climate, even the perception that the privacy and security of personal information are not satisfactorily addressed or do not meet regulatory requirements could result in adverse publicity and reputation loss.

Our articles, by-laws, shareholder rights plan and Canadian legislation contain provisions that may have the effect of delaying or preventing a change in control.
Certain provisions of our articles of amalgamation, and by-laws, as well as certain provisions of the Canada Business Corporations Act (the "CBCA") and applicable Canadian securities law, could discourage potential acquisition proposals, delay or prevent a change in control or materially adversely impact the price that certain investors might be willing to pay for our common shares. Our articles of amalgamation authorize our board of directors to determine the designations, rights and restrictions to be attached to, and to issue an unlimited number of, junior preferred shares and senior preferred shares.

Our by-laws contain provisions establishing that shareholders must give advance notice to us in circumstances where nominations of persons for election to our board of directors are made by our shareholders other than pursuant to either a requisition of a meeting made in accordance with the provisions of the CBCA or a shareholder proposal made in accordance with the provisions of the CBCA.

Among other things, these advance notice provisions set a deadline by which shareholders must notify us in writing of an intention to nominate directors for election to the board of directors prior to any shareholder meeting at which directors are to be elected and set forth the information required in this notice for it to be valid.

Our board of directors has adopted a shareholder rights plan (the "Rights Plan"), pursuant to which we issued one right in respect of each common share outstanding. Under the Rights Plan, following a transaction in which any person becomes an "acquiring person" as defined in the Rights Plan, each right will entitle the holder to receive a number of common shares provided in the Rights Plan. The purposes of the Rights Plan are (i) to provide our board of directors time to consider value-enhancing alternatives to a take-over bid and to allow competing bids to emerge; (ii) to ensure that shareholders are provided equal treatment under a take-over bid; and (iii) to give adequate time for shareholders to properly assess a take-over bid without undue pressure. The Rights Plan can potentially impose a significant penalty on any person commencing a takeover bid that would result in the offeror becoming the beneficial owner of 20% or more of our outstanding common shares.

Any of these provisions, as well as certain provisions of the CBCA and applicable Canadian securities law, may discourage a potential acquirer from proposing or completing a transaction that may have otherwise presented a premium to our shareholders.

Our business continuity plan may not operate effectively in the event of a significant interruption of our business.

We depend on our information and other systems and processes for the continuity and effective operation of our business. We have implemented a formal business continuity plan covering most significant aspects of our business that would take effect in the event of a significant interruption to our business, or the loss of key systems as a result of a natural or other disaster. Although we have tested our business continuity plan as part of the implementation, there can be no assurance that it will operate effectively or that our business, results of operations and financial condition will not be materially affected in the event of a significant interruption of our business.

If we were subject to a disaster or serious security breach, it could materially damage our business, financial condition and results of operations.

Our insurance may be insufficient to cover losses that may occur as a result of our operations.

We maintain property and general liability insurance. This insurance may not remain available to us at commercially reasonable rates, and the amount of our coverage may not be adequate to cover all liabilities that we may incur. Our auctions generally involve the operation of large equipment close to a large number of people, and despite our focus on safe work practices, an accident could damage our facilities or injure auction attendees. Any major accident could harm our reputation and our business. In addition, if we were held liable for amounts exceeding the limits of our insurance coverage or for claims outside the scope of our coverage, the resulting costs could harm our financial condition and results of operations.

Certain global conditions may affect our ability to conduct successful events.

Like most businesses with global operations, we are subject to the risk of certain global or regional adverse conditions, such as pandemics or other disease outbreaks, including COVID-19, or natural disasters including extreme weather or other events, such as hurricanes, tornadoes, earthquakes, forest fires or floods that could hinder our ability to conduct our scheduled auctions, restrict our customers’ travel patterns or their desire to attend auctions or impact our online operations, including disrupting the Internet or mobile networks or one or more of our service providers. If this situation were to occur, we may not be able to generate sufficient equipment consignments to sustain our business or to attract enough bidders to our auctions to achieve world fair market values for the items we sell. This could harm our financial condition and results of operations. Some climatic models indicate that global warming may result in rising sea levels, increased intensity of weather, and increased frequency of extreme precipitation and flooding. To the extent these phenomena occur, the risks noted above may increase.

U.S. civil liabilities may not be enforceable against us, our directors, or our officers.

We are governed by the CBCA and our principal place of business is in Canada. Many of our directors and officers reside outside of the U.S. and all or a substantial portion of their assets, as well as a substantial portion of our assets, are located outside the U.S. As a result, it may be difficult for investors to effect service of process within the U.S. upon us and such directors and officers or to enforce judgments obtained against us or such persons, in U.S. courts, in any action, including actions predicated upon the civil liability provisions of U.S. federal securities laws or any other laws of the U.S.

Additionally, rights predicated solely upon civil liability provisions of U.S. federal securities laws or any other laws of the U.S. may not be enforceable in original actions, or actions to enforce judgments obtained in U.S. courts, brought in Canadian courts, including courts in the Province of British Columbia.

We are governed by the corporate laws of Canada which in some cases have a different effect on shareholders than the corporate laws of Delaware.

We are governed by the CBCA and other relevant laws, which may affect the rights of shareholders differently than those of a company governed by the laws of a U.S. jurisdiction, and may, together with our charter documents, have the effect of delaying, deferring or discouraging another party from acquiring control of our company by means of a tender offer, a proxy contest or otherwise, or may affect the price an acquiring party would be willing to offer in such an instance.

Financial Risk Factors

Ineffective internal control over financial reporting could result in errors in our financial statements, reduce investor confidence, and adversely impact our stock price.

As discussed in Part II, Item 9A “Controls and Procedures” later in this report, in the fourth quarter of 2020, we identified a material weakness over the review of the recording of manual journal entries in one of our geographies; specifically, controls were not operating effectively to ensure that journal entries were properly prepared with appropriate supporting documentation. Additionally, we identified a material weakness over the completeness and accuracy of key reports used in the performance of controls to address the occurrence and measurement of revenue. There were no adjustments required in the 2020 interim or annual consolidated financial statements due to these material weaknesses. We are committed to maintaining a strong internal control environment and will make it a priority to implement measures designed to help ensure that control deficiencies contributing to the material weaknesses are remediated. Management with oversight from the Audit Committee and the Board of Directors is currently in the process of designing a remediation plan which will include a review of our internal controls over financial reporting. Such remediation efforts are intended to address the identified material weaknesses and enhance our overall financial control environment. Failure to remediate these control deficiencies could result in violations of applicable securities laws, stock exchange listing requirements, may subject us to litigation and investigations, negatively affect investor confidence in our financial statements, and adversely impact our stock price and ability to access capital markets.

We have substantial indebtedness, and the degree to which we are leveraged may materially and adversely affect our business, financial condition and results of operations.
As at December 31, 2020, we have $665.8 million of total debt outstanding, consisting of $173.7 million under an amended and extended credit agreement entered into on August 14, 2020 which extends the maturity of the credit facilities from October 27, 2021 to October 27, 2023 (the “Credit Agreement”) with a syndicate of lenders, and $500.0 million aggregate principal amount of 5.375% senior unsecured notes issued December 21, 2016 (the “Notes”), partially reduced by $8.0 million of unamortized debt issue costs, with no current drawings under our foreign credit facilities. There is $445.1 million of availability under the Credit Agreement.

Our ability to make payments on and to refinance our indebtedness, as well as any future debt that we may incur, will depend on our ability to generate cash in the future from operations, financings or asset sales. Our ability to generate cash is subject to general economic, financial, competitive, legislative, regulatory and other factors that are beyond our control. We may not generate sufficient funds to service our debt and meet our business needs, such as funding working capital or the expansion of our operations. If we are not able to repay or refinance our debt as it becomes due, we may be forced to take certain actions, including reducing spending on marketing, advertising and new product innovation, reducing future financing for working capital, capital expenditures and general corporate purposes, selling assets or dedicating an unsustainable level of our cash flow from operations to the payment of principal and interest on our indebtedness. In addition, our ability to withstand competitive pressures and to react to changes in our industry, including both the live and online auction industry, could be impaired.

The lenders who hold our debt could also accelerate amounts due in the event that we default, which could potentially trigger a default or acceleration of the maturity of our other debt.

In addition, our leverage could put us at a competitive disadvantage compared to our competitors that are less leveraged. These competitors could have greater financial flexibility to pursue strategic acquisitions and secure additional financing for their operations. Our leverage could also impede our ability to withstand downturns in our industry or the economy in general.

We may incur substantial additional indebtedness in the future. The terms of the Credit Agreement and the indenture governing the Notes will limit, but not prohibit, us from incurring additional indebtedness. If we incur any additional indebtedness that has the same priority as the Notes and the guarantees thereof, the holders of that indebtedness will be entitled to share rateably with the holders of the Notes and the guarantees thereof in any proceeds distributed in connection with any insolvency, liquidation, reorganization, dissolution or other winding-up of us.

Subject to restrictions in the Credit Agreement and the indenture governing the Notes, we also will have the ability to incur additional secured indebtedness that would be effectively senior to the Notes offered hereby, to the extent of the value of the assets securing such obligations. If new indebtedness is added to our current debt levels, the related risks that we now face could intensify.

Our debt instruments have restrictive covenants that could limit our financial flexibility.
The terms of the Credit Agreement, as well as the indenture governing the Notes, contain financial and other restrictive covenants that limit our ability to engage in activities that may be in our long-term best interests. Our ability to borrow under our Credit Agreement is subject to compliance with a consolidated leverage ratio covenant and a consolidated interest coverage ratio covenant.

The Credit Agreement includes other restrictions that limit our ability in certain circumstances to: incur indebtedness; grant liens; engage in mergers, consolidations and liquidations; make asset dispositions, restricted payments and investments; enter into transactions with affiliates; and amend, modify or prepay certain indebtedness. The indenture governing the Notes contains covenants that limit our ability in certain circumstances to:

- incur additional indebtedness (including guarantees thereof);
- incur or create liens on their assets securing indebtedness;

- make certain restricted payments;
- make certain investments;
- dispose of certain assets;
- allow to exist certain restrictions on the ability of our restricted subsidiaries to pay dividends or make other payments to us;
- engage in certain transactions with affiliates; and
- consolidate, amalgamate or merge with or into other companies.

Our failure to comply with these covenants could result in an event of default that, if not cured or waived, could result in the acceleration of substantially all of our funded debt. We do not have sufficient working capital to satisfy our debt obligations in the event of an acceleration of all or a significant portion of our outstanding indebtedness.

Uncertainty regarding LIBOR may adversely impact our indebtedness under our credit and loan facilities.
On July 27, 2017, the United Kingdom's Financial Conduct Authority, which regulates LIBOR, announced that it intends to phase out LIBOR by the end of 2021. The Alternative Reference Rates Committee ("ARRC") has proposed that the Secured Overnight Financing Rate ("SOFR") is the rate that represents the best alternative to LIBOR. The ARRC has proposed a market transition plan to SOFR from LIBOR. We are evaluating the potential impact of the eventual replacement of the LIBOR benchmark interest rate, including the possibility of SOFR as the dominant replacement. The market transition away from LIBOR towards SOFR is expected to be complicated. There can be no guarantee that SOFR will become a widely accepted benchmark in place of LIBOR. Although the full impact of any transition away from LIBOR, including the potential or actual discontinuance of LIBOR publication, remains unclear, these changes may have a material adverse impact on the availability of financing, including LIBOR-based loans, the terms of our Credit Agreement, and on our financing costs.

Risks Related to Our Intellectual Property

We may be unable to adequately protect or enforce our intellectual property rights, which could harm our reputation and adversely affect our growth prospects.
We regard our proprietary technologies and intellectual property as integral to our success. We protect our proprietary technology through a combination of trade secrets, third-party confidentiality and nondisclosure agreements, additional contractual restrictions on disclosure and use, and patent, copyright, and trademark laws.

We currently are the registered owners of many Internet domain names internationally. As we seek to protect our domain names in an increasing number of jurisdictions, we may not be successful in doing so in certain jurisdictions. Our competitors may adopt trade names or domain names similar to ours, thereby impeding our ability to promote our marketplace and possibly leading to customer confusion. In addition, we could face trade name or trademark or service mark infringement claims brought by owners of other registered or unregistered trademarks or service marks, including trademarks or service marks that may incorporate variations of our brand names. The legal means we use to protect our proprietary technology and intellectual property do not afford complete protection and may not adequately protect our rights or permit us to gain or keep any competitive advantage. We cannot guarantee that any of our present or future intellectual property rights will not lapse or be invalidated, circumvented, challenged or abandoned; our intellectual property rights will provide competitive advantages to us; our ability to assert our intellectual property rights against potential competitors or to settle current or future disputes will not be limited by our agreements with third parties; any of our pending or future patent applications will be issued or have the coverage originally sought; or our intellectual property rights will be enforced in jurisdictions where competition may be intense or where legal protection may be weak.

We also may allow certain of our registered intellectual property rights, or our pending applications or registrations for intellectual property rights, to lapse or to become abandoned if we determine that obtaining or maintaining the applicable registered intellectual property rights is not worthwhile.

Further, although it is our practice to enter into confidentiality agreements and intellectual property assignment agreements with our employees and contractors, these agreements may not be enforceable or may not provide meaningful protection for our trade secrets or other proprietary information in the event of unauthorized use or disclosure or other breaches of the agreements.

Despite our efforts to protect our proprietary rights, unauthorized parties may attempt to copy, reverse engineer, or otherwise obtain and use our products or technology. We cannot be certain that we will be able to prevent unauthorized use of our technology or infringement or misappropriation of our intellectual property, particularly in foreign countries where the laws may not protect our proprietary rights. Effective patent, copyright, trademark, service mark, trade secret, and domain name protection is time-consuming and expensive to maintain. Litigation may be necessary to enforce our intellectual property rights, to protect our trade secrets, or to determine the validity and scope of the proprietary rights of others, which could result in substantial costs and diversion of our resources. In addition, our efforts may be met with defenses and counterclaims challenging the validity and enforceability of our intellectual property rights or may result in a court determining that our intellectual property rights are unenforceable. If we are unable to cost-effectively protect our intellectual property rights, then our business could be harmed. If competitors are able to use our technology or develop proprietary technology similar to ours or competing technologies, our ability to compete effectively and our growth prospects could be adversely affected.

We are subject to the terms of open source licenses because our technology platform incorporates open source software.
Some of the software powering our marketplace incorporates software covered by open source licenses. The terms of many open source licenses have not been interpreted by U.S. courts and there is a risk that the licenses could be construed in a manner that imposes unanticipated conditions or restrictions on our ability to operate our marketplace. Under certain open source licenses, we could be required to publicly release the source code of our software or to make our software available under open source licenses. To avoid the public release of the affected portions of our source code, we could be required to expend substantial time and resources to re-engineer some or all of our software which could significantly interrupt our operations.

In addition, use of open source software can lead to greater risks than use of third-party commercial software because open source licensors generally do not provide warranties or controls on the origin of the software. Use of open source software may also present additional security risks because the public availability of this software may make it easier for hackers and other third parties to determine how to compromise our technology platform. Any of these risks could be difficult to eliminate or manage and, if not addressed, could adversely affect our business, financial condition and results of operations.

Risk Related to Our Industry

Competition could result in reductions in our future revenues and profitability.
The global used equipment market, including the auction segment of that market, is highly fragmented. We compete for potential purchasers and sellers of equipment with other auction companies and with non-auction competitors such as equipment manufacturers, distributors and dealers, equipment rental companies, and other online marketplaces. When sourcing equipment to sell at our auctions or other marketplaces, we compete with other on site and online auction companies, OEM and independent dealers, equipment brokers, other third parties, and equipment owners that have traditionally disposed of equipment in private sales.

Some of our competitors have significantly greater financial and marketing resources and name recognition than we do. New competitors with greater financial and other resources and/or different business models/strategies may enter the equipment auction market in the future. Additionally, existing or future competitors may succeed in entering and establishing successful operations in new geographic markets prior to our entry into those markets. They may also compete against us through internet-based services and other combined service offerings.

If commission rates decline, or if our strategy to compete against our many competitors is not effective, our revenues, market share, financial condition and results of operations may be adversely impacted. We may be susceptible to loss of business if competing selling models become more appealing to customers. If our selling model becomes undesirable or we are not successful in adding services complementary to our existing selling model and business, we may not be successful increasing market penetration over the long-term, which could prevent us from achieving our long-term earnings growth targets.

Our relationships with key long-term customers may be materially diminished or terminated.
We have long-standing and/or strategic relationships with a number of our customers and business partners, many of whom could unilaterally terminate their relationship with us or materially reduce the amount of business they conduct with us at any time. Market competition, business requirements and financial conditions could adversely affect our ability to continue or expand our relationships with our customers and business partners. There is no guarantee that we will be able to retain or renew existing agreements, or maintain relationships with any of our customers or business partners, on acceptable terms or at all. The loss of one or more of our major customers or business partners could adversely affect our business, financial condition and results of operations.

Decreases in the supply of, demand for, or market values of used equipment, could harm our business.
Our revenues could decrease if there was significant erosion in the supply of, demand for, or market values of used equipment, which could adversely affect our financial condition and results of operations. We have no control over any of the factors that affect the supply of, and demand for, used equipment, and the circumstances that cause market values for equipment to fluctuate — including, among other things, economic uncertainty, global geopolitical climate, disruptions to credit and financial markets, lower commodity

prices, and our customers’ restricted access to capital — are beyond our control. Recent economic conditions have caused fluctuations in the supply, mix and market values of used equipment available for sale, which has a direct impact on our revenues.

In addition, price competition and the availability of equipment directly affect the supply of, demand for, and market value of used equipment. Climate change initiatives, including significant changes to engine emission standards applicable to equipment, may also adversely affect the supply of, demand for our market values of equipment.

ITEM 1B: UNRESOLVED STAFF COMMENTS

Not applicable.

ITEM 2: PROPERTIES

We own and lease various properties in Canada, the United States and 10 other countries globally. We use the properties as auction sites, storage warehouses, and as executive and administrative offices.

Our corporate headquarters are located in Burnaby, Canada, and are held through a lease that expires in May 2030. We also lease the following other properties which support our business:

- A European head office in Breda, Netherlands;
- IronPlanet’s head office in Pleasanton, United States;
- Rouse’s head office in Los Angeles, United States;
- An administrative office in Fort Worth, United States, and;
- Two warehouses supporting GovPlanet operations in Las Vegas and Chambersburg, United States.

We also own an administrative office in Lincoln, United States.

International network of auction sites

We generally attempt to establish our auction sites in industrial areas close to major cities. Our auction sites benefit consignors who prefer to drop off their equipment on premise, where we offer ‘care, custody and control’. Our auction sites also allow buyers to come in advance of the live on site auction and physically inspect the equipment they plan to bid on. Although we lease some auction sites, we have historically preferred to purchase land and construct purpose-built facilities once we have established a base of business and determined that a region can generate sufficient financial returns to justify the investment.

We currently have over 40 locations in our auction site network that are either owned or leased as of the date of this Annual Report on Form 10-K.

The general location and ownership of our auction site network properties used in our A&M segment are set forth below:

Location	Number of Auction Sites	Owned Acreage	Leased Acreage
United States	20	1,745	210
Canada	10	732	51
Europe	6	259	66
Other	5	423	44
Total	41	3,159	371

We believe that our administrative offices and auction sites are adequate and suitable for the conduct of our operations. Despite many of our employees currently working remotely during the COVID-19 pandemic, the longer-term strategy is for our current sites and offices to be re-occupied albeit with more flexible work arrangements for our employees once it is safe for our employees to return to the office.

ITEM 3: LEGAL PROCEEDINGS

We have no material legal proceedings pending, other than ordinary routine litigation incidental to the business, and we do not know of any material proceedings contemplated by governmental authorities.

ITEM 4: MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5: MARKET FOR REGISTRANT’S COMMON EQUITY, RELATED STOCKHOLDER MATTERS, AND ISSUER PURCHASES OF EQUITY SECURITIES

Outstanding Share Data

We are a public company and our common shares are listed under the symbol “RBA” on the New York Stock Exchange (“NYSE”) and the Toronto Stock Exchange (“TSX”). Financial information about our equity and share-based payments is set forth in our consolidated financial statement footnotes 23 “Equity and dividends” and 24 “Share-based payments” in “Part II, Item 8: “Financial Statements and Supplementary Data” of this Annual Report on Form 10-K.

Market Information

Our common shares, without par value, are issued in registered form. The transfer agent for the shares is Computershare Trust Company of Canada, 100 University Avenue, 9th Floor, Toronto, Ontario M5J 2Y1. Our common shares trade on the NYSE and on the TSX under the symbol “RBA”. On February 18, 2021, there were 481 holders of record of our common shares that do not include the shareholders for whom shares are held in a nominee or street name.

Dividend Policy

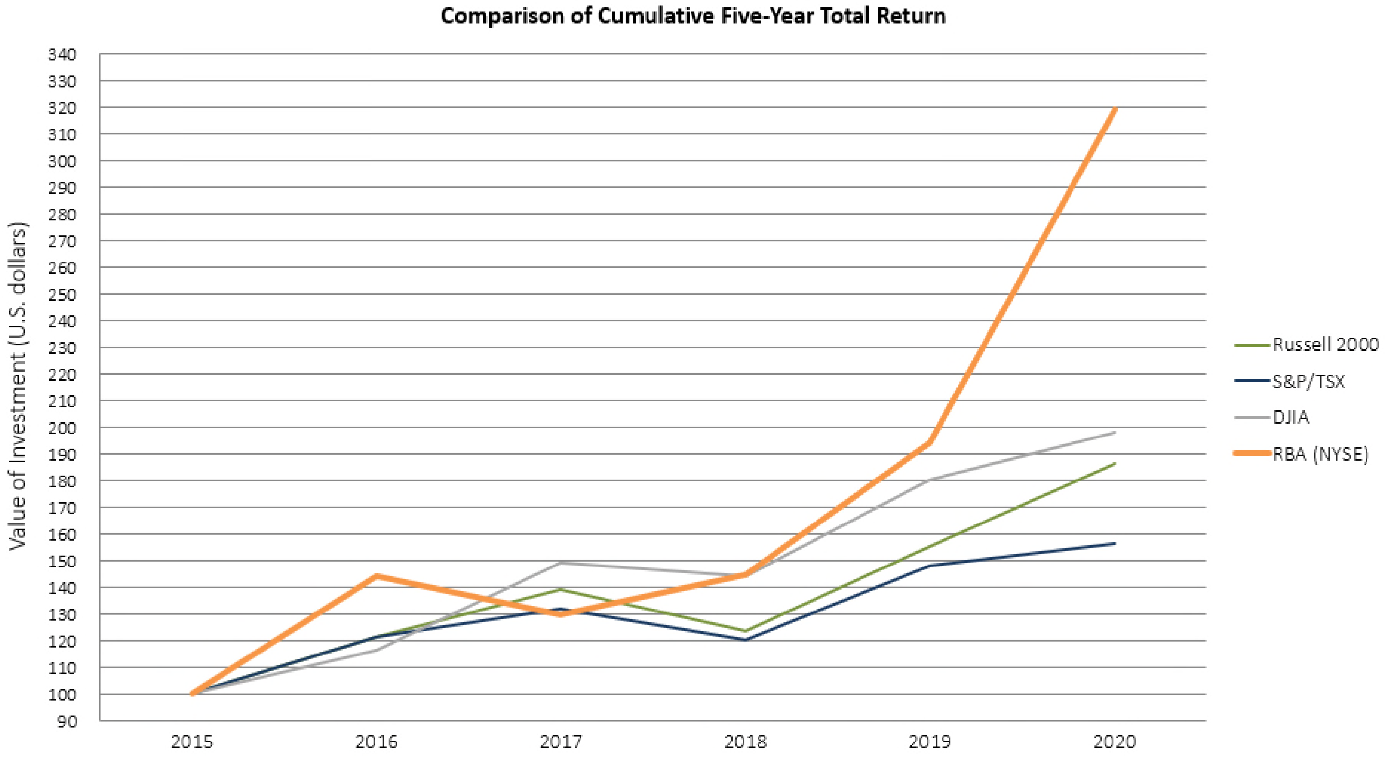
We currently pay a regular quarterly cash dividend of $0.22 per common share. We currently intend to continue to declare and pay a regular quarterly cash dividend on our common shares; however, any decision to declare and pay dividends in the future will be made at the discretion of our Board, after considering our operating results, financial condition, cash requirements, financing agreement restrictions and any other factors our Board may deem relevant.

Because Ritchie Bros. Auctioneers Incorporated is a holding company with no material assets other than the shares of its subsidiaries, our ability to pay dividends on our common shares depends on the income and cash flow of our subsidiaries. No financing agreements to which our subsidiaries are party currently restrict those subsidiaries from paying dividends.

Pursuant to income tax legislation, Canadian resident individuals who receive “eligible dividends” in 2006 and subsequent years will be entitled to an enhanced gross-up and dividend tax credit on such dividends. All dividends that we pay are “eligible dividends” unless indicated otherwise.

Comparison of Cumulative Return

The following graph compares the cumulative return on a $100 investment in our common shares over the last five fiscal years beginning December 31, 2015 through December 31, 2020, to that of the cumulative return on a $100 investment in the Russell Global Index (“Russell 2000”), the S&P / TSX Composite Index (“S&P/TSX”) and the Dow Jones Industrial Average Index (“DJIA”) for the same period. In calculating the cumulative return, reinvestment of dividends, if any, is assumed. The indices are included for comparative purpose only. This graph is not “soliciting material,” is not deemed filed with the SEC and is not to be incorporated by reference in any of our filings under the Securities Act or the Exchange Act, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.



Company / index	2015	2016	2017	2018	2019	2020
RBA (NYSE)	$ 100.0	$ 144.1	$ 129.8	$ 144.8	$ 194.0	$ 319.3
Russell 2000	$ 100.0	$ 121.3	$ 139.0	$ 123.7	$ 155.2	$ 186.2
S&P/TSX	$ 100.0	$ 121.1	$ 132.1	$ 120.3	$ 147.8	$ 156.1
DJIA	$ 100.0	$ 116.4	$ 149.2	$ 144.0	$ 180.5	$ 198.0

Securities Authorized for Issuance under Equity Compensation Plans

The following table sets forth information about the Company’s equity compensation plans as of December 31, 2020.

Plan Category	Number of securities to be issued upon exercise of 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	2,663,368 (1)	$ 34.95 (2)	8,292,425 (3)
Equity compensation plans not approved by security holders	—	—	—
Total	2,663,368	$ 34.95	8,292,425

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(1) Reflects our Stock Option Plan, the IronPlanet Stock Plans, PSUs granted under the Executive PSU Plan and the Employee PSU Plan, and equity-classified RSUs. This amount reflects 100% of target numbers of PSUs granted and includes dividend equivalent rights credited in connection with such PSUs. Under the PSU Plans, the number of PSUs that vest is conditional upon specified market, service, and/or performance vesting conditions being met. For the share units granted under the PSU Plans in 2018, the market vesting condition is based on the relative performance of our share price in comparison to the performance of a pre-determined portfolio of other companies’ share prices. There were no market vesting conditions for the share units granted under the PSU Plans in 2019 and 2020. All share units granted under our PSU plans contain non-market vesting conditions that are based on the achievement of specific performance measures and can result in participants earning between 0% and 200% of the target number of PSUs granted. Further, we have the option to choose whether to settle the PSUs in cash or in shares.

(2) Weighted average exercise price does not include the effect of our outstanding share units. The remaining term of our stock options is 7.7 years.

(3) Consists of: (a) 6,442,360 common shares available for issuance under the Stock Option Plan; (b) no common shares are available for issuance under the IronPlanet Stock Plans; (c) 1,238,769 common shares that we may elect to issue upon settlement of our PSUs granted under the PSU Plans; and (d) 611,296 common shares that we may elect to issue upon settlement of our RSUs granted under the RSU Plans.

Exchange Controls

Canada has no system of exchange controls. There are no Canadian restrictions on the repatriation of capital or earnings of a Canadian public company to non-resident investors. There are no laws in Canada or exchange restrictions affecting the remittance of dividends, profits, interest, royalties and other payments to U.S. Resident Holders (as defined below) of our common shares, except as discussed in “Certain Canadian Federal Income Tax Considerations for U.S. Residents” below.

There are no limitations under the laws of Canada or in our organizational documents on the right of foreigners to hold or vote our common shares, except that the *Investment Canada Act* may require review and approval by the Minister of Industry (Canada) of certain acquisitions of control of Ritchie Bros. by a “non-Canadian”. “Non-Canadian” generally means an individual who is not a Canadian citizen, or a corporation, partnership, trust or joint venture that is ultimately controlled by non-Canadians.

Certain Canadian Federal Income Tax Considerations for U.S. Residents

The following summarizes certain Canadian federal income tax consequences generally applicable under the Income Tax Act (Canada) and the regulations enacted thereunder (collectively, the “Canadian Tax Act”) and the Canada-U.S. Income Tax Convention (1980) (the “Convention”) to the holding and disposition of common shares.

This summary is restricted to holders of common shares each of whom, at all material times for the purposes of the Canadian Tax Act and the Convention, (i) is resident solely in the U.S., (ii) is entitled to the full benefits of the Convention, (iii) holds all common shares as capital property, (iii) holds no common shares that are “taxable Canadian property” (within the meaning of the Canadian Tax Act) of the holder, (iv) deals at arm’s length with and is not affiliated with Ritchie Bros., (v) does not and is not deemed to use or hold any common shares in a business carried on in Canada, and (vi) is not an "authorized foreign bank" (as defined in the Canadian Tax Act) or an insurer that carries on business in Canada and elsewhere (each such holder, a “U.S. Resident Holder”).

Certain U.S.-resident entities that are fiscally transparent for U.S. federal income tax purposes (including limited liability companies) may not be regarded by the Canada Revenue Agency (“CRA”) as entitled to the benefits of the Convention. Members of or holders of an interest in such an entity that holds common shares should consult their own tax advisers regarding the extent, if any, to which the CRA will extend the benefits of the Convention to the entity in respect of its common shares.

Generally, a U.S. Resident Holder’s common shares will be considered to be capital property of a U.S. Resident Holder provided that the U.S. Resident Holder acquired the common shares as a long-term investment; is not a trader or dealer in securities; did not acquire, hold or dispose of the common shares in one or more transactions considered to be an adventure or concern in the nature of trade; and does not hold the common shares as inventory in the course of carrying on a business.

This summary is based on the provisions of the Canadian Tax Act and the Convention in effect on the date hereof, all specific proposals to amend the Canadian Tax Act and Convention publicly announced by or on behalf of the Minister of Finance (Canada) on or before the date hereof (the “Tax Proposals”), and the current published administrative and assessing policies of the CRA. It is assumed that the Tax Proposals will be enacted as currently proposed, and that there will be no other material change to any applicable law or administrative or assessing practice, whether by judicial, legislative, governmental or administrative decision or action, although no assurance can be given in these respects. Except as otherwise expressly provided, this summary does not take into account any provincial, territorial or foreign tax considerations, which may differ materially from those set out herein.

This summary is of a general nature only and it is not intended to be, nor should it be construed to be, legal or tax advice to any holder of common shares, and no representation with respect to Canadian federal income tax consequences to any holder of common shares is made herein. Accordingly, holders of common shares should consult their own tax advisers with respect to their individual circumstances.

Disposition of common shares
A U.S. Resident Holder will not be subject to tax under the Canadian Tax Act in respect of any capital gain realized by such U.S. Resident Holder on a disposition of common shares unless the common shares constitute “taxable Canadian property” (within the meaning of the Canadian Tax Act) of the U.S. Resident Holder at the time of disposition and the U.S. Resident Holder is not entitled under the Convention to an exemption from Canadian tax on the gain.

Generally, a U.S. Resident Holder’s common shares will not constitute “taxable Canadian property” of the U.S. Resident Holder at a particular time at which the common shares are listed on a “designated stock exchange” (which currently includes the TSX and NYSE) unless at any time during the 60-month period immediately preceding a disposition both of the following conditions are true:

(i) the U.S. Resident Holder, any one or more persons with whom the U.S. Resident Holder does not deal at arm’s length, or any partnership in which the holder or persons with whom the holder did not deal at arm’s length holds a membership interest directly or indirectly through one or more partnerships, alone or in any combination, owned 25% or more of the issued shares of any class or series of our share capital; and

(ii) more than 50% of the fair market value of the common shares was derived directly or indirectly from, or from any combination of, real or immovable property situated in Canada, “Canadian resource properties” (as defined in the Canadian Tax Act), “timber resource properties” (as defined in the Canadian Tax Act), or options in respect of, interests in or civil law rights in, such properties, whether or not such properties exist.

In certain circumstances set out in the Canadian Tax Act, a common share may be deemed to be “taxable Canadian property” for purposes of the Canadian Tax Act.

Even if the common shares constitute “taxable Canadian property” to a U.S. Resident Holder, under the Convention, such a U.S. Resident Holder will not be subject to tax under the Canadian Tax Act on any capital gain realized by such holder on a disposition of such common shares, provided the value of such common shares is not derived principally from real property situated in Canada (within the meaning of the Convention).

U.S. Resident Holders whose shares may be taxable Canadian property should consult their own tax advisors

Dividends on common shares
Under the Canadian Tax Act, dividends on shares paid or credited, or deemed to be paid or credited, to a non-resident of Canada (or amounts paid or credited on account, or in lieu of payment of, or in satisfaction of, dividends) will be subject to Canadian withholding tax at the rate of 25% of the gross amount of the dividends (subject to reduction under the provisions of any applicable tax treaty). Under the Convention, a U.S. Resident Holder that beneficially owns the dividends will generally be subject to Canadian withholding tax at the rate of 15% of the gross amount of such dividends unless the beneficial owner is a company which owns (or is deemed under the Convention to own) at least 10% of the voting shares of Ritchie Bros. at that time, in which case the rate of Canadian withholding tax is generally reduced to 5%.

Share Repurchase Program
On August 5, 2020, the Board of Directors approved a share repurchase program for the repurchase of up to $100.0 million worth of our common shares, approved by the Toronto Stock Exchange, over a period of 12 months, ending August 23, 2021. For additional information on our share repurchases, please see Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations—Outstanding Share Data—Share Repurchase Program,” the contents of which are incorporated by reference into this Item 5.

ITEM 6: SELECTED FINANCIAL DATA

The following table sets forth selected consolidated financial data as of and for the years ended December 31, 2016 through December 31, 2020. The consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles ("U.S. GAAP").

Effective January 1, 2018, we adopted ASU 2014-09 Revenue from Contracts with Customers ("Topic 606") using the full retrospective method. The primary impact of the adoption of Topic 606 is the change in the presentation of revenue earned from inventory sales and ancillary and logistical services. These revenues are presented gross of the related expenses rather than net. All prior period revenue figures below have been restated to reflect the adoption of Topic 606.

Effective January 1, 2019, we adopted ASU 2016-02 Leases ("Topic 842") using the "optional transition method", which allows us to adopt this new lease standard at the adoption date. The comparative periods presented below are reported pursuant to Topic 840.

The following selected consolidated financial information should be read in conjunction with "Part II, Item 7: Management's Discussion and Analysis of Financial Conditions and Results of Operations" and the consolidated financial statements and the notes thereto included in "Part II, Item 8: Financial Statements and Supplementary Data" presented elsewhere in this Annual Report on Form 10-K.

	Year ended and as at December 31,				
(in U.S.$000's, except per share amounts)	**2020**	**2019**	**2018**	**2017**	**2016**
Consolidated Income Statements Data					
Service revenue	$ 871,596	$ 804,024	$ 749,515	$ 624,417	$ 555,843
Inventory sales revenue	505,664	514,617	420,511	346,774	571,134
Total revenue	$ 1,377,260	$ 1,318,641	$ 1,170,026	$ 971,191	$ 1,126,977
Operating income	263,160	223,202	185,189	107,454	135,722
Income before income taxes	235,888	190,763	152,512	77,394	130,494
Net income attributable to stockholders	170,095	149,140	121,479	75,027	91,832
Earnings per share attributable to stockholders:					
Basic	$ 1.56	$ 1.37	$ 1.12	$ 0.70	$ 0.86
Diluted	1.54	1.36	1.11	0.69	0.85
Consolidated Balance Sheets Data					
Working capital	$ 42,201	$ 178,326	$ 163,446	$ 120,032	$ 125,164
Total assets	2,351,529	2,229,430	2,052,392	2,017,312	1,599,533
Long-term debt	636,648	645,481	711,298	812,892	595,706
Stockholders' equity	1,007,245	901,833	830,643	739,682	687,057
Consolidated Statements of Cash Flows Data					
Dividends declared per common share	$ 0.84	$ 0.76	$ 0.70	$ 0.68	$ 0.66
Acquisition of subsidiaries, net of cash acquired	$ 250,039	$ —	$ —	$ 675,851	$ 45,511
Net capital spending	26,751	35,075	32,426	34,411	29,785

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(1) Subsidiaries acquired as disclosed in the table above consist of Rouse in December 2020, IronPlanet in May 2017, Kramer in November 2016, Petrowsky in August 2016, Mascus in February 2016, and Xcira in November 2015.

ITEM 7: MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

About Us

Established in 1958, Ritchie Bros. (NYSE and TSX: RBA) is a world leader in asset management technologies and disposition of commercial assets. We offer customers end-to-end solutions for buying and selling used heavy equipment, trucks and other assets. Operating in a number of sectors, including construction, transportation, agriculture, energy, oil and gas, mining, and forestry, the company’s selling channels include: Ritchie Bros. Auctioneers, the world’s largest industrial auctioneer offers live auction events with online bidding; IronPlanet, an online marketplace with featured weekly auctions and providing the exclusive IronClad Assurance® equipment condition certification; Marketplace-E, a controlled marketplace offering multiple price and timing options; Mascus, a leading European online equipment listing service; Rouse, a leader in market intelligence on sales and rental equipment data; and Ritchie Bros. Private Treaty, offering privately negotiated sales. Our suite of multichannel sales solutions also includes RB Asset Solutions, a complete end-to-end asset management and disposition system. We also offer sector-specific solutions including GovPlanet, TruckPlanet, and Kruse Energy Auctioneers, plus equipment financing and leasing through Ritchie Bros. Financial Services.

Through our unreserved live on site and online bidding auctions, online marketplaces, and private brokerage services, we sell a broad range of used and unused commercial assets, including earthmoving equipment, truck tractors, truck trailers, government surplus, oil and gas equipment and other industrial assets. Construction and heavy machinery comprise the majority of the equipment sold. Customers selling equipment through our sales channels include end-users (such as construction companies), equipment dealers, original equipment manufacturers (“OEMs”), and other equipment owners (such as rental companies). Our customers participate in a variety of sectors, including heavy construction, transportation, agriculture, energy, and mining.

Overview

This section of the Form 10-K generally discusses 2020 and 2019 items and year-to-year comparisons between 2020 and 2019. Discussions of 2018 items and year-to-year comparisons between 2019 and 2018 that are not included in this Form 10-K can be found in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in Part II, Item 7 of the Company’s Annual Report on Form 10-K for the fiscal year ended December 31, 2019. This discussion and analysis should be read in conjunction with the “Cautionary Note Regarding Forward-Looking Statements”, “Part II, Item 6: Selected Financial Data”, and the consolidated financial statements and the notes thereto included in “Part II, Item 8. Financial Statements and Supplementary Data” presented in this Annual Report on Form 10-K. This discussion and analysis contains forward-looking statements that involve risks and uncertainties.

Our actual results could differ materially from those expressed or implied in any forward-looking statements due to various factors, including those set forth under “Part I, Item 1A: Risk Factors” in this Annual Report on Form 10-K. The date of this discussion is as of February 18, 2021.

We prepare our consolidated financial statements in accordance with U.S. generally accepted accounting principles (“US GAAP”). Except for GTV, which is a measure of operational performance and not a measure of financial performance, liquidity, or revenue, the amounts discussed below are based on our consolidated financial statements. Unless indicated otherwise, all tabular dollar amounts, including related footnotes, presented below are expressed in thousands of United States (“U.S.”) dollars.

In the accompanying analysis of financial information, we sometimes use information derived from consolidated financial data but not presented in our financial statements prepared in accordance with US GAAP. Certain of these data are considered “non-GAAP financial measures” under the SEC rules. The definitions and reasons we use these non-GAAP financial measures and the reconciliations to their most directly comparable US GAAP financial measures are included either with the first use thereof or in the Non-GAAP Measures section within the MD&A. Non-GAAP financial measures referred to in this report are labeled as “non-GAAP measure” or designated as such with an asterisk (*).

Performance Overview

Net income attributable to stockholders for 2020 increased 14% to $170.1 million compared to $149.0 million in 2019. Adjusted net income attributable to stockholders* (non-GAAP measure), which excludes $7.8 million income tax expense related to an unfavourable adjustment to reflect final regulations published regarding hybrid financing arrangements, $5.2 million of acquisition-related costs ($3.9 million net of tax) related to the acquisition of Rouse, and $4.3 million ($3.2 million net of tax) of severance costs, increased 27% to $185.0 million in 2020 as compared to $145.6 million in 2019. Diluted earnings per share ("EPS") attributable to stockholders increased 13% to $1.54 from $1.36 per share. Diluted adjusted EPS attributable to stockholders* (non-GAAP measure), which excludes adjusting items, increased 26% to $1.68 per share in 2020 as compared to $1.33 per share in 2019.

Consolidated results:

- Total revenue increased 4% to $1.4 billion as compared to 2019
    - Service revenue increased 8% to $871.6 million as compared to 2019
    - Inventory sales revenue decreased 2% to $505.7 million as compared to 2019
- Total selling, general and administrative expenses ("SG&A") increased 9% to $417.5 million as compared to 2019
- Operating income increased 18% to $263.2 million as compared to 2019
- Net income increased 14% to $170.4 million as compared to 2019
- Adjusted Earnings Before Interest, Taxes, Depreciation and Amortization* ("EBITDA")(non-GAAP measure) increased 20% to $353.5 million as compared to 2019
- Cash provided by operating activities was $257.9 million for the year ended December 31, 2020

Auctions & Marketplaces segment results:

- GTV increased 5% to $5.4 billion as compared to 2019
- A&M total revenue increased 4% to $1.2 billion as compared to 2019
    - Service revenue increased 9% to $740.0 million as compared to 2019
    - Inventory sales revenue decreased 2% to $505.7 million as compared to 2019

Other Services segment results:

- Other Services total revenue increased 5% to $131.6 million as compared to 2019
- RBFS revenue increased 12% to $32.2 million as compared to 2019

Operational highlights

In 2020, the organization focused on the needs of our customers while keeping the health and safety of all our stakeholders a top priority. With our new CEO and the addition of several new senior leaders, we formalized a new growth strategy in August 2020 of becoming t*he trusted global marketplace for insights, services, and transaction solutions for commercial assets*. Despite the COVID-19 pandemic and the economic uncertainties, our successful pivot to 100% online bidding drove strong operational results:

- Ritchie Bros. conducted 315 auctions in 2020, resulting in a 5% year-over-year increase in GTV including a global auction event in Orlando, selling in excess of US$237 million. The six-day sale set a new company record for attendees, registering a staggering 18,100 people from 85 countries.

- Weekly Featured, our online unreserved format, set a new record with a 45% growth in GTV in 2020 driven by strong adoption of this format and exceptional performance from the US strategic accounts team.

- The talent and organization of our At-Risk business continued to leverage the environment and produced outstanding pricing realization.

- Our US region delivered strong growth in 2020 with US$208M+ GTV growth attributed to strong execution by the US strategic accounts team and the regional sales teams. This region also delivered strong results in 2020 by combining regional events and pooling together equipment and buyers from multiple sites to build larger events.

- **Marketplace-E, online reserved format** – Delivered a 17% year-over-year growth in GTV in 2020 driven by strength in North America.

- **RB Asset Solutions** – We continued to grow the number of RB Asset Solutions customers. RB Asset Solutions offers a complete end-to-end asset management and disposition system designed to help customers optimize their disposition process. By offering a complete inventory management system, data analytics and dashboards, branded e-commerce sites, and multiple external sales channels, Ritchie Bros. will help customers achieve the best possible returns.

- **Ritchie Bros. Financial Services (RBFS)** – We continue to invest in our team members and despite broader credit standards tightening in 2020 due to the COVID-19 pandemic, RBFS' total funded volume hit $524.6 million, increasing 3% year-over-year.

- **Strong operational leverage** – The transition to 100% online bidding combined with our COVID-19 protocols drove strong margin expansion that delivered an 18% year-over-year increase in operating income.

We understand that Ritchie Bros. can be an agent for change on issues that are critical for society and pride ourselves on deep-rooted social commitments to our local communities. In 2020 we took our first step in telling the Environmental, Social, Governance ("ESG") story by publishing our inaugural sustainability report.

We accelerated our journey against many of our strategic pillars by acquiring Rouse in December of 2020 which offered a highly complementary suite of data analytics and service offerings to help their customers make market business decisions with the most accurate and reliable market information In addition to the acquisition, we took several steps to advance our new growth strategy in 2020 highlighted below:

Customer Experience

- In 2020 we deconstructed all the touch points a buyer or seller has on our platforms and have identified ways to streamline and improve customer experience.
- We launched the Ritchie Bros. Market Trends module as part of the RB Asset solution technology and a monthly Ritchie Bros. Market Trends Report that provides data on high-level industry pricing and trends.
- We launched an online and mobile version of Ritchie Bros. Asset Valuator which allows customers to search equipment values by make, model, year and meter.
- We also observed a strong growth in the usage of priority bid as end users adopted the feature to simplify and enhance their experience. Priority bid enables buyers to make proxy bids online for items in live auctions up to a week before the sale. These priority bids put the buyer first in line to win the item provided they are not outbid. With the increased adoption of priority bids, our data science teams drove further customization and enhancements in digital marketing as well as algorithmic pricing.

Best Employee Experience

- Launched #MYRBStory which focuses on moments that matter for our employees.
- Implemented monthly townhalls to allow two-way dialogue between management and employees.
- We launched a Black Lives Matter employee resource group.

Modern Architecture

- Started our modern architecture journey by successfully transitioning our bidding engine into a cloud based microservice.
- Continued to focus on identifying several areas to improve capacity, functionality and usability of our systems internally and externally.

Inventory Management System

- Improved the process for our sellers to add inventory to our systems through functionality of spreadsheet uploads.
- For key accounts, we added algorithmic pricing to inventory under management allowing end users to estimate the current market value of equipment.

Accelerate growth: Test, learn and scale

- Formulated a new sales coverage model of Account Manager, Business Development Manager, Inside Territory Manager from the traditional Territory Manager role to test and learn in Texas, United States to better service our customers and consignors.
- Increased the number of new satellite sites for care, custody and control with new locations in Europe and Australia.
- We continued to refine and improve S.A.G.E. (Sales Activity Generation Engine), an initiative to accelerate new business growth and enhance Territory Manager sales productivity. S.A.G.E is an activity and behavior focused sales process overlaid with a "data-driven mindset".
- We tested, learned and scaled pooling smaller regional events into larger virtual events to drive more demand and solid price performance.

Results of Operations

	Year ended December 31,				
				% Change	
(in U.S. $000's, except EPS and percentages)	**2020**	**2019**	**2018**	**2020 over 2019**	**2019 over 2018**
Service revenue:					
Commissions	$ 452,882	$ 431,781	$ 420,160	5 %	3 %
Fees	418,714	372,243	329,355	12 %	13 %
Total service revenue	871,596	804,024	749,515	8 %	7 %
Inventory sales revenue	505,664	514,617	420,511	(2)%	22 %
Total revenue	1,377,260	1,318,641	1,170,026	4 %	13 %
Costs of services	157,296	164,977	159,058	(5)%	4 %
Cost of inventory sold	458,293	480,839	374,339	(5)%	28 %
Selling, general and administrative expenses	417,523	382,389	382,676	9 %	(0)%
Operating expenses	1,114,100	1,095,439	984,837	2 %	11 %
Operating income	263,160	223,202	185,189	18 %	21 %
Operating income as a % of total revenue	19.1 %	16.9 %	15.8 %	220 bps	110 bps
Net income attributable to stockholders	170,095	149,039	121,479	14 %	23 %
Adjusted net income attributable to stockholders*	184,952	145,649	117,669	27 %	24 %
Diluted earnings per share attributable to stockholders	$ 1.54	$ 1.36	$ 1.11	13 %	23 %
Diluted adjusted EPS attributable to stockholders*	$ 1.68	$ 1.33	$ 1.08	26 %	23 %
Effective tax rate	27.8 %	21.8 %	20.3 %	600 bps	150 bps
Total GTV	5,411,218	5,140,587	4,964,165	5 %	4 %
Service GTV	4,905,554	4,625,970	4,543,654	6 %	2 %
Service revenue as a % of total GTV - Rate	16.1 %	15.6 %	15.1 %	50 bps	50 bps
Inventory GTV	505,664	514,617	420,511	(2)%	22 %
Service revenue as a % of total revenue	63.3 %	61.0 %	64.1 %	230 bps	(310)bps
Inventory sales revenue as a % of total revenue	36.7 %	39.0 %	35.9 %	(230)bps	310 bps
Cost of inventory sold as a % of operating expenses	41.1 %	43.9 %	38.0 %	(280)bps	590 bps
Service GTV as a % of total GTV - Mix	90.7 %	90.0 %	91.5 %	70 bps	(150)bps
Inventory sales revenue as a % of total GTV - Mix	9.3 %	10.0 %	8.5 %	(70)bps	150 bps

Total revenue

Total revenue increased 4% to $1.4 billion as compared to 2019.

In 2020, total service revenue increased 8% with commissions revenue increasing 5% and fees revenue increasing 12%. Service revenues comprise of commissions which are earned on Service GTV, and Fees which are earned on total GTV as well as from our Other Services such as RBFS, Ancillary Services, and Rouse.

Service GTV increased 6% driven by positive results in the US and Canada offset by lower performance in International. The increase in US Service GTV was primarily due to strong execution by the US strategic accounts and regional sales teams driving positive growth at both our on site and online auctions. As well, the US region had higher Service GTV sold through our GovPlanet brand. In Canada, Service GTV increased mainly due to positive year-over-year performance at Canadian on site auctions, and particularly, equipment consigned in the oil and gas, and forestry sectors. Our Canada region grew its service GTV as it piloted the PurchaseSafe service in Q4 2019, providing escrow services for private brokered transactions through our Marketplace-E platform, which gained traction in 2020. This increase was partially offset by lower Service GTV in International, mainly in Europe and Mexico, due to the softness in the market, partially impacted by the COVID-19 pandemic.

Fee revenue increased 12%, partially related to the increase in total GTV of 5%. The remaining increase in fees revenue was driven by the full-year impact of the full harmonization of buyer fees implemented on June 1, 2019, a favourable change in rate due to GTV lot mix, and higher buyer fee structure in Australia and GovPlanet. We also saw higher online listing inspection fees in line with increased online GTV. Other Segment fees increased driven from greater activity in our Ancillary and RBFS operations, and incremental revenue earned from Rouse. This increase was partially offset by lower RB Logistics revenue earned resulting from lower activity in the International region during 2020.

Commissions revenue increased 5% in line with higher Services GTV, with lower rates due to a change in GTV mix in International, partially offset by higher guarantee contract rates performance in Canada.

Inventory sales revenue as a percent of total GTV decreased to 9.3% as compared to 10.0% in 2019.

Inventory sales revenue decreased 2% driven by lower volume of inventory contracts in the US, partially offset by higher volume of packages in Canada. In the US, the decrease was primarily driven by the non-repeat of a large dispersal of pipeline equipment as part of the $94 million Columbus, Ohio auction in June 2019 and lower levels of inventory contracts compared to our Orlando 2019 auction. The US region also had a decrease in inventory received from our government surplus contracts due to government shutdowns in response to the COVID-19 pandemic. This decrease in inventory sales revenue was partially offset by higher volumes in Canada primarily due to the large dispersal of pipeline equipment in our Q4 2020 Grand Prairie auction.

We offer our customers the opportunity to use underwritten commission contracts to serve their disposition strategy needs, entering into such contracts where the risk and reward profile of the terms are agreeable. Our underwritten contracts, which include inventory and guarantee contracts, remained flat at 20% in 2020, compared to 2019.

Operating income

Operating income increased 18% to $263.2 million compared to $223.2 million in 2019. This increase was primarily due to the 4% increase in total revenue, partially offset by a 2% increase in operating expenses in 2020. Operating expenses included $5.2 million of acquisition-related costs incurred in 2020 related to the acquisition of Rouse, $4.3 million severance costs related to the realignment of leadership to support the new global operations organization, and $4.1 million of share-based payment expense recovery recognized in 2019 related to the departure of our former CEO, which are all non-recurring.

Income tax expense and effective tax rate

We recorded an income tax expense of $65.5 million in 2020 compared to $41.6 million in 2019. Our effective tax rate was 27.8% compared to 21.8% in 2019. The increase in the effective tax rate over the comparative period was primarily due to final regulations published on April 8, 2020 by the United States Department of Treasury and the Internal Revenue Service (“IRS”) that clarified income tax benefits related to hybrid financing arrangements (“the Hybrid Rules”) would no longer be deductible as of January 1, 2019. We had recorded approximately $7.8 million in Hybrid Interest benefits in the year ended December 31, 2019 that were reversed in 2020. In addition, there was greater income tax expense related to increases in tax uncertainties in 2020 than in 2019, and a greater proportion of income taxed in jurisdictions with higher tax rates. Partially offsetting these increases was the reduced impact of the US tax reform.

Net income

Net income attributable to stockholders increased 14% to $170.1 million compared to $149.0 million in 2019. The increase was primarily related to higher operating income, lower interest expense due to debt repayments made in 2019 and lower interest rates in 2020, partially offset by the increase in the income tax expense driven by the higher effective tax rate.

Diluted EPS

Diluted EPS attributable to stockholders increased 13% to $1.54 per share compared to $1.36 in 2019. This increase was primarily due to the increase in net income attributable to stockholders.

U.S. dollar exchange rate comparison

We conduct global operations in many different currencies, with our presentation currency being the U.S dollar. The following table presents the variance in select foreign exchange rates over the comparative reporting periods:

				% Change	
Value of one local currency to U.S dollar	**2020**	**2019**	**2018**	**2020 over 2019**	**2019 over 2018**
Period-end exchange rate					
Canadian dollar	0.7843	0.7656	0.7331	2 %	4 %
Euro	1.2296	1.1202	1.1469	10 %	(2)%
Australian dollar	0.7689	0.7002	0.7052	10 %	(1)%
Average exchange rate -Year ended December 31,					
Canadian dollar	0.7462	0.7537	0.7716	(1)%	(2)%
Euro	1.1413	1.1195	1.1804	2 %	(5)%
Australian dollar	0.6901	0.6951	0.7469	(1)%	(7)%

In 2020, approximately 43% of our revenues and 48% of our operating expenses were denominated in currencies other than the U.S. dollar, compared to 42% and 44%, respectively, in 2019.

We recognized $1.6 million in foreign exchange losses in 2020 and $2.9 million of gains in 2019. Foreign exchange had an unfavourable impact on total revenue and a favourable impact on expenses. These impacts were mainly due to the fluctuations in the Euro and Australian dollar exchanges rates relative to the U.S. dollar during the year.

Non-GAAP Measures

As part of management's non-GAAP measures, we may eliminate the financial impact of adjusting items which are after-tax effects of significant non-recurring items that we do not consider to be part of our normal operating results, such as acquisition-related costs, management reorganization costs, severance, share-based payment expense recovery due to the departure of our former CEO, retention, gains/losses on sale of an equity accounted for investment, plant and equipment, impairment losses, and certain other items, which we refer to as 'adjusting items'.

Adjusted net income attributable to stockholders* increased 27%, to $185.0 million compared to $145.6 million in 2019.

Diluted adjusted EPS attributable to stockholders* increased 26% to $1.68 per share compared to $1.33 per share in 2019.

Adjusted Earnings Before Interest, Taxes, Depreciation and Amortization ("EBITDA")* increased 20% to $353.5 million compared to $294.7 million in 2019.

Debt at December 31, 2020 represented 3.9 times net income for 2020, compared to debt at December 31, 2019, which represented 4.4 times net income for 2019. The decrease in this debt/net income multiplier was primarily due to higher net income for the year ended December 31, 2020 compared to December 31, 2019. The adjusted net debt/adjusted EBITDA* was 1.1 times at December 31, 2020 compared to 1.0 times at December 31, 2019. The slight increase in adjusted net debt/adjusted EBITDA* was primarily due to higher adjusted net debt* balance at December 31, 2020, partially offset by a 20% increase in adjusted EBITDA* compared to the prior year.

Segment Performance

We provide our customers with a wide array of services. The following table presents a breakdown of our consolidated results between the A&M segment and Other services segment. A complete listing of channels and brand solutions under the A&M segment, as well as our Other services segment, is available under Item 1 of this Annual Report.

	Year ended December 31, 2020			Year ended December 31, 2019			Year ended December 31, 2018		
(in U.S $000's)	**A&M**	**Other**	**Consolidated**	**A&M**	**Other**	**Consolidated**	**A&M**	**Other**	**Consolidated**
Service revenue	$ 740,043	$ 131,553	$ 871,596	$ 678,823	$ 125,201	$ 804,024	$ 626,007	$ 123,508	$ 749,515
Inventory sales revenue	505,664	—	505,664	514,617	—	514,617	420,511	—	420,511
Total revenue	1,245,707	131,553	1,377,260	1,193,440	125,201	1,318,641	1,046,518	123,508	1,170,026
Ancillary and logistical service expenses	—	59,982	59,982	—	59,252	59,252	—	66,576	66,576
Other costs of services	92,195	5,119	97,314	99,821	5,904	105,725	87,430	5,052	92,482
Cost of inventory sold	458,293	—	458,293	480,839	—	480,839	374,339	—	374,339
SG&A expenses	388,442	29,081	417,523	358,016	24,373	382,389	363,549	19,127	382,676
Segment profit	306,777	37,371	344,148	254,764	35,672	290,436	221,200	32,753	253,953

Auctions and Marketplaces segment

Results of A&M segment operations are presented below for the comparative reporting periods.

	Year ended December 31,				
				% Change	
(in U.S. $000's, except percentages)	**2020**	**2019**	**2018**	**2020 over 2019**	**2019 over 2018**
Service revenue	$ 740,043	$ 678,823	$ 626,007	9 %	8 %
Inventory sales revenue	505,664	514,617	420,511	(2)%	22 %
Total revenue	1,245,707	1,193,440	1,046,518	4 %	14 %
A&M service revenue as a % of total A&M revenue	59.4 %	56.9 %	59.8 %	250 bps	(290)bps
Inventory sales revenue as a % of total A&M revenue	40.6 %	43.1 %	40.2 %	(250)bps	290 bps
Costs of services	92,195	99,821	87,430	(8)%	14 %
Cost of inventory sold	458,293	480,839	374,339	(5)%	28 %
SG&A expenses	388,442	358,016	363,549	8 %	(2)%
A&M segment expenses	938,930	938,676	825,318	0 %	14 %
Cost of inventory sold as a % of A&M expenses	48.8 %	51.2 %	45.4 %	(240)bps	580 bps
A&M segment profit	306,777	254,764	221,200	20 %	15 %
Total GTV	5,411,218	5,140,587	4,964,165	5 %	4 %
A&M service revenue as a % of total GTV- Rate	13.7 %	13.2 %	12.6 %	50 bps	60 bps

Gross Transaction Value

In response to the COVID-19 pandemic, beginning in March 2020, we transitioned all our traditional live on site auctions to online bidding utilizing our existing online bidding technology and simultaneously ceased all public attendance at our live auction theaters. Our core online auction channels (IronPlanet.com, GovPlanet.com, Marketplace-E) continued to operate as usual.

To facilitate the live auction process transition to a virtual platform and under strict safety guidelines, we enabled equipment drop off at our physical yards prior to the online event, with buyers able to conduct inspections pre-auction and collect equipment post auction. In addition, where auctioneers were not able to attend a physical site, we used Time Auctioned Lots (TAL) solutions for selected International and on-the-farm agriculture events.

GTV recognized through online bidding at live on site auctions and TAL are included in the Live on site auction metrics. The percentage of live GTV dollars that transacted on TAL rose to 27% in 2020, up from 9% in the prior year.

We believe it is meaningful to consider revenue in relation to GTV. GTV by channel and by revenue type are presented below for the comparative reporting periods.

GTV by Channel

	Year ended December 31,			% Change	
(in U.S. $000's, except percentages)	**2020**	**2019**	**2018**	**2020 over 2019**	**2019 over 2018**
Live on site auctions	$ 4,126,451	$ 4,175,527	$ 4,134,838	(1)%	$ 1 %
Percentage of total	76.3 %	81.2 %	83.3 %		
Online marketplaces including featured [1] and other [2]	1,284,767	965,060	829,327	33 %	16 %
Percentage of total	23.7 %	18.8 %	16.7 %		
GTV	$ 5,411,218	$ 5,140,587	$ 4,964,165	5 %	$ 4 %
Percentage of total GTV purchased by online buyers					
Live on site auctions	92 %	57 %	50 %	3500 bps	700 bps
Online marketplaces including featured[1] and other[2]	100 %	100 %	100 %	0 bps	0 bps
Total GTV	94 %	65 %	59 %	2900 bps	600 bps

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(1) This represents GTV from IronPlanet's Weekly Featured Auction, which operates under an unreserved auction model.
(2) This includes GTV from Marketplace-E and, before that, EquipmentOne.

GTV increased 5% to $5.4 billion as compared to 2019.

GTV from online marketplaces increased 33% primarily due to increased online performance driven from strong execution by the US strategic accounts and regional sales teams. This increase was also due to the shift of our Australia live on site auctions to our online platform, partially offset by lower volume in International Marketplace-E. Our Canada region also piloted the PurchaseSafe service in Q4 2019, which gained traction in 2020 and contributed to the increase in GTV from online marketplaces.

GTV from live on site auctions was down 1% to $4.1 billion. This decrease was primarily due to lower volume in the International region with Australia switching its selling platform from Live to Online and softness in the rest of the International region due to the COVID-19 pandemic, partially offset by large private treaty deals closed in Australia. In the US, GTV from live auctions decreased due to the non-repeat of the Columbus, Ohio auction in June 2019 and higher levels of inventory contracts at our Orlando 2019 auction. This decrease in the US was offset by the strong execution of the US strategic accounts and regional sales teams, with notable performance at our Fort Worth and Denver live on site auctions. In Canada, we had positive year-over-year performance at our live on site auctions, and in particular, we had a large dispersal of pipeline equipment in our Q4 2020 Grand Prairie auction.

Online bidding

Across all channels, 94% of total GTV was purchased by online buyers compared to 65% in 2019. The increase in internet bidders and online buyers is a direct impact of the COVID-19 pandemic, as we pivoted to 100% online bidding at our live auctions where on site attendance was not permitted. Prior to the COVID-19 pandemic restrictions in 2020, 67% of total GTV was purchased by online buyers.

Industrial Live On Site Metrics

Total industrial live on site auction metrics

	For the year ended December 31,			% Change	
	2020	**2019**	**2018**	**2020 over 2019**	**2019 over 2018**
Number of auctions	168	194	183	(13)%	6 %
Bidder registrations	957,050	732,550	555,000	31 %	32 %
Consignors	55,400	58,850	53,950	(6)%	9 %
Buyers	157,250	153,400	135,250	3 %	13 %
Lots	429,400	422,800	377,000	2 %	12 %

In 2020, we held 26 fewer industrial auctions primarily due to combining regional auctions in the US and switching from Live to Online platform in Australia.

The total number of industrial lots increased 2% to 429,400 and the total number of lots including agricultural lots increased 1% to 453,900 lots. These increases were partially due to an increase in small value lots sold in the US and Canada.

GTV on a per lot basis generated at our industrial live on site auctions decreased 3% to $9,100 compared to $9,400 in 2019, partially due to a higher number of small value lots sold in the US and Canada, and price softening of agricultural equipment.

12 months average metrics per industrial live on site auction

	For the year ended December 31,				
				% Change	
(in U.S. $000's, except percentages)	2020	2019	2018	2020 over 2019	2019 over 2018
GTV	$23.3 million	$20.5 million	$21.2 million	14 %	(3)%
Bidder registrations	5,697	3,776	3,033	51 %	24 %
Consignors	330	303	295	9 %	3 %
Lots	2,556	2,179	2,060	17 %	6 %

For the year ended December 31, 2020, we saw an increase in average GTV per industrial auction compared to the prior year periods.

Productivity

The majority of our business continues to be generated by our A&M segment operations. Sales Force Productivity within this segment is an operational statistic that we believe provides a gauge of the effectiveness of our Revenue Producers in increasing GTV. Revenue Producers is a term used to describe our revenue-producing sales personnel. This definition is comprised of Regional Sales Managers and Territory Managers.

Our Sales Force Productivity for the year ended December 31, 2020 increased 8.7% to $13.4 million per Revenue Producer as compared to $12.3 million per Revenue Producer in 2019.

A&M revenue

Total A&M revenue increased 4% to $1.2 billion as compared to 2019.

A&M revenue, GTV, and Service GTV by geographical region are presented below:

	Year ended December 31,				
				% Change	
(in U.S. $000's, except percentages)	**2020**	**2019**	**2018**	**2020 over 2019**	**2019 over 2018**
A&M Revenue by Geography					
United States					
Service revenue	475,482	419,164	373,555	13 %	12 %
Inventory sales revenue	218,144	270,616	126,627	(19)%	114 %
A&M revenue- United States	693,626	689,780	500,182	1 %	38 %
Canada					
Service revenue	179,397	167,389	160,751	7 %	4 %
Inventory sales revenue	84,257	40,634	88,680	107 %	(54)%
A&M revenue- Canada	263,654	208,023	249,431	27 %	(17)%
International					
Service revenue	85,164	92,270	91,701	(8)%	1 %
Inventory sales revenue	203,263	203,367	205,204	(0)%	(1)%
A&M revenue- International	288,427	295,637	296,905	(2)%	0 %
Total					
Service revenue	740,043	678,823	626,007	9 %	8 %
Inventory sales revenue	505,664	514,617	420,511	(2)%	22 %
A&M total revenue	1,245,707	1,193,440	1,046,518	4 %	14 %
GTV by Geography					
United States	3,235,548	3,027,459	2,736,208	7 %	11 %
Canada	1,392,249	1,254,857	1,309,950	11 %	(4)%
International	783,421	858,271	918,007	(9)%	(7)%
Total GTV	5,411,218	5,140,587	4,964,165	5 %	4 %
Service GTV by Geography					
United States	3,017,404	2,756,843	2,609,581	9 %	6 %
Canada	1,307,992	1,214,223	1,221,270	8 %	(1)%
International	580,158	654,904	712,803	(11)%	(8)%
Total Service GTV[1]	4,905,554	4,625,970	4,543,654	6 %	2 %

[1] Service GTV is calculated as total GTV less inventory sales revenue

United States

Service revenue increased 13%, partially due to the 9% increase in Service GTV. The increase in service revenue was also due to higher buyer fee rate performance due to the buyer fee harmonization, a favourable change in rate due to GTV lot mix, and higher buyer fee structure in GovPlanet. We also saw higher online listing inspection fees in line with increased online GTV.

Inventory sales revenue decreased 19% mainly driven by a large dispersal of pipeline equipment as part of the $94 million Columbus, Ohio auction in June 2019 and lower levels of inventory contracts compared to our Orlando 2019 auction. There was also a decrease in inventory received from our government surplus contracts due to government shutdowns in response to the COVID-19 pandemic.

Canada

Service revenue increased 7%, primarily due to an 8% increase in Service GTV. Canada rate was impacted by a lower rate due to fluctuations in revenue mix between contract types, fees waived for Canadian on-the-farm auction as part of our COVID-19 pandemic response, partially offset by the full harmonization of buyer fees, and a favourable change in rate due to GTV lot mix.

Inventory sales revenue increased 107% mainly due to the large dispersal of pipeline equipment in our Q4 2020 Grand Prairie auction.

International
Service revenue decreased 8%, partially due to the 11% decrease in Service GTV. Our Australia region had improved buyer fee rate performance due to higher online buyer fee structure and buyer fee harmonization, partially offset by lower commission rates due to a change in GTV mix.

Inventory sales revenue remained flat with strong performance at our Maltby, UK auction and large private treaty deals closed in Australia, partially offset by the non-repeat of supply contracts in Europe and Asia that were garnered in a more favourable supply environment in 2019.

Costs of services

A&M cost of services decreased 8% to $92.2 million. This decrease was primarily driven by cost reductions in employee compensation, and travel, advertising and promotion as a result of our response to the COVID-19 pandemic. Our response included transitioning our live on site auctions to online bidding, utilizing TAL solutions for selected International and on-the-farm agricultural events, and implementing travel restrictions. We also incurred lower net fees related to referral payments. The decrease was partially offset by additional facilities costs incurred to support our Q1 2020 Leake auction.

Cost of inventory sold

A&M cost of inventory sold decreased 5% to $458.3 million. Cost of inventory sold decreased at a higher rate than the decrease of inventory sales revenue, indicating an increase in the inventory revenue rates. The inventory revenue rates improved mainly due to the achievement of strong rate performance across our regions.

SG&A expenses

A&M segment SG&A expenses increased 8% to $388.4 million. The increase was mainly due to higher short-term incentive expense driven by strong performance, higher headcount to support our growth initiatives, and merit increases to our employees. Our SG&A also includes a one-time $4.3 million severance costs related to the realignment of leadership to support the new global operations organization, in line with strategic growth priorities led by the new CEO. In addition, in 2019, we recognized a recovery of $4.1 million of share-based payment expense related to the departure of our former CEO, which is non-recurring. These increases in SG&A expense were partially offset by lower travel, advertising, and promotion costs as we implemented travel restrictions.

Other Services Segment

Results of Other Services segment operations are presented below for the comparative reporting periods.

	Year ended December 31,				
				% Change	
(in U.S. $000's, except percentages)	2020	2019	2018	2020 over 2019	2019 over 2018
Service revenue	$ 131,553	$ 125,201	$ 123,508	5 %	1 %
Ancillary and logistical service expenses	59,982	59,252	66,576	1 %	(11)%
Other costs of services	5,119	5,904	5,052	(13)%	17 %
SG&A expenses	29,081	24,373	19,127	19 %	27 %
Other services profit	$ 37,371	$ 35,672	$ 32,753	5 %	9 %

Other Services revenue increased 5% to $131.6 million primarily due to higher revenue in Ancillary of $3.5 million, RBFS of $3.4 million, Rouse of $1.9 million, and Mascus of $0.9 million. This increase was partially offset by lower RB Logistics of $2.3 million caused by lower inventory sales in Europe requiring logistics.

Ancillary revenue was higher due to fees earned on refurbishing and transporting sellers’ equipment driven by higher GTV activity mainly in the US.

RBFS revenue increased 12% in 2020 as compared to 2019 due to growth in funded volume, and improved rate of fees earned from facilitation of financing arrangements. RBFS also earned higher fees for other services provided. Funded volume, which represents the amount of lending brokered by RBFS, increased 3% to $524.6 million, and increased 4% when excluding the impact of foreign exchange.

Other Services profit increased 5% to $37.4 million primarily driven by the increase in operating profit in Mascus and Rouse.

Share repurchase program

On May 8, 2019, our Board of Directors authorized a share repurchase program for the repurchase of up to $100 million worth of our common shares, approved by the Toronto Stock Exchange, over a total period of 12 months. In 2020, we repurchased 1,525,312 common shares for $53,170,000 as part of this program until it ended on May 8, 2020 as follows:

	Issuer purchases of equity securities			
	(a) Total number of shares purchased	(b) Average price paid per share	(c) Total number of shares purchased as part of publicly announced program	(d) Maximum approximate dollar value of shares that may yet be purchased under the program
March 5-23, 2020	1,525,312	$ 34.85	1,525,312	$ N/A

On August 5, 2020, our Board of Directors authorized a share repurchase program for the repurchase of up to $100.0 million worth of our common shares, approved by the Toronto Stock Exchange, over a period of 12 months, ending August 23, 2021. We did not repurchase any shares in 2020 as a part of this program.

Liquidity and Capital Resources

Our principal sources of liquidity are our cash provided by operating activities and borrowings from our revolving credit facilities, which we renewed on August 14, 2020.

In 2020, our operational liquidity was not materially impacted by the COVID-19 pandemic. Today we believe that our existing working capital and availability under our credit facilities are sufficient to satisfy our present operating requirements and contractual obligations. With future uncertainty due to COVID-19, we will continue to evaluate the nature and extent of any impacts to our liquidity as events unfold. Our future growth strategies continue to include but are not limited to the development of our A&M, RBFS, Rouse, and Mascus operating segments, as well as other growth opportunities including mergers and acquisitions.

We assess our liquidity based on our ability to generate cash to fund operating, investing, and financing activities. Our liquidity is primarily affected by fluctuations in cash provided by operating activities, significant acquisitions of businesses, payment of dividends, share repurchases, our net capital spending[1], and voluntary repayments of term debt.

Cash provided by operating activities can fluctuate significantly from period to period due to factors such as differences in the timing, size and number of auctions during the period, the volume of our inventory contracts, the timing of the receipt of auction proceeds from buyers and of the payment of net amounts due to consignors, as well as the location of the auction with respect to restrictions on the use of cash generated therein.

	Year ended December 31,				
				% Change	
(in U.S. $000's, except percentages)	2020	2019	2018	2020 over 2019	2019 over 2018
Cash provided by (used in):					
Operating activities	$ 257,872	$ 332,793	144,280	(23)%	131 %
Investing activities	(276,722)	(36,057)	(30,953)	667 %	16 %
Financing activities	(111,461)	(187,218)	(134,107)	(40)%	40 %
Effect of changes in foreign currency rates	16,950	5,171	(4,769)	228 %	208 %
Net increase in cash, cash equivalents, and restricted cash	$ (113,361)	$ 114,689	(25,549)	(199)%	549 %

Net cash provided by operating activities decreased $74.9 million in 2020. This decrease was primarily due to a net negative impact in our operating assets and liabilities, partially offset by an increase in our net income compared to 2019. We saw net negative cash flows from changes in our operating assets and liabilities primarily driven by the timing of auctions and changes in inventory levels compared to 2019. At the end of 2018, we saw particularly high levels of inventory in Europe, which turned over in 2019. Additionally, at the end of 2020, we saw an increase in inventory in Australia as compared to 2019. These cash outflows were partially offset by a net positive movement in our trade and other payables related to the timing of employee compensation payments.

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[1] We calculate net capital spending as property, plant and equipment additions plus intangible asset additions less proceeds on disposition of property, plant and equipment.

Net cash used in investing activities increased $240.7 million in 2020. This increase was primarily due to the December 2020 acquisition of Rouse, which used $250.0 million of cash, net of cash acquired. The increase was also due to the net issuance of loans receivable under the new non-recourse financing lending arrangements which we entered into in 2020. This increase was partially offset by $10.5 million more net proceeds on disposal of property, plant and equipment compared to 2019, which included $15.5 million on the sale of land in the United States, as well as $4.2 million on the distribution of equity investments in 2020.

Net cash used in financing activities decreased $75.8 million in 2020. This decrease was primarily due to $62.7 million fewer voluntary term loan repayments in 2020 compared to 2019. In addition, there was a $36.9 million increase in net proceeds from short-term debt draws, primarily to fund operating activities. Partially offsetting this was $11.2 million more share repurchases and $9.5 million more dividends paid in 2020 versus 2019.

Working capital

Working capital is calculated as total current assets less total current liabilities. Working capital at December 31, 2020 was $42.2 million, a decrease of $136.1 million compared to 2019. The decrease in working capital is primarily attributed to the $250.0 million cash outflow for the acquisition of Rouse, $111.5 million cash outflow for the payment of dividends, partially offset by $257.9 million cash provided from operations related to net income after adjusting for items not affecting cash and net changes in operating assets and liabilities.

Dividend information

We declared and paid a regular cash dividend of $0.20 per common share for the quarters ended September 30, 2019, December 31, 2019, and March 31, 2020. We declared and paid regular cash dividends of $0.22 per common share for the quarter ended June 30, 2020 and September 30, 2020. We have declared, but not yet paid, a dividend of $0.22 per common share for the quarter ended December 31, 2020. All dividends we pay are “eligible dividends” for Canadian income tax purposes unless indicated otherwise.

Our dividend payout ratio, which we calculate as dividends paid to stockholders divided by net income attributable to stockholders, decreased to 53.9% in 2020 from 55.4% in 2019. This decrease was primarily due to the increase in net income attributable to stockholders over the comparative period. Our adjusted dividend payout ratio* (non-GAAP measure) decreased to 49.6% in 2020 from 56.7% in 2019.

Return on average invested capital

Our return on average invested capital is calculated as net income attributable to stockholders divided by our average invested capital. We calculate average invested capital over a trailing 12-month period by adding the average long-term debt over that period to the average stockholders’ equity over that period.

Return on average invested capital increased 110 bps to 10.7% in 2020 from 9.6% in 2019. This increase is primarily due to a $21.1 million, or 14%, increase in net income attributable to stockholders over the comparative period, combined with the impact of $62.7 million in voluntary debt repayments in 2019 on average invested capital. Return on invested capital (“ROIC”) (non-GAAP measure) increased 220 bps to 11.6% in 2020 from 9.4% in 2019.

Credit facilities

On August 14, 2020, we entered into the amended and extended Credit Agreement. The Credit Agreement matures on October 27, 2023 and provides credit facilities totaling US$630.0 million with a syndicate of lenders comprising:

(1) Multicurrency revolving facilities of up to US$530 Million (the “Revolving Facilities”), and,

(2) A delayed-draw term loan facility of up to US$100 Million (the “Delayed-Draw Facility” and together with the Revolving Facilities, the “Facilities”).

The amendments, among other things, (i) extended the maturity date of the Facilities from October 27, 2021 to October 27, 2023, (ii) increased the applicable margin for base rate loans and LIBOR loans by 0.50% at each pricing tier level, (iii) increased the applicable percentage per annum used to calculate the commitment fee in respect of the unused commitments under the Revolving Facilities by 0.10% at each pricing tier level, and (iv) increased the aggregate amount available under the Revolving Facilities from $490.0 million to $530.0 million.

Credit facilities at December 31, 2020 and 2019 were as follows:

(in U.S. $000's, except percentages)	December 31, 2020	December 31, 2019	% Change
Committed			
Term loan facility	$ 98,420	$ 155,355	(37)%
Revolving credit facilities	540,000	500,000	8 %
Total credit facilities	$ 638,420	$ 655,355	(3)%
Unused			
Revolving credit facilities	455,124	489,937	(7)%
Total credit facilities unused	$ 455,124	$ 489,937	(7)%

Borrowings under our Credit Agreement bear floating rates of interest, which, at our option, are based on either a base rate (or Canadian prime rate for certain Canadian dollar borrowings) or LIBOR (or such floating rate customarily used by the syndicate for currencies other than U.S. dollars). In either case, an applicable margin is added to the rate. The applicable margin ranges from 0.75% to 2.00% for base rate loans, and 1.75% to 3.00% for LIBOR (or the equivalent of such currency) loans, depending on our leverage ratio at the time of borrowing.

Revolving credit facilities

At December 31, 2020, of the remaining $540.0 million in committed, revolving credit facilities, $530.0 million relates to our syndicated credit facility and $10.0 million relates to credit facilities in certain foreign jurisdictions.

On December 31, 2020, we had $455.1 million of unused committed revolving credit facilities, which consisted of:

- $445.1 million under our Credit Agreement that expires on October 27, 2023;
- $5.0 million under a foreign credit facility that expires on October 27, 2023; and
- $5.0 million under a foreign demand credit facility that has no maturity date

Term loan facility

We did not make any voluntary prepayments to our term loan in 2020. During 2019, we made voluntary prepayments totaling $62.7 million on the term loan denominated in U.S. dollars. Prepayments are applied against future scheduled mandatory payments. The amount available pursuant to the term loan facility was only available to finance the IronPlanet acquisition and is not available for other corporate purposes upon repayment of amounts borrowed under that facility**.**

Senior unsecured notes

At December 31, 2020, we had senior unsecured notes (the “Notes”) outstanding that expire on January 15, 2025 for an aggregate principal amount of $500.0 million, bearing an interest rate of 5.375% per annum. The proceeds of the offering of the Notes were used to finance the IronPlanet acquisition. The Notes are jointly and severally guaranteed on an unsecured basis, subject to certain exceptions, by each of our subsidiaries that is a borrower or guarantees indebtedness under the Credit Agreement.

Debt covenants

We were in compliance with all financial and other covenants applicable to our credit facilities at December 31, 2020. Our debt covenants did not change as a result of amending our Credit Agreement.

Our ability to borrow under our syndicated revolving credit facility is subject to compliance with a consolidated leverage ratio covenant and a consolidated interest coverage ratio covenant. In the event of sustained deterioration of global markets and economies, we expect the covenants pertaining to our leverage ratio would be the most restrictive to our ability to access funding under our credit agreement. We continue to assess the impact of the COVID-19 pandemic on our business and evaluate courses of action to maintain current levels of liquidity and compliance with our debt covenants.

The Credit Agreement contains certain covenants that could limit the ability of the Company and certain of its subsidiaries to, among other things and subject to certain significant exceptions: (i) incur, assume or guarantee additional indebtedness; (ii) declare or pay dividends or make other distributions with respect to, or purchase or otherwise acquire or retire for value, equity interests; (iii) make loans, advances or other investments; (iv) incur liens; (v) sell or otherwise dispose of assets; and (vi) enter into transactions with affiliates. The Credit Agreement also provides for certain events of default, which, if any of them occurs, would permit or require the principal, premium, if any, interest and any other monetary obligations on all the then outstanding amounts under the Credit Agreement to be declared immediately due and payable.

The Notes were issued pursuant to an indenture, dated December 21, 2016, with U.S. Bank National Association, as trustee (the "Indenture"). The Indenture contains covenants that limit our ability, and the ability of certain of our subsidiaries to, among other things and subject to certain significant exceptions: (i) incur, assume or guarantee additional indebtedness; (ii) declare or pay dividends or make other distributions with respect to, or purchase or otherwise acquire or retire for value, equity interests; (iii) make any principal payment on, or redeem or repurchase, subordinated debt; (iv) make loans, advances or other investments; (v) incur liens; (vi) sell or otherwise dispose of assets; and (vii) enter into transactions with affiliates. The Indenture also provides for certain events of default, which, if any of them occurs, would permit or require the principal, premium, if any, interest and any other monetary obligations on all the then outstanding Notes under the applicable indenture to be declared immediately due and payable.

Contractual obligations at December 31, 2020

		Payments due by period			
(in U.S. $000's)	**Total**	**Less than 1 year**	**1 to 3 years**	**3 to 5 years**	**More than 5 years**
Long-term debt obligations:					
Principal	$ 644,604	$ 10,360	$ 134,244	$ 500,000	$ —
Interest	130,973	30,688	59,972	40,313	—
Finance lease obligations	27,836	9,958	13,870	4,008	—
Operating lease obligations	165,795	15,103	25,885	20,459	104,348
Purchase obligations	751	751	—	—	—
Share unit liabilities	9,602	9,602	—	—	—
Other non-current liabilities	3,237	—	20	—	3,217
Total contractual obligations	$ 982,798	$ 76,462	$ 233,991	$ 564,780	$ 107,565

Off-Balance Sheet Arrangements

We have no off-balance sheet arrangements that have or are reasonably likely to have a current or future material effect on our financial condition, changes in financial condition, revenues or expenses, financial performance, liquidity, capital expenditures or capital resources.

Critical Accounting Policies, Judgments, Estimates and Assumptions

In preparing our consolidated financial statements in conformity with US GAAP, we must make decisions that impact the reported amounts and related disclosures. Such decisions include the selection of the appropriate accounting principles to be applied and the assumptions on which to base accounting estimates. In reaching such decisions, we apply judgments based on our understanding and analysis of the relevant circumstances and historical experience. The COVID-19 pandemic resulted in significant global economic disruption, which can cause a greater degree of uncertainty around our long-term cash projections. As COVID-19 continues to develop, we may make changes to these estimates and judgments over time, which could result in meaningful impacts to our financial statements in future periods.

The following discussion of critical accounting policies and estimates is intended to supplement the significant accounting policies presented in the notes to our consolidated financial statements included in “Part II, Item 8: Financial Statements and Supplementary Data” presented in this Annual Report on Form 10-K, which summarize the accounting policies and methods used in the preparation of those consolidated financial statements. The policies and the estimates discussed below are included here because they require more significant judgments and estimates in the preparation and presentation of our consolidated financial statements than other policies and estimates. Actual amounts could differ materially from those estimated by us at the time our consolidated financial statements are prepared.

Business combinations

Accounting for business combinations requires management to make significant estimates and assumptions, particularly for the valuation of intangible assets. The fair value of intangible assets are based upon widely-accepted valuation techniques, including discounted cash flows, multi period excess earnings method, and relief from royalty method, depending on the nature of the assets acquired or liabilities assumed. Inherent in each valuation technique are critical assumptions, including future revenue growth rates, gross margin, attrition rates, royalty rates, discount rates, and terminal value assumptions. The discount rates used to discount expected cash flows to present values are typically derived from a weighted average cost of capital analysis and adjusted to reflect inherent risks. Unanticipated events and circumstances may occur that could affect either the accuracy or validity of such assumptions, estimates or actual results. We also issue common shares in return for continuing employment services from certain previous unitholders, which are measured at the fair value on acquisition date and amortized to acquisition-related costs until restrictions lapse.

Goodwill

We perform impairment tests on goodwill and indefinite-lived intangible assets on an annual basis in accordance with US GAAP, or more frequently if events or changes in circumstances indicate that those assets might be impaired. Goodwill is tested for impairment at a reporting unit level, which is at the same level or one level below an operating segment. We determined our reporting units to be A&M, Mascus, and Rouse. We have preliminarily allocated the goodwill acquired as part of the Rouse acquisition to the Rouse reporting unit.

In accordance with Accounting Standards Update (“ASU”) 2017-04*, Intangibles – Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment (“ASU 2017-04”),* we begin with a qualitative assessment to determine whether a quantitative impairment test is necessary. If we determine, after performing an assessment based on the qualitative factors, that the fair value of the reporting unit is more likely than not less than the carrying amount, or that a fair value of the reporting unit substantially in excess of the carrying amount cannot be assured, then a quantitative impairment test would be performed. The quantitative test for impairment requires management to make judgments relating to future cash flows, growth rates and economic and market conditions. These evaluations are based on determining the fair value of a reporting unit or asset using a valuation method such as discounted cash flow or a relative, market-based approach. Historically, our reporting units have generated sufficient returns to recover the cost of goodwill.

A&M reporting unit goodwill

For the year ended December 31, 2020, we performed a qualitative assessment of the A&M reporting unit with consideration of the current global economic downturn as a result of the COVID-19 pandemic and we concluded there were no indicators of impairment that existed.

Mascus reporting unit goodwill

Goodwill arising from the acquisition of Mascus forms part of the reporting unit on December 31, 2020, and we performed the US GAAP goodwill impairment test. Using the cash flow methodology of the earnings approach, the fair value of the Mascus reporting unit was measured based on the present value of the cash flows that we expect the reporting unit to generate. In determining our future cash flows, we estimated an annual revenue growth rate ranging between 6% to 10% and an operating margin ranging between 52% to 59% from 2021 to 2025. We estimated a discount rate of 14% reflecting the risk premium on this reporting unit, and a terminal growth rate of 3.5% for the period beyond five years. As the fair value of the Mascus reporting unit was greater than its carrying amount, management concluded that Mascus goodwill was not impaired at December 31, 2020.

Rouse reporting unit goodwill

For the year ended December 31, 2020, we performed a qualitative assessment of the Rouse reporting unit and concluded there were no indicators of impairment that existed. There were no events and circumstances that occurred between the acquisition date and December 31, 2020 that indicated any potential of impairment.

Indefinite-lived intangible assets

Indefinite-lived intangible assets are tested at least annually for impairment, and between annual tests if indicators of potential impairment exist. To test our indefinite-lived intangible assets for impairment we first perform a qualitative assessment to determine if it is more likely than not that the carrying amount of our indefinite-lived intangible assets exceeds its fair value. If it is, a quantitative assessment is required. Based on our qualitative assessment, we determined there were no potential indicators of impairment of our indefinite-lived intangible assets at December 31, 2020.

Long-lived assets

We test long-lived assets, including amortizable intangible assets, for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. For the purpose of impairment testing, long-lived assets are grouped and tested for recoverability at the lowest level that generates independent cash flows. As a result of the COVID-19 pandemic, we reviewed for any events or changes in circumstances that indicate the carrying amount of our long-lived assets may not be recoverable. Our assessment concluded that despite the economic impact of the COVID-19 pandemic, we believe the carrying amounts of our long-lived assets are recoverable as at December 31, 2020.

Recoverability of trade receivables

Our trade receivables are generally secured by the equipment, and we determined the COVID-19 pandemic did not have a significant impact on our allowance for expected credit losses. Refer to Note 13 of the financial statements, Trade Receivables, regarding the activity in the allowance for expected credit losses.

Valuation of inventories

Inventory consists of equipment and other assets purchased for resale in an upcoming live on site auction or online marketplace event. We typically purchase inventory for resale through a competitive process where the consignor or vendor has determined this to be the preferred method of disposition through the auction process. We value our Inventory at the lower of cost and net realizable value where net realizable value represents the expected sale price upon disposition less make-ready costs and the costs of disposal and transportation.

For the year ended December 31, 2020, we reviewed our inventories balance to ensure that it is recorded at the lower of cost and net realizable value. Specific consideration was given to the impact on the net realizable value of our inventories balance given the global economic downturn triggered by the COVID-19 pandemic.

Share-based compensation

We measure the fair value of equity-classified share units as of the grant date. We calculate the fair value of stock options on the grant date using the Black-Scholes option pricing model. We calculate the fair value of share units without market conditions on the grant date based on the Company’s share price. We determine the fair value of share units with market conditions using the Monte Carlo simulation model. The fair value of awards expected to vest is expensed over the respective remaining service period, with the corresponding increase to APIC recorded in equity. Estimating fair value for share-based payment transactions requires determination of the most appropriate valuation model, which is dependent on the terms and conditions of the grant. This estimate may require determination of the most appropriate inputs to the valuation model, including the expected life of the share units or stock options, volatility and dividend yield, as well as making assumptions about them.

Accounting for income taxes
Income taxes are accounted for using the asset and liability method. Deferred income tax assets and liabilities are based on temporary differences (differences between the accounting basis and the tax basis of the assets and liabilities) and non-capital loss, capital loss, and tax credit carry-forwards. These are measured using the enacted tax rates and laws expected to apply when these differences reverse. Deferred tax benefits, including non-capital loss, capital loss, and tax credits carry-forwards, are recognized to the extent that realization of such benefits is considered more likely than not.

Liabilities for uncertain tax positions are recorded based on a two-step process. The first step is to evaluate the tax position for recognition by determining if the weight of available evidence indicates that it is more likely than not that the position will be sustained on audit, including resolution of related appeals or litigation processes, if any. The second step is to measure the tax benefit as the largest amount that is more than 50% likely of being realized upon settlement. We regularly assess the potential outcomes of examinations by tax authorities in determining the adequacy of our provision for income taxes. We also continually assess the likelihood and amount of potential adjustments and adjust the income tax provision, income taxes payable and deferred taxes in the period in which the facts that give rise to a revision become known.

Adoption of New Standards

Topic 326
Effective January 1, 2020, we adopted Topic 326, *Measurement of Credit Losses on Financial Instruments,* which replaces the ‘incurred loss methodology’ credit impairment model with a new forward-looking methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. The adoption of the standard had no material effect on the carrying values of our financial assets on the transition date. Periods prior to January 1, 2020 that are presented for comparative purposes have not been adjusted.

Topic 848
Effective January 1, 2020, we adopted Topic 848, *Facilitation of the Effects of Reference Rate Reform on Financial Reporting,* which provides relief for companies preparing for discontinuation of reference rates such as LIBOR. This guidance is effective immediately and can be applied until December 31, 2022. Our use of LIBOR is applicable on short term drawings on the committed revolving credit facilities in certain jurisdictions. If applicable, we will use the optional expedients available when reference rate changes occur.

Topic 842
Effective January 1, 2019, we adopted ASU No. 2016-02, *Leases (Topic 842)*. Refer to Note 25 of the financial statements, Leases, for a discussion of our lease accounting.

Other
In addition, effective January 1, 2020, we adopted ASU 2018-15, Intangibles – Goodwill and Other Internal-Use Software (Subtopic 350-40), *Customer’s Accounting for implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract* on a prospective basis. The adoption of ASU 2018-15 on January 1, 2020 using the prospective transition approach did not result in a material impact to the consolidated financial statements.

For a discussion of our new and amended accounting standards refer to Note 2 of the financial statements, Summary of significant accounting policies.

Recent Accounting Pronouncements
Recent accounting pronouncements that significantly impact our accounting policies or the presentation of our consolidated financial position or performance have been disclosed in the notes to our consolidated financial statements included in “Part II, Item 8: Financial Statements and Supplementary Data” presented elsewhere in this Annual Report on Form 10-K.

Non-GAAP Measures

We reference various non-GAAP measures throughout this Annual Report on Form 10-K. These measures do not have a standardized meaning and are, therefore, unlikely to be comparable to similar measures presented by other companies. The presentation of this financial information, which is not prepared under any comprehensive set of accounting rules or principles, is not intended to be considered in isolation of, or as a substitute for, the financial information prepared and presented in accordance with generally accepted accounting principles. Non-GAAP financial measures referred to in this report are labeled as “non-GAAP measure” or designated as such with an asterisk (*).

Adjusted Operating Income* Reconciliation

Adjusting operating income* eliminates the financial impact of adjusting items which are significant non-recurring items that we do not consider to be part of our normal operating results, such as acquisition-related costs, management reorganization costs, and certain other items, which we refer to as ‘adjusting items’. We believe that comparing adjusted operating income* for different financial periods provides useful information about the growth or decline of our operating income for the relevant financial period.

The following table reconciles adjusted operating income to operating income, which is the most directly comparable GAAP measure in our consolidated income statements.

	Year ended December 31,				
				% Change	
(in U.S. $000's, except percentages)	**2020**	**2019**	**2018**	**2020 over 2019**	**2019 over 2018**
Operating income	$ 263,160	$ 223,202	$ 185,189	18 %	21 %
Pre-tax adjusting items:					
Share-based payment recovery	—	(4,078)	—	(100)%	(100)%
Acquisition-related costs	5,213	—	—	100 %	— %
Severance	4,283	—	—	100 %	— %
IronPlanet reorganization costs	—	—	1,501	— %	(100)%
Adjusted operating income*	$ 272,656	$ 219,124	$ 186,690	24 %	17 %

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(1) Please refer to page 59 for a summary of adjusting items during the years ended December 31, 2020, 2019, and 2018.

(2) Adjusted operating income* represents operating income excluding the effects of adjusting items.

Adjusted Net Income Attributable to Stockholders* and Diluted Adjusted EPS Attributable to Stockholders* Reconciliation

We believe that adjusted net income attributable to stockholders* provides useful information about the growth or decline of our net income attributable to stockholders for the relevant financial period and eliminates the financial impact of adjusting items we do not consider to be part of our normal operating results. Diluted Adjusted EPS attributable to stockholders* eliminates the financial impact of adjusting items which are after-tax effects of significant non-recurring items that we do not consider to be part of our normal operating results, such as acquisition-related costs, management reorganization costs, and certain other items, which we refer to as ‘adjusting items’.

The following table reconciles adjusted net income attributable to stockholders* and diluted adjusted EPS attributable to stockholders* to net income attributable to stockholders and diluted EPS attributable to stockholders, which are the most directly comparable GAAP measures in our consolidated income statements.

	Year ended December 31,				
				% Change	
(in U.S. $000's, except share and per share data, and percentages)	**2020**	**2019**	**2018**	**2020 over 2019**	**2019 over 2018**
Net income attributable to stockholders	$ 170,095	$ 149,039	$ 121,479	14 %	23 %
Pre-tax adjusting items:					
Acquisition-related costs	5,213	—	—	100 %	— %
Share-based payment recovery	—	(4,078)	—	(100)%	(100)%
Severance	4,283	—		100 %	— %
IronPlanet reorganization costs	—	—	1,501	— %	(100)%
Gain on sale of equity accounted for investment	—	—	(4,935)	— %	100 %
Current income tax effect of adjusting items:					
Acquisition-related costs	(1,329)	—	—	(100)%	— %
Severance	(1,065)	—	—	(100)%	— %
IronPlanet reorganization costs	—	—	(376)	— %	100 %
Deferred income tax effect of adjusting items:					
Share-based payment recovery	—	688	—	(100)%	100 %
Current income tax adjusting item:					
Change in uncertain tax provision	2,293	—	—	100 %	— %
Deferred tax adjusting item:					
Change in uncertain tax provision	5,462	—	—	100 %	— %
Adjusted net income attributable to stockholders*	$ 184,952	$ 145,649	$ 117,669	27 %	24 %
Weighted average number of dilutive shares outstanding	110,310,984	109,759,123	109,388,236	1 %	0 %
Diluted earnings per share attributable to stockholders	$ 1.54	$ 1.36	$ 1.11	13 %	23 %
Diluted adjusted EPS attributable to Stockholders*	$ 1.68	$ 1.33	$ 1.08	26 %	23 %

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(1) Please refer to page 59 for a summary of adjusting items during the years ended December 31, 2020, 2019, and 2018.

(2) Adjusted net income attributable to stockholders* represents net income attributable to stockholders excluding the effects of adjusting items.

(3) Diluted adjusted EPS attributable to stockholders* is calculated by dividing adjusted net income attributable to stockholders*, net of the effect of dilutive securities, by the weighted average number of dilutive shares outstanding.

Adjusted EBITDA*

We believe adjusted EBITDA* provides useful information about the growth or decline of our net income when compared between different financial periods.

The following table reconciles adjusted EBITDA* to net income, which is the most directly comparable GAAP measure in, or calculated from, our consolidated income statements:

	Year ended December 31,				
				% Change	
(in U.S. $000's, except percentages)	**2020**	**2019**	**2018**	**2020 over 2019**	**2019 over 2018**
Net income	$ 170,358	$ 149,140	$ 121,506	14 %	23 %
Add: depreciation and amortization expenses	74,921	70,501	66,614	6 %	6 %
Add: interest expense	35,568	41,277	44,527	(14)%	(7)%
Less: interest income	(2,338)	(3,802)	(2,888)	(39)%	32 %
Add: income tax expense	65,530	41,623	31,006	57 %	34 %
Pre-tax adjusting items:					
Share-based payment recovery	—	(4,078)	—	(100)%	— %
Acquisition-related costs	5,213	—	—	100 %	— %
Severance	4,283	—	—	100 %	— %
IronPlanet reorganization costs	—	—	1,501	— %	(100)%
Gain on sale of equity accounted for investment	—	—	(4,935)	— %	(100)%
Adjusted EBITDA*	$ 353,535	$ 294,661	$ 257,331	20 %	15 %

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(1) Please refer to page 59 for a summary of adjusting items during the years ended December 31, 2020, 2019, and 2018.

(2) Adjusted EBITDA* is calculated by adding back depreciation and amortization expenses, interest expense, and income tax expense, and subtracting interest income from net income excluding the pre-tax effects of adjusting items.

Adjusted Net Debt* and Adjusted Net Debt*/Adjusted EBITDA* Reconciliation

We believe that comparing adjusted net debt*/adjusted EBITDA* on a trailing 12-month basis for different financial periods provides useful information about the performance of our operations as an indicator of the amount of time it would take us to settle both our short and long-term debt. We do not consider this to be a measure of our liquidity, which is our ability to settle only short-term obligations, but rather a measure of how well we fund liquidity. Measures of liquidity are noted under “Liquidity and Capital Resources”.

The following table reconciles adjusted net debt* to debt, adjusted EBITDA* to net income, and adjusted net debt*/adjusted EBITDA* to debt/ net income, respectively, which are the most directly comparable GAAP measures in, or calculated from, our consolidated financial statements.

	Year ended December 31,				
				% Change	
(in U.S. $millions, except percentages)	**2020**	**2019**	**2018**	**2020 over 2019**	**2019 over 2018**
Short-term debt	$ 29.1	$ 4.7	$ 19.9	520 %	(76)%
Long-term debt	636.7	645.5	711.3	(1)%	(9)%
Debt	665.8	650.2	731.2	2 %	-11%
Less: Cash and cash equivalents	(278.8)	(359.7)	(237.7)	(23)%	51 %
Adjusted net debt*	387.0	290.5	493.5	33 %	(41)%
Net income	$ 170.4	$ 149.1	$ 121.5	14 %	23 %
Add: depreciation and amortization expenses	74.9	70.5	66.6	6 %	6 %
Add: interest expense	35.6	41.3	44.5	(14)%	(7)%
Less: interest income	(2.3)	(3.8)	(2.9)	(39)%	31 %
Add: income tax expense	65.5	41.6	31.0	57 %	34 %
Pre-tax adjusting items:					
Share-based payment expense recovery	—	(4.1)	—	(100)%	(100)%
Acquisition-related costs	5.2	—	—	100 %	— %
Severance	4.3	—	—	100 %	— %
IronPlanet reorganization costs	—	—	1.5	— %	(100)%
Gain on sale of equity accounted for investment	—	—	(4.9)	— %	100 %
Adjusted EBITDA*	$ 353.6	$ 294.6	$ 257.3	20 %	14 %
Debt/net income	3.9 x	4.4 x	6 x	(11)%	(43)%
Adjusted net debt*/adjusted EBITDA*	1.1 x	1.0 x	1.9 x	11 %	(47)%

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(1) Please refer to page 59 for a summary of adjusting items during the years ended December 31, 2020, 2019, and 2018.

(2) Adjusted EBITDA* is calculated by adding back depreciation and amortization expenses, interest expense, and income tax expense, and subtracting interest income from net income excluding the pre-tax effects of adjusting items.

(3) Adjusted net debt* is calculated by subtracting cash and cash equivalents from short and long-term debt.

(4) Adjusted net debt*/adjusted EBITDA* is calculated by dividing adjusted net debt* by adjusted EBITDA*.

Operating Free Cash Flow* (“OFCF”) Reconciliation

We believe OFCF*, when compared on a trailing 12-month basis to different financial periods provides an effective measure of the cash generated by our business and provides useful information regarding cash flows remaining for discretionary return to stockholders, mergers and acquisitions, or debt reduction. Our balance sheet scorecard includes OFCF* as a performance metric. OFCF* is also an element of the performance criteria for certain annual short-term and long-term incentive awards.

The following table reconciles OFCF* to cash provided by operating activities, which is the most directly comparable GAAP measure in, or calculated from, our consolidated statements of cash flows:

	Year ended December 31,				
				% Change	
(in U.S. $ millions, except percentages)	**2020**	**2019**	**2018**	**2020 over 2019**	**2019 over 2018**
Cash provided by operating activities	$ 257.9	$ 332.8	$ 144.3	(23)%	131 %
Property, plant and equipment additions	14.3	13.6	16.9	5 %	(20)%
Intangible asset additions	28.9	27.4	26.1	5 %	5 %
Proceeds on disposition of property plant and equipment	(16.4)	(5.9)	(10.6)	178 %	(44)%
Net capital spending	$ 26.8	$ 35.1	$ 32.4	(24)%	8 %
OFCF*	$ 231.1	$ 297.7	$ 111.9	(22)%	166 %

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(1) OFCF* is calculated by subtracting net capital spending from cash provided by operating activities.

Adjusted Net Income Attributable to Stockholders* and Adjusted Dividend Payout Ratio* Reconciliation

We believe that adjusted net income attributable to stockholders* provides useful information about the growth or decline of our net income attributable to stockholders for the relevant financial period and eliminates the financial impact of adjusting items we do not consider to be part of our normal operating results. We believe that disclosing our adjusted dividend payout ratio* for different financial periods provides useful information about how well our net income supports our dividend payments.

The following table reconciles adjusted net income attributable to stockholders* and adjusted dividend payout ratio* to net income attributable to stockholders, and dividend payout ratio, which are the most directly comparable GAAP measures in, or calculated from, our consolidated financial statements:

	Year ended December 31,				
				% Change	
(in U.S. $millions, except percentages)	**2020**	**2019**	**2018**	**2020 over 2019**	**2019 over 2018**
Dividends paid to stockholders	$ 91.7	$ 82.5	$ 75.7	11 %	9 %
Net income attributable to stockholders	$ 170.0	$ 149.0	$ 121.5	14 %	23 %
Pre-tax adjusting items:					
Share-based payment expense recovery	—	(4.1)	—	(100)%	(100)%
Acquisition-related costs	5.2	—	—	100 %	— %
Severance	4.3	—	—	100 %	— %
IronPlanet reorganization costs	—	—	1.5	— %	(100)%
Gain on sale of equity accounted for investment	—	—	(4.9)	— %	100 %
Current income tax effect of adjusting items:					
Acquisition-related costs	(1.3)	—	—	(100)%	— %
Severance	(1.1)	—	—	(100)%	— %
IronPlanet reorganization costs	—	—	(0.4)	— %	100 %
Deferred income tax effect of adjusting items:					
Share-based payment expense recovery	—	0.7	—	(100)%	100 %
Current income tax adjusting item:					
Change in uncertain tax provision	2.3	—	—	100 %	— %
Deferred tax adjusting item:					
Change in uncertain tax provisions	5.5	—	—	100 %	— %
Adjusted net income attributable to stockholders*	$ 184.9	$ 145.6	$ 117.7	27 %	24 %
Dividend payout ratio	53.9 %	55.4 %	62.3 %	(150)bps	(690)bps
Adjusted dividend payout ratio*	49.6 %	56.7 %	64.3 %	(710)bps	(760)bps

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(1) Please refer to page 59 for a summary of adjusting items for the years ended December 31, 2020, 2019, and 2018.

(2) Adjusted net income attributable to stockholders* represents net income attributable to stockholders excluding the effects of adjusting items.

(3) Adjusted dividend payout ratio* is calculated by dividing dividends paid to stockholders by adjusted net income attributable to stockholders*.

Adjusted Net Income Attributable to Stockholders* and ROIC* Reconciliation

We believe that comparing ROIC* on a trailing 12-month basis for different financial periods, provides useful information about the after-tax return generated by our investments.

The following table reconciles adjusted net income attributable to stockholders* and ROIC* to net income attributable to stockholders and return on average invested capital which are the most directly comparable GAAP measures in, or calculated from, our consolidated financial statements:

	Year ended December 31,				
				% Change	
(in U.S. $millions, except percentages)	**2020**	**2019**	**2018**	**2020 over 2019**	**2019 over 2018**
Net income attributable to stockholders	$ 170.0	$ 149.0	$ 121.5	14 %	23 %
Pre-tax adjusting items:					
Share-based payment expense recovery	—	(4.1)	—	(100)%	(100)%
Acquisition-related costs	5.2	—	—	100 %	— %
Severance	4.3	—	—	100 %	— %
IronPlanet reorganization costs	—	—	1.5	— %	(100)%
Gain on sale of equity accounted for investment	—	—	(4.9)	— %	(100)%
Current income tax effect of adjusting items:					
Acquisition-related costs	(1.3)	—	—	(100)%	— %
Severance	(1.1)	—	—	(100)%	— %
IronPlanet reorganization costs	—	—	(0.4)	— %	(100)%
Deferred income tax effect of adjusting items:					
Share-based payment expense recovery	—	0.7	—	(100)%	100 %
Current income tax adjusting item:					
Change in uncertain tax provision	2.3	—	—	100 %	— %
Deferred tax adjusting item:					
Change in uncertain tax provisions	5.5	—	—	100 %	— %
Adjusted net income attributable to stockholders*	$ 184.9	$ 145.6	$ 117.7	27 %	24 %
Opening long-term debt	$ 645.5	$ 711.3	$ 812.9	(9)%	(12)%
Ending long-term debt	636.7	645.5	711.3	(1)%	(9)%
Average long-term debt	641.1	678.4	762.1	(6)%	(11)%
Opening stockholders' equity	$ 901.8	$ 830.6	$ 739.7	9 %	12 %
Ending stockholders' equity	1,007.2	901.8	830.6	12 %	9 %
Average stockholders' equity	954.5	866.2	785.2	10 %	10 %
Average invested capital	$ 1,595.6	$ 1,544.7	$ 1,547.3	3 %	(0)%
Return on average invested capital	10.7 %	9.6 %	7.9 %	110 bps	170 bps
ROIC*	11.6 %	9.4 %	7.6 %	220 bps	180 bps

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(1) Please refer to page 59 for a summary of adjusting items for the years ended December 31, 2020, 2019, and 2018.

(2) Return on average invested capital is calculated as net income attributable to stockholders divided by average invested capital. We calculate average invested capital as the average long-term debt and average stockholders' equity over a trailing 12-month period.

(3) ROIC* is calculated as adjusted net income attributable to stockholders* divided by average invested capital.

(4) The adoption of Leases (Topic 842) requires lessees to recognize almost all leases, including operating leases, on the balance sheet through a right-of-use asset and a corresponding lease liability. The lease liability is not included in the calculation of debt.

Adjusting items for the year ended December 31, 2020:

Recognized in the fourth quarter of 2020

- $5.2 million ($3.9 million after tax, or $0.04 per diluted share) of acquisition-related costs related to the acquisition of Rouse.
- $1.5 million ($0.01 per diluted share) of current income tax expense recognized related to an unfavourable adjustment to reflect final regulations published in Q2 2020 regarding hybrid financing arrangements.

Recognized in the third quarter of 2020

- $4.3 million ($3.2 million after tax, or $0.03 per diluted share) of severance costs related to the realignment of leadership to support the new global operations organization, in line with strategic growth priorities led by the new CEO.

Recognized in the second quarter of 2020

- $6.2 million ($0.06 per diluted share) in current and deferred income tax expense related to an unfavourable adjustment to reflect final regulations published regarding hybrid financing arrangements.

Recognized in the first quarter of 2020

- There were no adjustment items recognized in the first quarter of 2020.

Adjusting items for the year ended December 31, 2019:

Recognized in the fourth quarter of 2019

- $4.1 million ($3.4 million after tax, or $0.03 per diluted share) in share-based payment expense recovery related to the departure of our former CEO.

Recognized in the third quarter of 2019

- There were no adjustment items recognized in the third quarter of 2019.

Recognized in the second quarter of 2019

- There were no adjustment items recognized in the second quarter of 2019.

Recognized in the first quarter of 2019

- There were no adjustment items recognized in the first quarter of 2019.

Adjusting items for the year ended December 31, 2018:

Recognized in the fourth quarter of 2018

- There were no adjustment items recognized in the fourth quarter of 2018.

Recognized in the third quarter of 2018

- $1.5 million ($1.1 million after tax, or $0.01 per diluted share) of severance and retention costs in a corporate reorganization that followed the IronPlanet acquisition;
- $4.9 million ($4.9 million after tax, or $0.04 per diluted share) due to gain on sale of an equity accounted for investment.

Recognized in the second quarter of 2018

- There were no adjustment items recognized in the second quarter of 2018.

Recognized in the first quarter of 2018

- There were no adjustment items recognized in the first quarter of 2018.

ITEM 7A: QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Foreign Currency Exchange Rate Risk

We conduct operations in local currencies in countries around the world, but we use the U.S. dollar as our presentation currency. As a result, we are exposed to currency fluctuations and exchange rate risk. We cannot accurately predict the future effects of foreign currency fluctuations on our financial condition or results of operations, nor quantify their effects on the macroeconomic environment. The proportion of revenues denominated in currencies other than the U.S. dollar in a given period will differ from the annual proportion for the year ended December 31, 2020, which was 43%, depending on the size and location of auctions held during the period. On an annual basis, we expect fluctuations in revenues and operating expenses to largely offset and generally act as a natural hedge against exposure to fluctuations in the value of the U.S. dollar.

During 2020, we recorded a net increase in our foreign currency translation adjustment balance of $24.8 million, compared to a net decrease of $2.9 million in 2019 and a net decrease of $13.8 million in 2018. Our foreign currency translation adjustment arises from the translation of our net assets denominated in currencies other than the U.S. dollar to the U.S. dollar for reporting purposes. Based on our exposures to foreign currency transactions as at December 31, 2020, and assuming all other variables remain constant, a 10% appreciation or depreciation of the Canadian dollar and Euro against the U.S. dollar would result in an increase/decrease of approximately $31.2 million in our consolidated comprehensive income, of which $32.3 million relates to our foreign currency translation adjustment and is offset by $1.1 million to our net income.

Interest Rate Risk

Loans under our syndicated and foreign credit facilities, bear interest, at our option, at a rate equal to either a base rate (or Canadian prime rate for certain Canadian dollar borrowings) or LIBOR (or such floating rate customarily used by the syndicate for currencies other than U.S. dollars). In either case, an applicable margin is added to the rate. As at December 31, 2020, we had a total of $173.7 million in loans (short-term facilities drawn and term loans) bearing floating rates of interest, as compared to $159.3 million at December 31, 2019. Based on the amount owing as at December 31, 2020, and assuming all other variables remain constant, a change in the interest rate by 100 bps would result in an increase/decrease of approximately $1.7 million in the pre-tax interest we accrue per annum.

Our exposure to interest rate risk increased at December 31, 2020 compared to December 31, 2019, primarily due to the increase in short-term borrowings during 2020. The Notes of US $500.0 million, which represent 78% of our long-term debt, bear interest at a fixed rate of 5.375% per annum. The proportion of fixed-to-floating interest rates is expected to increase as we make the required principal repayments on our term loans and execute on our debt management strategies. We continue to monitor our exposure to interest rate risk, and while we have not adopted a long-term hedging strategy to protect against interest rate fluctuations associated with our variable rate debt, we may consider hedging specific borrowings if we deem it appropriate in the future.

Inflation

Although we cannot accurately anticipate the future effect of inflation on our financial condition or results of operations, inflation historically has not had a material impact on our operations.

ITEM 8: FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The following financial statements and supplementary data should be read in conjunction with “Part II, Item 6: Selected Financial Data” of this Annual Report on Form 10-K.

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Ritchie Bros. Auctioneers Incorporated

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Ritchie Bros. Auctioneers Incorporated (the “Company“) as of December 31, 2020 and 2019, the related consolidated statements of income, comprehensive income, changes in equity and cash flows for each of the three years in the period ended December 31, 2020, and the related notes (collectively referred to as the “consolidated financial statements“). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020, in conformity with US generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (“PCAOB”), the Company’s internal control over financial reporting as of December 31, 2020, based on the criteria established in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework), and our report dated February 18, 2021 expressed an adverse opinion on the effectiveness of the Company’s internal control over financial reporting.

Basis for Opinion

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

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the 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 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 financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the financial statements and (2) 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.

Valuation of Goodwill related to the Mascus reporting unit

Description of the Matter

At December 31, 2020, the Company’s goodwill related to Mascus was $21.6 million. As discussed in Note 2(r) to the consolidated financial statements, goodwill is tested for impairment at least annually at the reporting unit level. The Company’s goodwill is further described in note 19 to the consolidated financial statements.

Auditing management’s annual goodwill impairment test related to the Mascus reporting unit involved subjective auditor judgment due to the significant estimation uncertainly in determining the fair value of the reporting unit. The fair value estimate was made using a discounted cash flow model. Significant judgment was required in assessing the assumptions used, in particular projected revenue growth rates, the terminal growth rate, projected earnings before interest, taxes, depreciation and amortization (EBITDA) margins and the discount rate.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design and tested the operating effectiveness of controls over the Company’s goodwill impairment review, including controls over management’s review of the significant assumptions described above.

Our substantive procedures to test the Company’s estimated fair value of the Mascus reporting unit, included, among others, assessing methodologies and testing the significant assumptions discussed above and the underlying data used by the Company in its analysis. We assessed the projected revenue growth rates, terminal growth rates and EBITDA margins used by management by comparing them to current economic and industry trends. We assessed the accuracy of the Company’s projections for revenue growth rates and EBITDA margins by comparing the projections to actual historic operating results. We performed sensitivity analysis of significant assumptions discussed above to evaluate the potential changes in the fair value of the reporting unit that would result from changes in the assumptions. We also involved our valuation specialists to assist in the review of the valuation methodology as well as the appropriateness of the discount rates used.

Accounting for Acquisitions

Description of the Matter

As disclosed in Note 4 to the consolidated financial statements, on December 8, 2020, the Company completed its acquisition of Rouse Services LLC (“Rouse”) for net consideration of $251.7 million. The transaction was accounted for as a business combination.

Auditing the Company’s accounting for its acquisition of Rouse was complex due to the significant estimation required by management to determine the fair value of the intangible assets acquired, in particular customer relationships of $71.0 million. The significant estimation uncertainty was primarily due to the sensitivity of the fair value to underlying assumptions about the future performance of the acquired business. The Company used a discounted cash flow model to measure the customer relationship intangible asset. The significant assumptions used to estimate the value of the intangible asset included the discount rate and certain assumptions that form the basis of the forecasted results, in particular revenue growth rates, earnings before interest, taxes, depreciation and amortization (EBITDA) margins, customer attrition rates and the forecast period. These significant assumptions are forward looking and could be affected by future economic and market conditions.

How We Addressed the Matter in Our Audit	We obtained an understanding, evaluated the design and tested the operating effectiveness of the Company’s controls over its accounting for acquisitions, including controls over the estimation process supporting the recognition and measurement of the customer relationship intangible asset and controls over management’s review of the significant assumptions described above. To test the estimated fair value of the customer relationship intangible asset, we performed audit procedures that included, among others, evaluating the Company's selection of the valuation methodology, evaluating the methods and significant assumptions incorporated therein and evaluating the completeness and accuracy of the underlying data supporting the significant assumptions. We compared the revenue growth rates, EBITDA margins and the forecast period to current industry, market and economic trends, the historical results of the acquired business and other guidelines used by companies within comparable industries. We also involved our valuation specialists to assist in the review of the valuation methodology, as well as the appropriateness of the discount rates and the customer attrition rates used.

/s/Ernst & Young LLP
Chartered Professional Accountants
We have served as the Company‘s auditor since 2013.
Vancouver, Canada
February 18, 2021

Consolidated Income Statements

(Expressed in thousands of United States dollars, except share and per share data)

Year ended December 31,	**2020**	**2019**	**2018**
Revenue:			
Service revenue	$ 871,596	$ 804,024	$ 749,515
Inventory sales revenue	505,664	514,617	420,511
Total revenue	1,377,260	1,318,641	1,170,026
Operating expenses:			
Costs of services	157,296	164,977	159,058
Cost of inventory sold	458,293	480,839	374,339
Selling, general and administrative expenses	417,523	382,389	382,676
Acquisition-related costs	6,014	777	5,093
Depreciation and amortization expenses	74,921	70,501	66,614
Gain on disposition of property, plant and equipment	(1,559)	(1,107)	(2,731)
Foreign exchange (gain) loss	1,612	(2,937)	(212)
Total operating expenses	1,114,100	1,095,439	984,837
Operating income	263,160	223,202	185,189
Interest expense	(35,568)	(41,277)	(44,527)
Other income, net	8,296	8,838	11,850
Income before income taxes	235,888	190,763	152,512
Income tax expense:			
Current income tax	56,378	32,797	24,767
Deferred income tax	9,152	8,826	6,239
	65,530	41,623	31,006
Net income	$ 170,358	$ 149,140	$ 121,506
Net income attributable to:			
Stockholders	$ 170,095	$ 149,039	$ 121,479
Non-controlling interests	263	101	27
Net income	$ 170,358	$ 149,140	$ 121,506
Earnings per share attributable to stockholders:			
Basic	$ 1.56	$ 1.37	$ 1.12
Diluted	$ 1.54	$ 1.36	$ 1.11
Weighted average number of shares outstanding:			
Basic	109,054,493	108,519,739	108,063,349
Diluted	110,310,984	109,759,123	109,388,236

See accompanying notes to the consolidated financial statements.

Consolidated Statements of Comprehensive Income

(Expressed in thousands of United States dollars)

Year ended December 31,	2020	2019	2018
Net income	$ 170,358	$ 149,140	$ 121,506
Other comprehensive income (loss), net of income tax:			
Foreign currency translation adjustment	24,861	(2,836)	(13,792)
Total comprehensive income	$ 195,219	$ 146,304	$ 107,714
Total comprehensive income attributable to:			
Stockholders	$ 194,899	$ 146,217	$ 107,716
Non-controlling interests	320	87	(2)
	$ 195,219	$ 146,304	$ 107,714

See accompanying notes to the consolidated financial statements.

Consolidated Balance Sheets

(Expressed in thousands of United States dollars, except share data)

As at December 31,	2020	2019
Assets		
Cash and cash equivalents	$ 278,766	$ 359,671
Restricted cash	28,129	60,585
Trade and other receivables	135,001	142,627
Less: allowance for credit losses	(5,467)	(5,225)
Inventory	86,278	64,956
Other current assets	27,274	50,160
Income taxes receivable	6,797	6,810
Total current assets	556,778	679,584
Property, plant and equipment	492,127	484,482
Other non-current assets	147,608	145,679
Intangible assets	300,948	233,380
Goodwill	840,610	672,310
Deferred tax assets	13,458	13,995
Total assets	$ 2,351,529	$ 2,229,430
Liabilities and Equity		
Auction proceeds payable	$ 214,254	$ 276,188
Trade and other payables	243,786	194,279
Income taxes payable	17,032	7,809
Short-term debt	29,145	4,705
Current portion of long-term debt	10,360	18,277
Total current liabilities	514,577	501,258
Long-term debt	626,288	627,204
Other non-current liabilities	153,000	151,238
Deferred tax liabilities	45,265	42,743
Total liabilities	1,339,130	1,322,443
Commitments and Contingencies (Note 26 and Note 27 respectively)		
Stockholders' equity:		
Share capital:		
Common stock; no par value, unlimited shares authorized, issued and outstanding shares: 109,876,428 (December 31, 2019: 109,337,781)	200,451	194,771
Additional paid-in capital	49,171	52,110
Retained earnings	791,918	714,051
Accumulated other comprehensive loss	(34,295)	(59,099)
Stockholders' equity	1,007,245	901,833
Non-controlling interest	5,154	5,154
Total stockholders' equity	1,012,399	906,987
Total liabilities and equity	$ 2,351,529	$ 2,229,430

See accompanying notes to the consolidated financial statements.

Consolidated Statements of Changes in Equity

(Expressed in thousands of United States dollars, except where noted)

	Attributable to stockholders							
	Common stock							
	Number of shares	Amount	Additional paid-In capital ("APIC")	Retained earnings	Accumulated other comprehensive income (loss)	Non-controlling interest ("NCI")	Total equity	Contingently redeemable performance share units ("PSUs")
Balance, December 31, 2017	107,269,783	$ 138,582	$ 41,005	$ 602,609	$ (42,514)	$ 5,069	$ 744,751	$ 9,014
Net income	—	—	—	121,479	—	27	121,506	—
Other comprehensive loss	—	—	—	—	(13,763)	(29)	(13,792)	—
	—	—	—	121,479	(13,763)	(2)	107,714	—
Change in value of contingently redeemable NCI	—	—	—	—	—	—	—	—
Stock option exercises	1,235,154	37,308	(8,784)	—	—	—	28,524	—
Issuance of common stock related to vesting of share units	177,093	5,890	(1,662)	(326)	—	—	3,902	(7,803)
Stock option compensation expense	—	—	8,252	—	—	—	8,252	—
Modification of PSUs	—	—	12,365	958	—	—	13,323	(6,622)
Equity-classified share units expense	—	—	5,384	—	—	—	5,384	5,872
Equity-classified share units dividend equivalents	—	—	325	(678)	—	—	(353)	353
Change in value of contingently redeemable equity-classified PSUs	—	—	—	(109)	—	—	(109)	109
Cash dividends paid	—	—	—	(75,678)	—	—	(75,678)	—
Balance, December 31, 2018	108,682,030	$ 181,780	$ 56,885	$ 648,255	$ (56,277)	$ 5,067	$ 835,710	$ 923
Net income	—	—	—	149,039	—	101	149,140	—
Other comprehensive loss	—	—	—	—	(2,822)	(14)	(2,836)	—
	—	—	—	149,039	(2,822)	87	146,304	—
Stock option exercises	1,672,022	49,117	(8,023)	—	—	—	41,094	—
Issuance of common stock related to vesting of share units	207,403	5,886	(10,064)	1	—	—	(4,177)	(1,083)
Stock option compensation expense	—	—	4,697	—	—	—	4,697	—
Equity-classified share units expense	—	—	7,933	—	—	—	7,933	114
Equity-classified share units dividend equivalents	—	—	682	(709)	—	—	(27)	46
Cash dividends paid	—	—	—	(82,535)	—	—	(82,535)	—
Shares repurchased	(1,223,674)	(42,012)	—	—			(42,012)	—
Balance, December 31, 2019	109,337,781	$ 194,771	$ 52,110	$ 714,051	$ (59,099)	$ 5,154	$ 906,987	$ —
Net income	—	—	—	170,095	—	263	170,358	—
Other comprehensive income	—	—	—	—	24,804	57	24,861	—
	—	—	—	170,095	24,804	320	195,219	—
Stock option exercises	1,563,941	55,669	(11,541)	—	—	—	44,128	—
Issuance of common stock related to vesting of share units	187,825	3,181	(9,900)	—	—	—	(6,719)	—
Issuance of common stock related to business combination	312,193	—	1,459	—	—	—	1,459	—
Share-based continuing employment costs	—	—	802	—	—	—	802	—
Stock option compensation expense	—	—	5,853	—	—	—	5,853	—
Equity-classified share units expense	—	—	9,897	—	—	—	9,897	—
Equity-classified share units dividend equivalents	—	—	491	(491)	—	—	—	—
Cash dividends paid	—	—	—	(91,737)	—	(320)	(92,057)	—
Shares repurchased	(1,525,312)	(53,170)	—	—	—	—	(53,170)	—
Balance, December 31, 2020	109,876,428	$ 200,451	$ 49,171	$ 791,918	$ (34,295)	$ 5,154	$ 1,012,399	$ —

See accompanying notes to the consolidated financial statements.

Consolidated Statements of Cash Flows

(Expressed in thousands of United States dollars)

Year ended December 31,	2020	2019	2018
Cash provided by (used in):			
Operating activities:			
Net income	$ 170,358	$ 149,140	$ 121,506
Adjustments for items not affecting cash:			
Depreciation and amortization expenses	74,921	70,501	66,614
Stock option compensation expense	5,853	4,697	8,252
Equity-classified share unit expense	9,897	8,047	11,256
Share-based continuing employment costs	802	—	—
Deferred income tax expense	9,152	8,826	6,239
Unrealized foreign exchange (gain) loss	2,453	(3,058)	951
Gain on disposition of property, plant and equipment	(1,559)	(1,107)	(2,731)
Amortization of debt issuance costs	3,123	4,086	4,995
Gain on disposition of equity investment	—	—	(4,935)
Amortization of right-of-use assets	12,240	12,280	—
Gain on contingent consideration from equity investment	(1,700)	—	—
Other, net	1,466	2,779	(2,317)
Net changes in operating assets and liabilities	(29,134)	76,602	(65,550)
Net cash provided by operating activities	257,872	332,793	144,280
Investing activities:			
Acquisition of Rouse, net of cash acquired	(250,039)	—	—
Property, plant and equipment additions	(14,263)	(13,589)	(16,860)
Proceeds on disposition of property, plant and equipment	16,385	5,929	10,586
Intangible asset additions	(28,873)	(27,415)	(26,152)
Issuance of loans receivable	(9,071)	—	—
Repayment of loans receivable	3,227	—	—
Distribution from equity investment	4,212	—	—
Proceeds on contingent consideration from equity investment	1,700	—	6,147
Other, net	—	(982)	(4,674)
Net cash used in investing activities	(276,722)	(36,057)	(30,953)
Financing activities:			
Share repurchase	(53,170)	(42,012)	—
Dividends paid to stockholders	(91,737)	(82,535)	(75,678)
Dividends paid to NCI	(320)	—	—
Proceeds from exercise of options and share option plans	44,128	41,094	28,524
Payment of withholding taxes on issuance of shares	(6,656)	(5,260)	(3,901)
Proceeds from short-term debt	50,799	13,169	19,715
Repayment of short-term debt	(29,368)	(28,684)	(6,628)
Repayment of long-term debt	(13,711)	(76,282)	(91,013)
Debt issue costs	(2,038)	—	—
Repayment of finance lease obligations	(9,388)	(6,708)	(3,950)
Other, net	—	—	(1,176)
Net cash used in financing activities	(111,461)	(187,218)	(134,107)
Effect of changes in foreign currency rates on cash, cash equivalents, and restricted cash	16,950	5,171	(4,769)
Increase (decrease)	(113,361)	114,689	(25,549)
Beginning of period	420,256	305,567	331,116
Cash, cash equivalents, and restricted cash, end of period	$ 306,895	$ 420,256	$ 305,567

See accompanying notes to the consolidated financial statements.

1. General information

Ritchie Bros. Auctioneers Incorporated and its subsidiaries (collectively referred to as the "Company") provide global asset management and disposition services, offering customers end-to-end solutions for buying and selling used industrial equipment and other durable assets through its unreserved live on site auctions, online marketplaces, listing services, and private brokerage services. Ritchie Bros. Auctioneers Incorporated is a company incorporated in Canada under the Canada Business Corporations Act, whose shares are publicly traded on the Toronto Stock Exchange ("TSX") and the New York Stock Exchange ("NYSE").

On December 8, 2020, the Company acquired all the issued and outstanding units of Rouse Services LLC ("Rouse"), which has been consolidated from the date of acquisition. Rouse is a leader in construction equipment market intelligence. Rouse generates its revenues by delivery of appraisals, used equipment sales support, and rental metrics benchmarking solutions to its customers. Please refer to Note 4 for further information.

2. Significant accounting policies

(a) Basis of preparation

These financial statements have been prepared in accordance with United States generally accepted accounting principles ("US GAAP") and the following accounting policies have been consistently applied, except as otherwise noted, in the preparation of the consolidated financial statements. There were no material changes in the significant accounting policies of the Company as a result of the acquisition of Rouse.

In March 2020, the World Health Organization declared the outbreak of COVID-19 as a pandemic, which continues to spread throughout the world. The extent of the impact of the COVID-19 pandemic on the operational and financial performance of the Company, including the ability to execute on business strategies and initiatives, will depend on future developments, including the duration and spread of the pandemic, time of mass vaccine distribution, and any related restrictions placed by respective global governments as well as supply and demand impacts driven by the Company's consignor and buyer base and our ability to move equipment to and from our auction sites, all of which are uncertain and cannot be easily predicted. Given the dynamic nature of this situation, the Company cannot reasonably estimate the impacts of COVID-19 on its business operations, results of operations, cash flows or financial performance.

(b) Basis of consolidation

The consolidated financial statements include the accounts of the Company and its wholly-owned and non-wholly owned subsidiaries in which the Company has a controlling financial interest either through voting rights or means other than voting rights. All inter-company transactions and balances have been eliminated on consolidation. Where the Company's ownership interest in a consolidated subsidiary is less than 100%, the non-controlling interests' share of these non-wholly owned subsidiaries is reported in the Company's consolidated balance sheets as a separate component of equity or within temporary equity. The non-controlling interests' share of the net income of these non-wholly owned subsidiaries is reported in the Company's consolidated income statements as a deduction from the Company's net earnings to arrive at net income attributable to stockholders of the Company.

Investments in entities that the Company has the ability to exercise significant influence over, but not control, are accounted for using the equity method of accounting. Under the equity method of accounting, investments are stated at initial costs and are adjusted for subsequent additional investments and the Company's share of earnings or losses and distributions.

The Company consolidates variable interest entities ("VIEs") if the Company has (a) the power to direct matters that most significantly impact the VIEs economic performance and (b) the obligation to absorb losses or the right to receive benefits of the VIE that could potentially be significant to the VIE. For VIEs where the Company has shared power with unrelated parties, the Company uses the equity method of accounting to report their results. The determination of the primary beneficiary involves judgment.

2. Significant accounting policies

(c) Revenue recognition

Revenues are comprised of:

- Service revenue, including the following:
    i. Revenue from auction and marketplace ("A&M") activities, including commissions earned at our live and online bidding auctions, online marketplaces, and private brokerage services where we act as an agent for consignors of equipment and other assets, and various auction-related fees, including listing and buyer transaction fees; and
    ii. Other services revenue, including revenue from listing services, refurbishment, logistical services, financing, appraisals, data subscriptions, and other ancillary service fees; and
- Inventory sales revenue as part of A&M activities

The Company recognizes revenue when control of the promised goods or services is transferred to our customers, or upon completion of the performance obligation, in an amount that reflects the consideration we expect to be entitled to in exchange for those goods or services. A performance obligation is a promise in a contract to transfer a distinct good or service, or a series of distinct goods or services, to the customer. A contract's transaction price is allocated to each distinct performance obligation and recognized as revenue when, or as, the performance obligation is satisfied. For live event-based auctions or online auctions, revenue is recognized when the auction sale is complete and the Company has determined that the sale proceeds are collectible. Revenue is measured at the fair value of the consideration received or receivable and is shown net of value-added tax and duties.

Service revenues

Commissions from sales at the Company's auctions represent the percentage earned by the Company on the gross proceeds from equipment and other assets sold at auction. The majority of the Company's commissions are earned as a pre-negotiated fixed rate of the gross selling price. Other commissions from sales at the Company's auctions are earned from underwritten commission contracts, when the Company guarantees a certain level of proceeds to a consignor.

The Company accepts equipment and other assets on consignment stimulating buyer interest through professional marketing techniques and matches sellers (also known as consignors) to buyers through the auction or private sale process. Prior to offering an item for sale on its online marketplaces, the Company also performs inspections.

Following the sale of the item, the Company invoices the buyer for the purchase price of the asset, taxes, and, if applicable, the buyer transaction fee, collects payment from the buyer, and remits the proceeds to the seller, net of the seller commissions, applicable taxes, and applicable fees. Commissions are calculated as a percentage of the hammer price of the property sold at auction. Fees are also charged to sellers for listing and inspecting equipment. Other revenue earned in the process of conducting the Company's auctions include administrative, documentation, and advertising fees.

On the fall of the auctioneer's hammer, the highest bidder becomes legally obligated to pay the full purchase price, which is the hammer price of the property purchased and the seller is legally obligated to relinquish the property in exchange for the hammer price less any seller's commissions. Commission and fee revenue are recognized on the date of the auction sale upon the fall of the auctioneer's hammer.

Under the standard terms and conditions of its auction sales, the Company is not obligated to pay a consignor for property that has not been paid for by the buyer, provided the property has not been released to the buyer. If the buyer defaults on its payment obligation, also referred to as a collapsed sale, the sale is cancelled in the period in which the determination is made, and the property is returned to the consignor or placed in a later event-based or online auction. Historically, service revenues on cancelled sales have not been material.

2. Significant accounting policies (continued)

(c) Revenue recognition (continued)

Online marketplace commission revenue is reduced by a provision for disputes, which is an estimate of disputed items that are expected to be settled at a cost to the Company, related to settlements of discrepancies under the Company's equipment condition certification program. The equipment condition certification refers to a written inspection report provided to potential buyers that reflects the condition of a specific piece of equipment offered for sale, and includes ratings, comments, and photographs of the equipment following inspection by one of the Company's equipment inspectors.

The equipment condition certification provides that a buyer may file a written dispute claim during an eligible dispute period for consideration and resolution at the sole determination of the Company if the purchased equipment is not substantially in the condition represented in the inspection report. Typically disputes under the equipment condition certification program are settled with minor repairs or additional services, such as washing or detailing the item; the estimated costs of such items or services are included in the provision for disputes.

Commission revenue are recorded net of commissions owed to third parties, which are principally the result of situations when the commission is shared with a consignor in an auction guarantee risk and reward sharing arrangement.

Underwritten commission contracts can take the form of guarantee contracts. Guarantee contracts typically include a pre-negotiated percentage of the guaranteed gross proceeds plus a percentage of proceeds in excess of the guaranteed amount. If actual auction proceeds are less than the guaranteed amount, commission is reduced; if proceeds are sufficiently lower, the Company can incur a loss on the sale. Losses, if any, resulting from guarantee contracts are recorded in the period in which the relevant auction is completed. If a loss relating to a guarantee contract held at the period end to be sold after the period end is known or is probable and estimable at the financial statement reporting date, the loss is accrued in the financial statements for that period. The Company's exposure from these guarantee contracts fluctuates over time.

Other services revenue also includes fees for refurbishment, logistical services, financing, appraisals, data subscriptions and other ancillary service fees. Fees are recognized in the period in which the service is provided or the product is delivered to the customer.

Inventory sales revenue

Underwritten commission contracts can take the form of inventory contracts. Revenue related to inventory contracts is recognized in the period in which the sale is completed, title to the property passes to the purchaser and the Company has fulfilled any other obligations that may be relevant to the transaction. In its role as auctioneer, the Company auctions its inventory to equipment buyers through the auction process. Following the sale of the item, the Company invoices the buyer for the purchase price of the asset, taxes, and, if applicable, the buyer transaction fee, and collects payment from the buyer.

On the fall of the auctioneer's hammer, the highest bidder becomes legally obligated to pay the full purchase price, which is the hammer price of the property purchased. Title to the property is transferred in exchange for the hammer price, and if applicable, the buyer transaction fee plus applicable taxes.

(d) Costs of services

Costs of services incurred in earning A&M revenues are comprised of expenses incurred in direct relation to conducting auctions ("direct expenses"), earning online marketplace revenue, and earning other fee revenue. Direct expenses include direct labour, buildings and facilities charges, travel, advertising and promotion costs and fees paid to unrelated third parties who introduce the Company to equipment sellers who sell property at the Company's auctions and marketplaces. Costs of services to operate our online marketplace revenue excludes hosting costs where we leverage a shared infrastructure that supports both our internal technology requirements and external sales to our customers.

2. Significant accounting policies (continued)

(d) Costs of services (continued)

Costs of services incurred to earn online marketplace revenue in addition to the costs listed above also include inspection costs. Inspections are generally performed at the seller's physical location. The cost of inspections includes payroll costs and related benefits for the Company's employees that perform and manage field inspection services, the related inspection report preparation and quality assurance costs, fees paid to contractors who perform field inspections, related travel and incidental costs for the Company's inspection service organization, and office and occupancy costs for its inspection services personnel. Costs of earning online marketplace revenue also include costs for the Company's customer support, online marketplace operations, logistics, title and lien investigation functions.

Costs of services incurred in earning other fee revenue include ancillary and logistical service expenses, direct labour (including commissions on sales), cloud infrastructure and hosting costs, software maintenance fees, and materials. Costs of services exclude depreciation and amortization expenses.

(e) Cost of inventory sold

Cost of inventory sold includes the purchase price of assets sold for the Company's own account and is determined using a specific identification basis.

(f) Share-based payments

The Company classifies a share-based payment award as an equity or liability payment based on the substantive terms of the award and any related arrangement.

Equity-classified share-based payments

The cost of equity-settled share-based payment arrangements is recorded based on the estimated fair-value at the grant date and charged to earnings over the vesting period.

Share unit plans

The Company has a senior executive performance share unit ("PSU") plan and an employee PSU plan that provides for the award of PSUs to certain senior executives and employees, respectively, of the Company. The Company has the option to settle certain share unit awards in cash or shares and expects to settle them in shares. The cost of PSUs granted is measured at the fair value of the underlying PSUs at the grant date. PSUs vest based on the passage of time and achievement of performance criteria.

The Company also has a senior executive restricted share unit ("RSU") plan and an employee RSU plan that provides for the award of RSUs to certain senior executives and employees, respectively, of the Company. The Company has the option to settle certain share unit awards in cash or shares and expects to settle them in shares. The cost of RSUs granted is measured at the fair value of the underlying RSUs based on the fair value of the Company's common shares at the grant date. RSUs vest based on the passage of time and include restrictions related to employment.

This fair value of awards expected to vest under these plans is expensed over the respective remaining service period of the individual awards, on an accelerated recognition basis, with the corresponding increase to APIC recorded in equity. At the end of each reporting period, the Company revises its estimate of the number of equity instruments expected to vest. The impact of the revision of the original estimates, if any, is recognized in earnings, such that the consolidated expense reflects the revised estimate, with a corresponding adjustment to equity. Dividend equivalents on the equity-classified PSUs and RSUs are recognized as a reduction to retained earnings over the service period.

2. Significant accounting policies (continued)

(f) Share-based payments (continued)

Stock option plans

The Company has three stock option compensation plans that provide for the award of stock options to selected employees, directors and officers of the Company. The cost of options granted is measured at the fair value of the underlying option at the grant date using the Black-Scholes option pricing model. The fair value of options expected to vest under these plans is expensed over the respective remaining service period of the individual awards, on an accelerated recognition basis, with the corresponding increase to APIC recorded in equity. Upon exercise, any consideration paid on exercise of the stock options and amounts fully amortized in APIC are credited to the common shares.

Liability-classified share-based payments

The Company maintains other share unit compensation plans that vest over a period of up to three years after grant. Under those plans, the Company is either required or expects to settle vested awards on a cash basis or by providing cash to acquire shares on the open market on the employee’s behalf, where the settlement amount is determined based on the average price of the Company’s common shares prior to the vesting date or, in the case of deferred share unit (“DSU”) recipients, following cessation of service on the Board of Directors.

These awards are classified as liability awards, measured at fair value at the date of grant and re-measured at fair value at each reporting date up to and including the settlement date. The determination of the fair value of the share units under these plans is described in note 24. The fair value of the awards is expensed over the respective vesting period of the individual awards with recognition of a corresponding liability. Changes in fair value after vesting are recognized through compensation expense. Compensation expense reflects estimates of the number of instruments expected to vest.

The impact of forfeitures and fair value revisions, if any, are recognized in earnings such that the cumulative expense reflects the revisions, with a corresponding adjustment to the settlement liability. Liability-classified share unit liabilities due within 12 months of the reporting date are presented in trade and other payables while settlements due beyond 12 months of the reporting date are presented in other non-current liabilities.

(g) Leases

The Company determines if an arrangement is a lease at inception. The Company may have lease agreements with lease and non-lease components, which are generally accounted for separately. Additionally, for certain vehicle and equipment leases, management applies a portfolio approach to account for the right-of-use ("ROU") assets and liabilities for assets leased with similar lease terms.

Operating leases

Operating leases are included in other non-current assets, trade and other payables, and other non-current liabilities in our consolidated balance sheets if the initial lease term is greater than 12 months. For leases with an initial term of 12 months or less the Company recognizes those lease payments on a straight-line basis over the lease term.

ROU assets represent the right to use an underlying asset for the lease term and lease liabilities represent the obligation to make lease payments arising from the lease. Operating lease ROU assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. As most of the Company's leases do not provide an implicit rate, management uses the incremental borrowing rate based on the information available at commencement date in determining the present value of lease payments. Management uses the implicit rate when readily determinable. The Company includes lease payments for renewal or termination options in its determination of lease term, ROU asset, and lease liability when it is reasonably certain that the Company will exercise these options. Lease expense for lease payments is recognized on a straight-line basis over the lease term and are included in costs of services and selling, general and administrative ("SG&A") expenses.

2. Significant accounting policies (continued)

(g) Leases (continued)

Finance leases

Finance lease ROU assets and liabilities are included in property, plant and equipment, trade and other payables, and other non-current liabilities in our consolidated balance sheets.

Finance lease ROU assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. As most of the Company's leases do not provide an implicit rate, management uses the incremental borrowing rate based on the information available at commencement date in determining the present value of lease payments. Management uses the implicit rate when readily determinable. The Company includes lease payments for renewal, purchase options, or termination options in its determination of lease term, ROU asset, and lease liability when it is reasonably certain that the Company will exercise these options. Finance lease ROU assets are generally amortized over the lease term and are included in depreciation expense. The interest on the finance lease liabilities is included in interest expense.

(h) Fair value measurement

Fair value is the exit price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The Company measures financial instruments or discloses select non-financial assets at fair value at each balance sheet date. Also, fair values of financial instruments measured at amortized cost are disclosed in note 12.

The Company uses valuation techniques that are appropriate in the circumstances and for which sufficient data is available to measure fair value, maximizing the use of relevant observable inputs and minimizing the use of unobservable inputs.

All assets and liabilities for which fair value is measured or disclosed in the financial statements at fair value are categorized within a fair value hierarchy, as disclosed in note 12, based on the lowest level input that is significant to the fair value measurement or disclosure. This fair value hierarchy gives the highest priority to quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3).

For assets and liabilities that are recognized in the financial statements at fair value on a recurring basis, the Company determines whether transfers have occurred between levels in the hierarchy by re-assessing categorization at the end of each reporting period.

For the purposes of fair value disclosures, the Company has determined classes of assets and liabilities on the basis of the nature, characteristics and risks of the assets or liability and the level of the fair value hierarchy as explained above.

(i) Foreign currency translation

The parent entity’s presentation and functional currency is the United States dollar. The functional currency for each of the parent entity’s subsidiaries is the currency of the primary economic environment in which the entity operates, which is usually the currency of the country of residency.

Accordingly, the financial statements of the Company’s subsidiaries that are not denominated in United States dollars have been translated into United States dollars using the exchange rate at the end of each reporting period for asset and liability amounts and the monthly average exchange rate for amounts included in the determination of earnings. Any gains or losses from the translation of asset and liability amounts are included in foreign currency translation adjustment in accumulated other comprehensive income.

In preparing the financial statements of the individual subsidiaries, transactions in currencies other than the entity’s functional currency are recognized at the rates of exchange prevailing at the dates of the transaction. At the end of each reporting period, monetary assets and liabilities denominated in foreign currencies are retranslated at the rates prevailing at that date. Foreign currency differences arising on retranslation of monetary items are recognized in earnings.

2. Significant accounting policies (continued)

(j) Cash and cash equivalents

Cash and cash equivalents is comprised of cash on hand, deposits with financial institutions, and other short-term, highly liquid investments with original maturity of three months or less when acquired, that are readily convertible to known amounts of cash.

(k) Restricted cash

In certain jurisdictions, local laws require the Company to hold cash in segregated bank accounts, which are used to settle auction proceeds payable resulting from live on site auctions and online marketplace sales conducted in those regions. In addition, the Company also holds cash generated from its online marketplace sales in separate escrow accounts, for settlement of the respective online marketplace transactions as a part of its secured escrow service. Restricted cash balances also include funds held in accounts owned by the Company in support of short-term stand-by letters of credit to provide seller security.

(l) Trade and other receivables

Trade receivables principally include amounts due from customers as a result of live on site auction and online marketplace transactions. The recorded amount reflects the purchase price of the item sold, including the Company’s commission. The allowance for credit losses is the Company’s best estimate of the amount of probable credit losses in existing accounts receivable. The Company determines the allowance based on historical write-off experience, customer economic data and reasonable and supportable forecasts of future economic conditions.

The Company reviews the allowance for credit losses regularly and past due balances are reviewed for collectability. Account balances are charged against the allowance when the Company believes that the receivable will not be recovered.

(m) Inventories

Inventory consists of equipment and other assets purchased for resale in an upcoming live on site auction or online marketplace event. The Company typically purchases inventory for resale through a competitive process where the consignor or vendor has determined this to be the preferred method of disposition through the auction process. In addition, certain jurisdictions require auctioneers to hold title to assets and facilitate title transfer on sale. Inventory is valued at the lower of cost and net realizable value where net realizable value represents the expected sale price upon disposition less make-ready costs and the costs of disposal and transportation. As part of its government business, the Company purchases inventory for resale as part of its commitment to purchase certain surplus government property (Note 26). The significant elements of cost include the acquisition price, in-bound transportation costs of the inventory, and make-ready costs to prepare the inventory for sale that are not selling expenses. Write-downs to the carrying value of inventory are recorded in cost of inventory sold on the consolidated income statement.

(n) Property, plant and equipment

All property, plant and equipment are stated at cost less accumulated depreciation. Cost includes all expenditures that are directly attributable to the acquisition or development of the asset, net of any amounts received in relation to those assets, including scientific research and experimental development tax credits.

The cost of self-constructed assets includes the cost of materials and direct labour, any other costs directly attributable to bringing the assets to working condition for their intended use, the costs of dismantling and removing items and restoring the site on which they are located (if applicable), and capitalized interest on qualifying assets. Subsequent costs are included in the asset’s carrying amount or recognized as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Company and the cost of the item can be measured reliably.

2. Significant accounting policies (continued)

(n) Property, plant and equipment (continued)

All repairs and maintenance costs are charged to earnings during the financial period in which they are incurred. Gains and losses on disposal of an item of property, plant and equipment are determined by comparing the proceeds from disposal with the carrying amount of the item and are recognized net within operating income on the income statement.

Depreciation is provided to charge the cost of the assets to operations over their estimated useful lives based on their usage as follows:

Asset	Basis	Rate / term
Land improvements	Declining balance	10 %
Buildings	Straight-line	15 - 30 years
Yard equipment	Declining balance	20 - 30 %
Automotive equipment	Declining balance	30 %
Computer software and equipment	Straight-line	3 - 5 years
Office equipment	Declining balance	20 %
Leasehold improvements	Straight-line	Lesser of lease term or economic life

No depreciation is provided on freehold land or on assets in the course of construction or development. Depreciation of property, plant and equipment under finance leases is recorded in depreciation expense.

Legal obligations to retire and to restore property, plant and equipment and assets under operating leases are recorded at management's best estimate in the period in which they are incurred, if a reasonable estimate can be made, with a corresponding increase in asset carrying value. The liability is accreted to face value over the remaining estimated useful life of the asset. The Company does not have any significant asset retirement obligations.

(o) Long-lived assets held for sale

Long-lived assets, or disposal groups comprising assets and liabilities, that are expected to be recovered primarily through sale rather than through continuing use are classified as assets held for sale. Immediately before classification as held for sale, the assets, or components of a disposal group, are measured at carrying amount in accordance with the Company's accounting policies. Thereafter, the assets, or disposal group, are measured at the lower of their carrying amount and fair value less cost to sell and are not depreciated. Impairment losses on initial classification as held for sale and subsequent gains or losses on re-measurement are recognized in operating income on the income statement.

(p) Intangible assets

Intangible assets are measured at cost less accumulated amortization and accumulated impairment losses. Cost includes all expenditures that are directly attributable to the acquisition or development of the asset, net of any amounts received in relation to those assets, including scientific research and experimental development tax credits. Costs of internally developed software and technology assets are amortized on a straight-line basis over the remaining estimated economic life of the software product and technology assets. Costs related to software and technology assets incurred prior to establishing technological feasibility or the beginning of the application development stage of software and technology assets are charged to operations as such costs are incurred. Once technological feasibility is established or the application development stage has begun, directly attributable costs are capitalized until the software and technology assets are available for use.

2. Significant accounting policies (continued)

(p) Intangible assets (continued)

Amortization is recognized in net earnings on a straight-line basis over the estimated useful lives of intangible assets from the date that they are available for use. The estimated useful lives are:

Asset	Basis	Rate / term
Trade names and trademarks	Straight-line	2 - 15 years or indefinite-lived
Customer relationships	Straight-line	6 - 20 years
Software and technology assets	Straight-line	3 - 7 years

Customer relationships includes relationships with buyers and sellers.

(q) Impairment of long-lived and indefinite-lived assets

Long-lived assets, comprised of property, plant and equipment, ROU assets, and intangible assets subject to amortization, are assessed for impairment whenever events or circumstances indicate that their carrying value may not be recoverable. For the purpose of impairment testing, long-lived assets are grouped and tested for recoverability at the lowest level that generates independent cash flows. An impairment loss is recognized when the carrying value of the assets or asset groups is greater than the future projected undiscounted cash flows. The impairment loss is calculated as the excess of the carrying value over the fair value of the asset or asset group. Fair value is based on valuation techniques or third party appraisals. Significant estimates and judgments are applied in determining these cash flows and fair values.

Indefinite-lived intangible assets are tested annually for impairment as of December 31, and between annual tests if indicators of potential impairment exist. The Company has the option of performing a qualitative assessment to first determine whether the quantitative impairment test is necessary. This involves an assessment of qualitative factors to determine the existence of events or circumstances that would indicate whether it is more likely than not that the carrying amount of the indefinite-lived intangible asset is less than its fair value. If the qualitative assessment indicates it is not more likely than not that the carrying amount is less than its fair value, a quantitative impairment test is not required. Where a quantitative impairment test is required, the procedure is to compare the indefinite-lived intangible asset’s fair value with its carrying amount. An impairment loss is recognized as the difference between the indefinite-lived intangible asset’s carrying amount and its fair value.

(r) Goodwill

Goodwill represents the excess of the purchase price of an acquired enterprise over the fair value assigned to the assets acquired and liabilities assumed in a business combination.

Goodwill is not amortized, but it is tested annually for impairment at the reporting unit level as of December 31, and between annual tests if indicators of potential impairment exist. The Company has the option of performing a qualitative assessment of a reporting unit to first determine whether the quantitative impairment test is necessary. This involves an assessment of qualitative factors to determine the existence of events or circumstances that would indicate whether it is more likely than not that the carrying amount of the reporting unit to which goodwill belongs is less than its fair value. If the qualitative assessment indicates it is not more likely than not that the reporting unit’s carrying amount is less than its fair value, a quantitative impairment test is not required.

If a quantitative impairment test is required, the procedure is to identify potential impairment by comparing the reporting unit’s fair value with its carrying amount, including goodwill. The reporting unit’s fair value is determined using various valuation approaches and techniques that involve assumptions based on what the Company believes a hypothetical marketplace participant would use in estimating fair value on the measurement date. An impairment loss is recognized as the difference between the reporting unit’s carrying amount and its fair value. If the difference between the reporting unit’s carrying amount and fair value is greater than the amount of goodwill allocated to the reporting unit, the impairment loss is restricted by the amount of the goodwill allocated to the reporting unit.

2. Significant accounting policies (continued)

(s) Deferred financing costs

Deferred financing costs represent the unamortized costs incurred on the issuance of the Company's long-term debt. Amortization of deferred financing costs is provided on the effective interest rate method over the term of the facility. Deferred financing costs relating to the Company's term debt are presented in the consolidated balance sheet as a direct reduction of the carrying amount of the long-term debt. Deferred financing costs relating to the Company's revolving loans are presented on the balance sheet as a deferred charge.

(t) Taxes

Income tax expense represents the sum of current tax expense and deferred tax expense.

Current tax

The current tax expense is based on taxable profit for the period and includes any adjustments to tax payable in respect of previous years. Taxable profit differs from income before income taxes as reported in the consolidated income statement because it excludes (i) items of income or expense that are taxable or deductible in other years and (ii) items that are never taxable or deductible. The Company's liability for current tax is calculated using tax rates that have been enacted by the balance sheet date.

Deferred tax

Income taxes are accounted for using the asset and liability method. Deferred income tax assets and liabilities are based on temporary differences, which are differences between the accounting basis and the tax basis of the assets and liabilities, and non-capital loss, capital loss, and tax credits carryforwards are measured using the enacted tax rates and laws expected to apply when these differences reverse. Deferred tax benefits, including non-capital loss, capital loss, and tax credits carryforwards, are recognized to the extent that realization of such benefits is considered more likely than not. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in earnings in the period that enactment occurs. When realization of deferred income tax assets does not meet the more-likely-than-not criterion for recognition, a valuation allowance is provided.

Interest and penalties related to income taxes, including unrecognized tax benefits, are recorded in income tax expense in the income statement.

Liabilities for uncertain tax positions are recorded based on a two-step process. The first step is to evaluate the tax position for recognition by determining if the weight of available evidence indicates that it is more likely than not that the position will be sustained on audit, including resolution of related appeals or litigation processes, if any. The second step is to measure the tax benefit as the largest amount that is more than 50% likely of being realized upon settlement. The Company regularly assesses the potential outcomes of examinations by tax authorities in determining the adequacy of its provision for income taxes. The Company continually assesses the likelihood and amount of potential adjustments and adjusts the income tax provision, income taxes payable, and deferred taxes in the period in which the facts that give rise to a revision become known.

(u) Earnings per share

Basic earnings per share has been calculated by dividing net income attributable to stockholders by the weighted average number of common shares outstanding. Diluted earnings per share has been determined after giving effect to outstanding dilutive stock options and share units calculated by adjusting the net income attributable to stockholders and the weighted average number of shares outstanding for all dilutive shares.

2. Significant accounting policies (continued)

(v) Defined contribution plans

The employees of the Company are members of retirement benefit plans to which the Company matches up to a specified percentage of employee contributions or, in certain jurisdictions, contributes a specified percentage of payroll costs as mandated by the local authorities. The only obligation of the Company with respect to the retirement benefit plans is to make the specified contributions.

(w) Advertising costs

Advertising costs are expensed as incurred. Advertising expense is included in costs of services and selling, general and administrative ("SG&A") expenses on the accompanying consolidated income statements.

(x) Business combinations

Business combinations are accounted for using the acquisition method. The purchase price is determined based on the fair value of the assets transferred, liabilities incurred, and equity interest issued, after considering any transactions that are separate from the business combination. The Company allocates the aggregate of the fair value of the purchase consideration transferred to the tangible and intangible assets acquired and the liabilities assumed on the basis of their fair values at the date of acquisition, with any excess recorded as goodwill. The fair value determinations require judgement and may involve the use of significant estimates and assumptions, especially with respect to intangible assets and contingent liabilities. The purchase price allocation may be provisional during a measurement period of up to one year to provide reasonable time to obtain the information necessary to identify and measure the assets acquired and liabilities assumed. Any such measurement period adjustments are recognized to the assets and liabilities assumed, with the corresponding offset to goodwill, in the period in which the adjustment amounts are determined. Acquisition-related costs associated with the acquisition are expensed as incurred.

(y) New and amended accounting standards

a. Effective January 1, 2020, the Company adopted ASU 2016-13, Financial Instruments – Credit Losses (Topic 326), *Measurement of Credit Losses on Financial Instruments*. The new standard replaces the 'incurred loss methodology' credit impairment model with a new forward-looking "methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates." In applying the new standard, the Company has adopted the loss rate methodology to estimate historical losses on trade receivables. The historical data is adjusted to account for forecasted changes in the macroeconomic environment in order to calculate the current expected credit loss. The Company's adoption of ASC 326 did not result in a material change in the carrying values of the Company's financial assets on the transition date. Periods prior to January 1, 2020 that are presented for comparative purposes have not been adjusted.

b. In March 2020, the FASB issued ASU 2020-04, Reference Rate Reform (Topic 848), *Facilitation of the Effects of Reference Rate Reform on Financial Reporting*. The update provides "optional expedients and exceptions for applying generally accepted accounting principles to contract modifications and hedging relationships, subject to meeting certain criteria, that reference LIBOR or another reference rate expected to be discontinued." The amendments are effective immediately and may be applied prospectively to contract modifications made and hedging relationships entered into or evaluated on or before December 31, 2022. The Company's use of LIBOR is applicable on short-term drawings on the committed revolving credit facilities in certain jurisdictions. If applicable, the Company will use the optional expedients available when reference rate changes occur.

c. Effective January 1, 2020, the Company adopted ASU 2018-15, Intangibles – Goodwill and Other Internal-Use Software (Subtopic 350-40), *Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract* on a prospective basis. The update aligns the accounting for costs incurred to implement a cloud computing arrangement that is a service agreement with the guidance on capitalizing costs associated with developing or obtaining internal-use software. The adoption of ASU 2018-15 on January 1, 2020 using the prospective transition approach has not resulted in a material impact to the consolidated financial statements.

3. Significant judgments, estimates and assumptions

The preparation of financial statements in conformity with US GAAP requires management to make judgments, estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period.

Future differences arising between actual results and the judgments, estimates and assumptions made by the Company at the reporting date, or future changes to estimates and assumptions, could necessitate adjustments to the underlying reported amounts of assets, liabilities, revenues and expenses in future reporting periods.

Judgments, estimates and underlying assumptions are evaluated on an ongoing basis by management, and are based on historical experience and other factors including expectations of future events that are believed to be reasonable under the circumstances. However, existing circumstances and assumptions about future developments may change due to market changes or circumstances and such changes are reflected in the assumptions when they occur. Significant items subject to estimates include, the recoverable amounts of goodwill and indefinite-lived intangible assets, the useful lives of long-lived assets and finite-lived intangible assets, share-based compensation, share-based continuing employment costs, the determination of lease term and lease liabilities, deferred income taxes, reserves for tax uncertainties, and other contingencies. Accounting for business combinations requires estimates with respect to the fair value of the assets acquired and liabilities assumed. Such estimates of fair value may require valuation methods which use significant estimates and assumptions. At the acquisition of Rouse, we estimated the fair value of the intangible assets acquired, using a valuation method, which required management to make estimates with respect to expected future cash flows and growth rates, gross margins, attrition rates, royalty rates, discount rates, terminal value, and forecast period. The Company based these estimates on historical and anticipated results, industry trends, economic analysis, and various other assumptions that it believes are reasonable, including assumptions as to future events.

As of December 31, 2020, the Company performed a qualitative assessment of the A&M and Rouse reporting units and a quantitative assessment of the Mascus reporting unit with consideration of the current global economic downturn as a result of COVID-19 and the Company concluded there were no indicators of impairment.

4. Business combination

Rouse acquisition

On December 8, 2020, the Company acquired all of the issued and outstanding units of Rouse for a total purchase price of $251,724,000. The Company paid cash consideration of $250,265,000, of which $2,169,000 was placed in escrow.

Rouse is a leading provider of construction equipment market data intelligence and performance benchmarking solutions. Rouse provides appraisals to asset backed lenders, market intelligence and software to rental companies, contractors and dealers to optimize the used equipment sales process, and comparisons of rental rates, utilization, and other key performance metrics to industry benchmarks for rental companies and dealers. The combination of Rouse with the Company is expected to enhance the data analytics and service offerings available to customers.

The acquisition was accounted for in accordance with ASC 805, *Business Combinations*. The following table summarizes the fair value of consideration transferred at the date of acquisition, as well as our preliminary allocation of the purchase price to the fair value of assets acquired and liabilities assumed.

	December 8, 2020
Cash consideration paid on closing	$ 250,265
Equity consideration paid for pre-combination services	1,459
Purchase price	$ 251,724

4. Business combinations (continued)

Rouse acquisition (continued)

Rouse purchase price allocation

		December 8, 2020
Purchase price	$	251,724
Assets acquired:		
Cash and cash equivalents	$	226
Trade and other receivables		4,601
Other current assets		159
Property, plant and equipment		1,171
Other non-current assets		3,741
Deferred tax assets		7,584
Intangible assets		79,300
Liabilities assumed:		
Trade and other payables		6,704
Other non-current liabilities		3,188
Deferred tax liabilities		936
Fair value of identifiable net assets acquired		85,954
Goodwill acquired on acquisition	$	165,770

The following table summarizes the fair values of the identifiable intangible assets acquired:

Asset		Fair value at acquisition	Weighted average amortization period
Customer relationships		71,000	15 years
Software and technology assets		7,500	4 years
Trade names and trademarks	$	800	2 years
Total	$	79,300	13.8 years

The amounts included in the Rouse provisional purchase price allocation are preliminary in nature and are subject to adjustment as additional information is obtained about the facts and circumstances that existed at the date of the acquisition. The final determination of the fair values of certain assets and liabilities will be completed within the measurement period of up to one year from the acquisition date and will be finalized upon the determination of closing working capital. Adjustments to the preliminary values during the measurement period may impact the amounts recorded as assets and liabilities with a corresponding adjustment to goodwill, and will be recognized in the period in which the adjustments are determined.

Goodwill

Goodwill has been preliminarily assigned and allocated to “Other” for segmented information purposes and is based on an analysis of the fair value of net assets acquired. Goodwill relates to benefits expected from the acquisition of Rouse’s business, its assembled workforce and associated technical expertise, as well as anticipated synergies from the Company’s auction expertise and transactional capabilities to Rouse’s existing customer base. The transaction is considered a taxable business combination and all of the goodwill is deductible for tax purposes.

4. Business combinations (continued)

Contributed revenue and net income

The results of Rouse's operations are included in these consolidated financial statements from the date of acquisition. Rouse contributed revenue of $1,922,000 and net income of $181,000 which includes $460,000 amortization of intangible assets for the period from December 8, 2020 to December 31, 2020. Pro forma results of operations have not been presented as such pro forma financial information would not be significantly different from historical results.

Transactions recognized separately from the acquisition of assets and assumptions of liabilities

At the date of acquisition, the Company issued 312,193 common shares to certain previous unitholders of Rouse in return for their continuing employment service. The common shares are expected to vest at various vesting dates over a three-year period from the date of acquisition as continuing employment services are provided to the Company. At the date of acquisition, the Company estimated that it will recognize a total fair value of $20,735,000 share-based continuing employment costs in acquisition-related costs over the vesting period, with an increase to additional paid-in capital, subject to continuing employment of those individuals. As and when the common shares vest, the Company will recognize the fair value of the issued common shares from additional paid-in capital to share capital.

Subsequent to December 31, 2020, one of the previous unitholders of Rouse, who became an employee of the Company after the acquisition, terminated the employment contract which resulted in the forfeiture of 55,510 shares as no vesting conditions had been achieved. As a result, the revised number of common shares expected to vest is 256,683 and the revised total fair value of the share-based continuing employment costs expected to be recognized is $17,931,000.

As part of the acquisition, the Company incurred $6,014,000 of acquisition-related costs for legal, advisory, integration and other professional fees, which included $802,000 of share-based continuing employment costs. These costs are included in the consolidated income statement for the period ended December 31, 2020 (Note 7).

5. Segmented information

The Company's principal business activity is the management and disposition of used industrial equipment and other durable assets. The Company's operations are comprised of one reportable segment and other business activities that are not reportable as follows:

- Auctions and Marketplaces – This is the Company's only reportable segment, which consists of the Company's live on site auctions, its online auctions and marketplaces, and its brokerage service;

- Other includes the results of Rouse, Ritchie Bros. Financial Services ("RBFS"), Mascus online services, and the results from various value-added services and make-ready activities, including the Company's equipment refurbishment services, Asset Appraisal Services, and Ritchie Bros. Logistical Services.

5. Segmented information (continued)

	Year ended December 31, 2020		
	A&M	**Other**	**Consolidated**
Service revenue	$ 740,043	$ 131,553	$ 871,596
Inventory sales revenue	505,664	—	505,664
Total revenue	$ 1,245,707	$ 131,553	$ 1,377,260
Costs of services	92,195	65,101	157,296
Cost of inventory sold	458,293	—	458,293
Selling, general and administrative expenses ("SG&A")	388,442	29,081	417,523
Segment profit	$ 306,777	$ 37,371	$ 344,148
Acquisition-related costs			6,014
Depreciation and amortization expenses ("D&A")			74,921
Gain on disposition of property, plant and equipment ("PPE")			(1,559)
Foreign exchange loss			1,612
Operating income			$ 263,160
Interest expense			(35,568)
Other income, net			8,296
Income tax expense			(65,530)
Net income			$ 170,358

	Year ended December 31, 2019		
	A&M	**Other**	**Consolidated**
Service revenue	$ 678,823	$ 125,201	$ 804,024
Inventory sales revenue	514,617	—	514,617
Total revenue	$ 1,193,440	$ 125,201	$ 1,318,641
Costs of services	99,821	65,156	164,977
Cost of inventory sold	480,839	—	480,839
SG&A expenses	358,016	24,373	382,389
Segment profit	$ 254,764	$ 35,672	$ 290,436
Acquisition-related costs			777
D&A expenses			70,501
Gain on disposition of PPE			(1,107)
Foreign exchange gain			(2,937)
Operating income			$ 223,202
Interest expense			(41,277)
Other income, net			8,838
Income tax expense			(41,623)
Net income			$ 149,140

5. Segmented information (continued)

	Year ended December 31, 2018		
	A&M	Other	Consolidated
Service revenue	$ 626,007	$ 123,508	$ 749,515
Inventory sales revenue	420,511	—	420,511
Total revenue	$ 1,046,518	$ 123,508	1,170,026
Costs of services	87,430	71,628	159,058
Cost of inventory sold	374,339	—	374,339
SG&A expenses	363,549	19,127	382,676
Segment profit	$ 221,200	$ 32,753	$ 253,953
Acquisition-related costs			5,093
D&A expenses			66,614
Gain on disposition of PPE			(2,731)
Foreign exchange gain			(212)
Operating income			$ 185,189
Interest expense			(44,527)
Other income, net			11,850
Income tax expense			(31,006)
Net income			$ 121,506

The Chief operating decision maker “CODM” does not evaluate the performance of its operating segments or assess allocation of resources based on segment assets and liabilities, nor does the Company classify liabilities on a segmented basis. The carrying value of goodwill of $653,183,000 has been allocated to A&M and $187,427,000 has been allocated to Other in relation to the Mascus and Rouse acquisitions ($21,656,938 and $165,770,062 respectively).

As at December 31,	2020	2019
A&M	$ 653,183	$ 652,243
Other	187,427	20,067
Total Goodwill	$ 840,610	$ 672,310

The Company’s geographic information as determined by the revenue and location of assets, which represents property, plant and equipment is as follows:

	United States	Canada	Europe	Other	Consolidated
Total revenue for the year ended:					
December 31, 2020	$ 754,815	$ 305,236	$ 158,999	$ 158,210	$ 1,377,260
December 31, 2019	743,793	247,737	173,054	154,057	1,318,641
December 31, 2018	548,695	284,989	180,817	155,525	1,170,026

	United States	Canada	Europe	Other	Consolidated
Property, plant and equipment:					
December 31, 2020	$ 252,335	$ 106,973	$ 83,014	$ 49,805	$ 492,127
December 31, 2019	256,159	106,922	73,991	47,410	484,482

6. Revenues

The Company's revenue from the rendering of services is as follows:

Year ended December 31,	**2020**	**2019**	**2018**
Service revenue:			
Commissions	$ 452,882	$ 431,781	$ 420,160
Fees	418,714	372,243	329,355
	871,596	804,024	749,515
Inventory sales revenue	505,664	514,617	420,511
	$ 1,377,260	$ 1,318,641	$ 1,170,026

7. Operating expenses

Costs of services

Year ended December 31,	**2020**	**2019**	**2018**
Ancillary and logistical service expenses	$ 59,982	$ 59,252	$ 66,576
Employee compensation expenses	47,745	50,093	41,391
Buildings, facilities and technology expenses	9,886	7,865	9,477
Travel, advertising and promotion expenses	22,636	31,652	27,606
Other costs of services	17,047	16,115	14,008
	$ 157,296	$ 164,977	$ 159,058

SG&A expenses

Year ended December 31,	**2020**	**2019**	**2018**
Employee compensation expenses	$ 286,908	$ 246,028	$ 249,115
Buildings, facilities and technology expenses	62,755	61,177	60,930
Travel, advertising and promotion expenses	25,780	38,248	36,728
Professional fees	18,220	15,572	16,768
Other SG&A expenses	23,860	21,364	19,135
	$ 417,523	$ 382,389	$ 382,676

Acquisition-related costs

Acquisition-related costs consist of operating expenses directly incurred as part of our business combinations such as due diligence and integration planning related to our acquisitions, and share-based continuing employment costs. The following is a summary of our acquisition-related costs:

Year ended December 31,	**2020**	**2019**	**2018**
Rouse:			
Share-based continuing employment costs	$ 802	$ —	$ —
Other acquisition-related costs	5,212	—	—
	6,014	—	—
IronPlanet:			
Other acquisition-related costs	—	82	2,944
Other acquisitions:			
Continuing employment costs	—	128	2,091
Other acquisition-related costs	—	567	58
	—	777	5,093
	$ 6,014	$ 777	$ 5,093

7. Operating expenses (continued)

Depreciation and amortization expenses

Year ended December 31,	2020	2019	2018
Depreciation expense	$ 31,330	$ 29,112	$ 29,021
Amortization expense	43,591	41,389	37,593
	$ 74,921	$ 70,501	$ 66,614

During the year ended December 31, 2020, depreciation expense of $199,000 (2019: $410,000; 2018: $494,000) and amortization expense of $29,779,000 (2019: $27,944,000; 2018: $18,996,000) were recorded relating to software.

8. Other income

Other income primarily includes interest income, equity investment income, rental and storage income. For the year ended December 31, 2020, the Company recognized $1,700,000 of other income related to the contingent consideration received on the disposition of one of the Company's equity accounted for investments upon achievement of certain financial targets.

In 2018, the Company included in other income a gain of $4,935,000 on the disposition of one of the Company's equity accounted for investments. The Company received net proceeds of $6,147,000 on closing and is entitled to receive up to $1,020,000 upon the satisfaction of certain escrow release conditions over a period of five years. The first and second escrow tranches were released during the periods ended December 31, 2019 and 2020, respectively.

9. Income taxes

The expense for the year can be reconciled to income before income taxes as follows:

Year ended December 31,	2020	2019	2018
Earnings before income tax	$ 235,888	$ 190,763	$ 152,512
Statutory federal and provincial tax rate in British Columbia, Canada	27.00 %	27.00 %	27.00 %
Expected income tax expense	$ 63,690	$ 51,506	$ 41,178
Non-deductible expenses	4,732	3,705	4,810
Adjustment to prior year provision to statutory tax returns	(865)	4	1,323
Changes in the valuation of deferred tax assets	(2,027)	(550)	(771)
Different tax rates of subsidiaries operating in foreign jurisdictions	(12,016)	(11,818)	(17,145)
U.S. tax reform impacts	17,105	6,949	4,899
Change in enacted tax rates	391	(1,016)	93
Unrecognized tax benefits	817	(2,347)	(1,800)
Benefits of deductible stock options vested and exercised	(4,070)	(1,780)	(2,434)
Other	(2,227)	(3,030)	853
	$ 65,530	$ 41,623	$ 31,006

9. Income taxes (continued)

The income tax expense (recovery) consists of:

Year ended December 31,	2020	2019	2018
Canadian:			
Current tax expense	$ 27,766	$ 19,752	$ 13,209
Deferred tax expense	3,970	3,346	3,958
Foreign:			
Current tax expense before application of operating loss carryforwards	30,280	24,815	19,851
Tax benefit of operating loss carryforwards	(1,668)	(11,770)	(8,293)
Total current tax expense	28,612	13,045	11,558
Deferred tax expense before adjustment to opening valuation allowance	6,127	5,727	2,386
Adjustment to opening valuation allowance	(945)	(247)	(105)
Total deferred tax expense	5,182	5,480	2,281
	$ 65,530	$ 41,623	$ 31,006

The foreign provision for income taxes is based on foreign pre-tax earnings of $117,212,000, $108,714,000, and $102,824,000, in 2020, 2019, and 2018 respectively. The Company's consolidated financial statements provide for any related tax liability on undistributed earnings that we intend to repatriate in the foreseeable future. As of December 31, 2020, income taxes have not been provided on a cumulative total of $635,828,000 of such earnings. The amount of unrecognized deferred tax liability related to these temporary differences is estimated to be approximately $11,246,000. Earnings retained by subsidiaries and equity-accounted investments amount to approximately $645,828,000 (2019: $500,430,000; 2018: $484,510,000). The Company accrues withholding and other taxes that would become payable on the distribution of earnings only to the extent that either the Company does not control the relevant entity or it is expected that these earnings will be remitted in the foreseeable future.

The tax effects of temporary differences that give rise to significant deferred tax assets and deferred tax liabilities were as follows:

As at December 31,	2020	2019
Deferred tax assets:		
Working capital	$ 13,185	$ 13,307
Property, plant and equipment	6,467	5,579
Share-based compensation	5,606	5,973
Tax losses and tax credit carryforwards	25,943	33,248
Lease liabilities	29,393	29,523
Other	8,848	3,088
	89,442	90,718
Deferred tax liabilities:		
Property, plant and equipment	$ (16,838)	$ (14,783)
Goodwill	(2,255)	(8,499)
Intangible assets	(52,218)	(50,531)
Right-of-use assets	(26,206)	(25,244)
Long-term debt	(3,571)	(1,883)
Other	(7,165)	(5,613)
	(108,253)	(106,553)
Net deferred tax liabilities	$ (18,811)	$ (15,835)
Valuation allowance	(12,995)	(12,913)
	$ (31,806)	$ (28,748)

9. Income taxes (continued)

At December 31, 2020, the Company had non-capital loss carryforwards that are available to reduce taxable income in the future years. These non-capital loss carryforwards expire as follows:

2021	$ 2,430
2022	2,905
2023	3,137
2024	823
2025 and thereafter	65,003
	$ 74,298

The Company has capital loss carryforwards of approximately $43,476,000 (2019: $39,981,209) available to reduce future capital gains and interest deduction carryforwards of $3,374,000 (2019: $23,746,000), both of which carryforward indefinitely.

Tax losses are denominated in the currency of the countries in which the respective subsidiaries are located and operate. Fluctuations in currency exchange rates could reduce the U.S. dollar equivalent value of these tax loss and tax credit carry forwards in future years.

In assessing the realizability of our deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during periods in which temporary differences become deductible and the loss carry forwards or tax credits can be utilized. Management considers projected future taxable income and tax planning strategies in making our assessment.

Uncertain tax positions

Tax positions are evaluated in a two-step process. The Company first determines whether it is more likely than not that a tax position will be sustained upon examination. If a tax position meets the more-likely-than-not recognition threshold it is then measured to determine the amount of the benefit to recognize in the financial statements. The tax position is measured as the largest amount of the benefit that is greater than 50% likely of being realized upon ultimate settlement. The Company classifies unrecognized tax benefits that are not expected to result in the payment or receipt of cash within one year as non-current liabilities in the consolidated balance sheets.

At December 31, 2020, the Company had gross unrecognized tax benefits of $20,298,000 (2019: $20,232,000). Of this total, $9,248,000 (2019: $8,854,000) represents the net amount of unrecognized tax benefits that, if recognized, would favorably impact the effective tax rate.

Reconciliation of gross unrecognized tax benefits:

As at December 31,	**2020**	**2019**
Unrecognized tax benefits, beginning of year	$ 20,232	$ 22,584
Increases - tax positions taken in prior period	1,487	700
Decreases - tax positions taken in prior period	—	(57)
Increases - tax positions taken in current period	558	1,268
Settlement and lapse of statute of limitations	(2,591)	(4,364)
Currency translation adjustment	612	101
Unrecognized tax benefits, end of year	$ 20,298	$ 20,232

9. Income taxes (continued)

Interest expense and penalties related to unrecognized tax benefits are recorded within the provision for income tax expense on the consolidated income statement. At December 31, 2020, the Company had accrued $4,003,000 (2019: $3,569,000) for interest and penalties.

In the normal course of business, the Company is subject to audit by the Canadian federal and provincial taxing authorities, by the U.S. federal and various state taxing authorities and by the taxing authorities in various foreign jurisdictions. Tax years ranging from 2014 to 2020 remain subject to examination in Canada, the United States, Luxembourg, and the Netherlands.

10. Earnings per share attributable to stockholders

Basic earnings per share (“EPS”) attributable to stockholders was calculated by dividing the net income attributable to stockholders by the weighted average (“WA”) number of common shares outstanding during the period. Diluted EPS attributable to stockholders was calculated by dividing the net income attributable to stockholders by the weighted average number of shares of common stock outstanding if the potentially dilutive securities had been issued. Potentially dilutive securities include unvested PSUs, unvested RSUs, and outstanding stock options. The dilutive effect of potentially dilutive securities is reflected in diluted EPS by application of the treasury stock method. Under the treasury stock method, an increase in the fair market value of the Company’s common stock can result in a greater dilutive effect from potentially dilutive securities.

Year ended December 31, 2020	**Net income attributable to stockholders**	**WA number of shares**	**Per share amount**
Basic	$ 170,095	109,054,493	$ 1.56
Effect of dilutive securities:			
Share units	—	541,054	(0.01)
Stock options	—	715,437	(0.01)
Diluted	$ 170,095	110,310,984	$ 1.54

Year ended December 31, 2019	**Net income attributable to stockholders**	**WA number of shares**	**Per share amount**
Basic	$ 149,039	108,519,739	$ 1.37
Effect of dilutive securities:			
Share units	—	458,763	—
Stock options	—	780,621	(0.01)
Diluted	$ 149,039	109,759,123	$ 1.36

Year ended December 31, 2018	**Net income attributable to stockholders**	**WA number of shares**	**Per share amount**
Basic	$ 121,479	108,063,349	$ 1.12
Effect of dilutive securities:			
Share units	—	459,503	—
Stock options	—	865,384	(0.01)
Diluted	$ 121,479	109,388,236	$ 1.11

11. Supplemental cash flow information

Year ended December 31,	2020	2019	2018
Trade and other receivables	$ 22,079	$ (8,611)	$ (43,341)
Inventory	(18,149)	44,633	(77,292)
Advances against auction contracts	6,705	2,766	(8,266)
Prepaid expenses and deposits	2,196	(3,403)	646
Income taxes receivable	13	(445)	13,053
Auction proceeds payable	(74,114)	69,382	8,768
Trade and other payables	38,078	(21,296)	39,531
Income taxes payable	9,671	5,812	1,954
Share unit liabilities	—	—	1,070
Operating lease obligation	(11,162)	(13,404)	—
Other	(4,451)	1,168	(1,673)
Net changes in operating assets and liabilities	$ (29,134)	$ 76,602	$ (65,550)

Net capital spending, which consists of property, plant and equipment and intangible asset additions excluding those acquired through business combinations, net of proceeds on disposition of property, plant and equipment, was $26,751,000 for the year ended December 31, 2020 (2019: $35,075,000; 2018: $32,426,000).

Year ended December 31,	2020	2019	2018
Interest paid, net of interest capitalized	$ 32,521	$ 37,046	$ 39,429
Interest received	2,338	3,802	2,888
Net income taxes paid	43,398	26,699	10,352
Non-cash purchase of property, plant and equipment under finance lease	11,326	15,282	8,968
Non-cash right of use assets obtained (reassessed) in exchange for new lease obligations	10,588	29,117	—
Non-cash equity consideration in connection with Rouse acquisition	1,459	—	—

	2020	2019	2018
Cash and cash equivalents	$ 278,766	$ 359,671	$ 237,744
Restricted cash	28,129	60,585	67,823
Cash, cash equivalents, and restricted cash	$ 306,895	$ 420,256	$ 305,567

12. Fair value measurement

All assets and liabilities for which fair value is measured or disclosed in the consolidated financial statements are categorized within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement or disclosure:

- Level 1: Unadjusted quoted prices in active markets for identical assets or liabilities that the entity can access at measurement date;
- Level 2: Inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly; and
- Level 3: Unobservable inputs for the asset or liability.

12. Fair value measurement (continued)

		December 31, 2020		December 31, 2019	
	Category	Carrying amount	Fair value	Carrying amount	Fair value
Fair values disclosed:					
Cash and cash equivalents	Level 1	$ 278,766	$ 278,766	$ 359,671	$ 359,671
Restricted cash	Level 1	28,129	28,129	60,585	60,585
Loan receivables	Level 2	5,798	6,438	—	—
Short-term debt	Level 2	29,145	29,145	4,705	4,705
Long-term debt					
Senior unsecured notes	Level 1	492,734	514,219	490,933	520,625
Term loan	Level 2	97,812	98,420	154,548	155,355
Long-term revolver loan	Level 2	46,102	46,184	—	—

The carrying value of the Company’s cash and cash equivalents, restricted cash, trade and other receivables, advances against auction contracts, auction proceeds payable, trade and other payables, and short-term debt approximate their fair values due to their short terms to maturity. The fair value of the loan receivables is determined by estimating discounted cash flows using market rates. The carrying value of the term loan and long-term revolver loan, before deduction of deferred debt issue costs, approximates their fair value as the interest rates on the loans is short-term in nature. The fair value of the senior unsecured notes is determined by reference to a quoted market price.

13. Trade and other receivables

As at December 31,	2020	2019
Trade receivables	$ 111,545	$ 126,977
Consumption taxes receivable	20,789	12,108
Other receivables	2,667	3,542
	$ 135,001	$ 142,627

Trade receivables are generally secured by the equipment that they relate to as it is Company policy that equipment is not released until payment has been collected. Trade receivables are due for settlement within three to seven days of the date of sale, after which they are interest bearing. Consumption taxes receivable are deemed fully recoverable unless disputed by the relevant tax authority. Other receivables are unsecured and non-interest bearing.

The following table presents the activity in the allowance for expected credit losses on trade receivables for the period ended December 31, 2020:

Opening balance at January 1, 2020	(5,225)
Current period provision	(3,986)
Write-offs charged against the allowance	3,744
Balance, December 31, 2020	$ (5,467)

14. Inventory

At each period end, inventory is reviewed to ensure that it is recorded at the lower of cost and net realizable value. Specific consideration was given to the valuation of the surplus government inventory. The Company determined that the valuation provision was not significant.

During the year ended December 31, 2020, the Company recorded an inventory write-down of $1,691,000 (2019: $4,215,000; 2018: $1,011,000).

15. Other current assets

As at December 31,	**2020**	**2019**
Advances against auction contracts	$ 6,487	$ 12,925
Assets held for sale	—	15,051
Prepaid expenses and deposits	20,787	22,184
	$ 27,274	$ 50,160

Advances against auction contracts

Advances against auction contracts arise when the Company pays owners, in advance, a portion of the expected gross auction proceeds from the sale of the related assets at future auctions. The Company's policy is to limit the amount of advances to a percentage of the estimated gross auction proceeds from the sale of the related assets, and before advancing funds, require proof of owner's title to and equity in the assets, as well as receive delivery of the assets and title documents at a specified auction site, by a specified date and in a specified condition of repair.

Advances against auction contracts are generally secured by the assets to which they relate, as the Company requires owners to provide promissory notes and security instruments registering the Company as a charge against the asset. Advances against auction contracts are usually settled within two weeks of the date of sale, as they are netted against the associated auction proceeds payable to the owner.

Assets held for sale

Balance, December 31, 2018	$ 15,051
Reclassified from property, plant and equipment	4,071
Disposal	(4,071)
Balance, December 31, 2019	15,051
Reclassified to property, plant and equipment	(6,888)
Disposal	(8,163)
Balance, December 31, 2020	$ —

The Company's assets held for sale have consisted of excess auction sites located in the United States, which belonged to the A&M segment. Management made the strategic decision to sell certain excess acreage to maximize the Company's return on invested capital. During the year ended December 31, 2020, the Company sold excess auction site acreage in the United States. The Company also sold the property that was reclassified to property, plant and equipment during the first quarter of 2020. The sale of the two properties resulted in combined proceeds of $15,555,000 and a combined pre-tax gain of $1,090,000 (2019: $571,000 gain related to the sale of property located in the United States ; 2018: $1,439,000 gain related to the sale of property located in Canada and the United States).

16. Property, plant and equipment

As at December 31, 2020	Cost	Accumulated depreciation	Net book value
Land and improvements	$ 370,511	$ (81,591)	$ 288,920
Buildings	259,928	(125,944)	133,984
Yard and automotive equipment	74,151	(47,663)	26,488
Computer software and equipment	86,423	(72,169)	14,254
Office equipment	35,587	(24,729)	10,858
Leasehold improvements	21,654	(15,510)	6,144
Assets under development	11,479	—	11,479
	$ 859,733	$ (367,606)	$ 492,127

As at December 31, 2019	Cost	Accumulated depreciation	Net book value
Land and improvements	$ 361,623	$ (77,015)	$ 284,608
Buildings	252,774	(115,423)	137,351
Yard and automotive equipment	66,871	(40,686)	26,185
Computer software and equipment	80,756	(68,431)	12,325
Office equipment	31,760	(21,776)	9,984
Leasehold improvements	19,756	(16,541)	3,215
Assets under development	10,814	—	10,814
	$ 824,354	$ (339,872)	$ 484,482

During the year ended December 31, 2020, interest of $150,000 (2019: $85,000; 2018: $110,000) was capitalized to the cost of assets under development. These interest costs relating to qualifying assets are capitalized at a weighted average rate of 3.02% (2019: 4.07%; 2018: 4.06%).

Additions during the year include $11,392,000 (2019: $15,282,000; 2018: $8,968,000) of property, plant and equipment under finance leases.

17. Other non-current assets

As at December 31,	2020	2019
Right-of-use assets	$ 116,503	$ 116,209
Tax receivable	11,050	11,792
Loans receivable	4,870	—
Equity-accounted investments	—	4,276
Deferred debt issue costs	2,263	1,403
Other	12,922	11,999
	$ 147,608	$ 145,679

Loans receivable

During the year ended December 31, 2020, the Company entered into two non-recourse financing lending arrangements which are fully collateralized and secured by certain equipment. These financing lending arrangements have a term of two to four years. In the event of default, the Company is obligated to take possession of the equipment under the agreements to recover its loans receivable balance. As at December 31, 2020, the loans receivable balance of such financing lending arrangements was $5,797,000 (of which $927,000 is recorded in other current assets) and the expected credit loss allowance was not significant.

17. Other non-current assets (continued)

Equity-accounted investments

The Company held a 48% share interest in a group of companies detailed below (together, the "Cura Classis entities"), which had common ownership. The Cura Classis entities provided dedicated fleet management services in three jurisdictions to a common customer unrelated to the Company. The Company has previously determined that the Cura Classis entities were variable interest entities and that the Company was not the primary beneficiary, as it did not have the power to make any decisions that significantly affect the economic results of the Cura Classis entities. Accordingly, the Company accounted for its investments in the Cura Classis entities following the equity method.

A condensed summary of the Company's investments in and advances to equity-accounted investees are as follows:

(in U.S. $000's, except percentages)	Ownership percentage	December 31, 2020	December 31, 2019
Cura Classis entities	48 %	$ —	$ 4,276

During the year ended December 31, 2020, the Company received a final distribution of its equity-accounted investments in the Cura Classis entities. The transaction did not result in a significant gain or loss. The Company has no other business relationships with the Cura Classis entities.

18. Intangible assets

As at December 31, 2020	Cost	Accumulated amortization	Net book value
Trade names and trademarks	$ 53,871	$ (1,595)	$ 52,276
Customer relationships	196,407	(47,752)	148,655
Software and technology assets	206,829	(108,127)	98,702
Software under development	1,315	—	1,315
	$ 458,422	$ (157,474)	$ 300,948

As at December 31, 2019	Cost	Accumulated amortization	Net book value
Trade names and trademarks	$ 53,319	$ (2,028)	$ 51,291
Customer relationships	124,865	(34,666)	90,199
Software and technology assets	157,776	(78,330)	79,446
Software under development	12,444	—	12,444
	$ 348,404	$ (115,024)	$ 233,380

At December 31, 2020, a net carrying amount of $51,864,000 (December 31, 2019: $62,589,000) included in intangible assets was not subject to amortization. During the year ended December 31, 2020, the cost of additions was reduced by $2,639,000 for recognition of tax credits (2019: $1,022,000; 2018: $1,606,000).

During the year ended December 31, 2020, interest of $299,000 (2019: $402,000; 2018: $460,000) was capitalized to the cost of software under development. These interest costs relating to qualifying assets are capitalized at a weighted average rate of 3.04% (2019: 4.01%; 2018: 4.09%).

During the year ended December 31, 2020, the weighted average amortization period for all classes of intangible assets was 9.1 years (2019: 7.8; 2018: 8.2 years).

18. Intangible assets (continued)

As at December 31, 2020, estimated annual amortization expense for the next five years ended December 31 are as follows:

2021	$ 45,996
2022	39,561
2023	27,825
2024	19,087
2025	11,322
	$ 143,791

19. Goodwill

Balance, December 31, 2018	$ 671,594
Additions	93
Foreign exchange movement	623
Balance, December 31, 2019	$ 672,310
Additions (Note 4)	165,770
Foreign exchange movement	2,530
Balance, December 31, 2020	$ 840,610

20. Trade and other payables

As at December 31,	2020	2019
Trade payables	$ 75,503	$ 72,918
Accrued liabilities	99,559	69,539
Social security and sales taxes payable	39,909	27,737
Net consumption taxes payable	10,434	12,298
Share unit liabilities	9,602	5,130
Other payables	8,779	6,657
	$ 243,786	$ 194,279

21. Debt

	Carrying amount	
	December 31, 2020	December 31, 2019
Short-term debt	$ 29,145	$ 4,705
Long-term debt:		
Term loan and long-term revolver loan:		
Term loan denominated in Canadian dollars, secured, bearing interest at a weighted average rate of 2.72%, due in monthly installments of interest only and quarterly installments of principal, maturing in October 2023	98,420	155,355
Long-term revolver loan denominated in Canadian dollars, secured, bearing interest at a weighted average rate of 2.72%, due in monthly installments of interest only, maturing in October 2023	46,184	—
Less: unamortized debt issue costs	(690)	(807)
Senior unsecured notes:		
Bearing interest at 5.375% due in semi-annual installments, with the full amount of principal due in January 2025	500,000	500,000
Less: unamortized debt issue costs	(7,266)	(9,067)
Total long-term debt	636,648	645,481
Total debt	$ 665,793	$ 650,186
Long-term debt:		
Current portion	$ 10,360	$ 18,277
Non-current portion	626,288	627,204
Total long-term debt	$ 636,648	$ 645,481

Short-term debt

Short-term debt is comprised of drawings in different currencies on the Company's committed revolving credit facilities and has a weighted average interest rate of 2.3% (December 31, 2019: 2.3%).

Long-term debt

a) Term loan and long-term revolver loan

On August 14, 2020, the Company entered into an amendment of its credit agreement dated October 27, 2016 ("Credit Agreement"), totaling US$630.0 million with a syndicate of lenders comprising:

(1) Multicurrency revolving facilities of up to US$530 Million (the "Revolving Facilities"), and,

(2) A delayed-draw term loan facility of up to US$100 Million (the "Delayed-Draw Facility" and together with the Revolving Facilities, the "Facilities").

The amendment, among other things, (i) extended the maturity date of the Facilities from October 27, 2021 to October 27, 2023, (ii) increased the applicable margin for base rate loans and LIBOR loans by 0.50% at each pricing tier level, (iii) increased the applicable percentage per annum used to calculate the commitment fee in respect of the unused commitments under the Revolving Facilities by 0.10% at each pricing tier level, and (iv) increased the aggregate amount available under the Revolving Facilities from $490.0 million to $530.0 million. Immediately prior to the amendment, the aggregate principal amount outstanding under the Delayed-Draw Facility was $141.0 million. In connection with the amendment, the Company prepaid $41.0 million of such amount with the proceeds from a borrowing under the Revolving Facilities. The Delayed-Draw Facility will continue to amortize in equal quarterly installments in an annual amount of 10%, with the balance payable at maturity.

21. Debt (continued)

The Company incurred $2,278,000 of total debt issue costs of which $2,038,000 were eligible to be deferred in connection with the amendment. At December 31, 2020, the Company had unamortized deferred debt issue costs relating to the Credit Agreement of $2,953,000.

For the year ended December 31, 2020, the Company made scheduled debt repayments of $13,711,000 on the Term loan (2019: $13,592,000). The Company did not make any voluntary prepayments on the Term loan during the year ended December 31, 2020 (2019: $62,690,000).

b) Senior unsecured notes

On December 21, 2016, the Company completed the offering of $500,000,000 aggregate principal amount of 5.375% senior unsecured notes due January 15, 2025 (the “Notes”). Interest on the Notes is payable semi-annually. The Notes are jointly and severally guaranteed on an unsecured basis, subject to certain exceptions, by certain of the Company’s subsidiaries. IronPlanet, Rouse, and certain of their respective subsidiaries were added as additional guarantors in connection with the acquisitions of IronPlanet and Rouse, respectively.

As at December 31, 2020, principal repayments for the remaining period to the contractual maturity dates are as follows:

	Face value
2021	$ 10,360
2022	10,360
2023	123,884
2024	—
2025	500,000
Thereafter	—
	$ 644,604

As at December 31, 2020, the Company had unused committed revolving credit facilities aggregating $455,124,000 of which $450,124,000 is available until October 27, 2023 subject to certain covenant restrictions. The Company was in compliance with all financial and other covenants applicable to the credit facilities at December 31, 2020.

22. Other non-current liabilities

As at December 31,	2020	2019
Operating lease liability	$ 112,818	$ 111,322
Tax payable	19,706	20,232
Finance lease liability	17,109	16,336
Other	3,367	3,348
	$ 153,000	$ 151,238

23. Equity and dividends

Share capital

Common stock

Unlimited number of common shares, without par value.

Preferred stock

Unlimited number of senior preferred shares, without par value, issuable in series.
Unlimited number of junior preferred shares, without par value, issuable in series.
All issued shares are fully paid. No preferred shares have been issued.

Shares issued for business combination

In connection with the acquisition of Rouse, the Company issued 312,193 common shares on December 8, 2020. These shares were issued to certain previous unitholders and employees of Rouse, and their vesting is subject to continuing employment with the Company over a three year period from the acquisition date. The fair value of these common shares was $71.09 based on the fair market value of the Company's common shares on the date of acquisition.

As at December 31, 2020, the unrecognized share-based continuing employment costs were $19,933,000, which is expected to be recognized over a weighted average period of 2 years. As at December 31, 2020, the number of common shares which had not yet vested was 312,193.

Subsequent to December 31, 2020, 55,510 shares were forfeited and as such the revised unrecognized share-based continuing employment costs was $17,225,000.

Share repurchase

There were 1,525,312 common shares repurchased for $53,170,000 during the year ended December 31, 2020. There were 1,223,674 common shares repurchased for $42,012,000 in the year ended December 2019 and no common shares repurchased in the year ended 2018.

23. Equity and dividends (continued)

Dividends

Declared and paid

The Company declared and paid the following dividends during the years ended December 31, 2020, 2019, and 2018:

	Declaration date	Dividend per share	Record date	Total dividends	Payment date
Year ended December 31, 2020:					
Fourth quarter 2019	January 24, 2020	$ 0.2000	February 14, 2020	$ 21,905	March 6, 2020
First quarter 2020	May 6, 2020	0.2000	May 27, 2020	21,681	June 17, 2020
Second quarter 2020	August 5, 2020	0.2200	August 26, 2020	24,053	September 16, 2020
Third quarter 2020	November 4, 2020	0.2200	November 25, 2020	24,098	December 16, 2020
Year ended December 31, 2019:					
Fourth quarter 2018	January 25, 2019	$ 0.1800	February 15, 2019	$ 19,568	March 8, 2019
First quarter of 2019	May 8, 2019	0.1800	May 29, 2019	19,592	June 19, 2019
Second quarter of 2019	August 8, 2019	0.2000	August 28, 2019	21,631	September 18, 2019
Third quarter 2019	November 7, 2019	0.2000	November 27, 2019	21,744	December 18, 2019
Year ended December 31, 2018:					
Fourth quarter 2017	January 26, 2018	$ 0.1700	February 16, 2018	$ 18,246	March 9, 2018
First quarter of 2018	May 9, 2018	0.1700	May 30, 2018	18,342	June 20, 2018
Second quarter of 2018	August 7, 2018	0.1800	August 29, 2018	19,528	September 19, 2018
Third quarter 2018	November 8, 2018	0.1800	November 28, 2018	19,562	December 19, 2018

Declared and undistributed

In addition to the above dividends, since the end of the year the Directors have recommended the payment of a final dividend of $0.22 cents per common share, accumulating to a total dividend of $24,180,000. The aggregate amount of the proposed final dividend is expected to be paid out of retained earnings on March 5, 2021 to stockholders of record on February 12, 2021. This dividend has not been recognized as a liability in the financial statements. The payment of this dividend will not have a tax consequence for the Company.

Foreign currency translation reserve

Foreign currency translation adjustment includes intra-entity foreign currency transactions that are of a long-term investment nature, which generated net gain of $10,826,000 for 2020 (2019: net loss of $1,082,000; 2018: net loss of $9,602,000).

24. Share-based payments

Share-based payments consist of the following compensation costs:

Year ended December 31,	2020	2019	2018
SG&A expenses:			
Stock option compensation expense	$ 5,853	$ 4,697	$ 7,895
Equity-classified share units	9,897	8,047	11,256
Liability-classified share units	3,635	1,380	1,764
Employee share purchase plan - employer contributions	2,497	2,281	2,174
	21,882	16,405	23,089
Acquisition-related costs:			
Stock option compensation expense	—	—	357
Share-based continuing employment costs	802	—	—
	802	—	357
	$ 22,684	$ 16,405	$ 23,446

Stock option plans

The Company has three stock option plans that provide for the award of stock options to selected employees, directors, and officers of the Company: a) Amended and Restated Stock Option Plan, b) IronPlanet 1999 Stock Plan, and c) IronPlanet 2015 Stock Plan.

Stock option activity for the years ended December 31, 2020, 2019, and 2018 is presented below:

	Common shares under option	WA exercise price	WA remaining contractual life (in years)	Aggregate intrinsic value
Outstanding, December 31, 2017	4,459,744	$ 24.29	7.5	$ 17,649
Granted	923,199	32.14		
Assumed in acquisition	(1,235,154)	23.10		
Exercised	(132,624)	25.91		14,808
Forfeited	(1,302)	25.76		
Outstanding, December 31, 2018	4,013,863	$ 26.41	7.2	$ 25,374
Granted	914,068	34.03		
Exercised	(1,672,022)	24.58		27,349
Forfeited	(458,092)	32.15		
Expired	(628)	24.44		
Outstanding, December 31, 2019	2,797,189	$ 29.05	7.1	$ 38,874
Granted	822,626	41.94		
Exercised	(1,563,941)	28.22		37,062
Forfeited	(68,056)	34.30		
Expired	(2,064)	20.74		
Outstanding, December 31, 2020	1,985,754	34.95	7.7	68,717
Exercisable, December 31, 2020	702,443	$ 28.45	6.0	$ 28,869

24. Share-based payments (continued)

Stock option plans (continued)

Stock options are granted with an exercise price equal to the fair market value of the Company's common shares at the grant date, with a three years vesting period and terms not exceeding 10 years. At December 31, 2020, there were 6,442,360 (December 31, 2019: 7,222,978) shares authorized and available for grants of options under the stock option plans. The options outstanding at December 31, 2020 expire on dates ranging to November 10, 2030. The weighted average grant date fair value of options granted during the year ended December 31, 2020 was $8.69 per option (2019: $7.52; 2018: $7.69). The weighted average share price of options exercised during the year ended December 31, 2020 was $51.92 (2019: $40.32; 2018: $35.08).

The significant assumptions used to estimate the fair value of stock options granted during the years ended December 31, 2020, 2019, and 2018 are presented in the following table on a weighted average basis:

Year ended December 31,	**2020**	**2019**	**2018**
Risk free interest rate	0.7 %	2.5 %	2.7 %
Expected dividend yield	1.96 %	2.06 %	2.11 %
Expected lives of the stock options	5 years	5 years	5 years
Expected volatility	28.0 %	26.8 %	28.1 %

As at December 31, 2020, the unrecognized stock-based compensation cost related to the non-vested stock options was $4,424,000, which is expected to be recognized over a weighted average period of 2.2 years. Cash received from stock-based award exercises for the year ended December 31, 2020 was $44,128,000 (2019: $41,094,000; 2018: $28,524,000). The actual tax benefit realized for the tax deductions from option exercise of the share-based payment arrangements totaled $4,594,000 for the year ended December 31, 2020 (2019: $1,679,000; 2018: $2,793,000).

24. Share-based payments (continued)

Share unit plans

Share unit activity for the years ended December 31, 2020, 2019, and 2018 is presented below:

	Equity-classified awards				Liability-classified awards					
	PSUs		RSUs		PSUs(1)		RSUs		DSUs	
	Number	WA grant date fair value	Number	WA grant date fair value	Number	WA grant date fair value	Number	WA grant date fair value	Number	WA grant date fair value
Outstanding, December 31, 2017	434,248	$ 27.83	125,152	$ 26.93	259,241	$ 26.38	4,666	$ 26.42	93,487	$ 26.32
Granted	240,803	35.63	91,251	32.10	—	—	66	34.70	26,553	33.42
Transferred to (from) equity awards on modification	257,659	31.30	—	—	(257,659)	26.38	—	—	—	—
Vested and settled	(212,263)	33.78	—	—	—	—	(4,732)	26.54	(6,605)	23.16
Forfeited	(50,159)	31.41	(8,417)	32.00	(1,582)	26.45	—	—	—	—
Outstanding, December 31, 2018	670,288	$ 31.46	207,986	$ 28.99	—	$ —	—	$ —	113,435	$ 28.16
Granted	170,208	36.13	36,350	35.40	—	—	—	—	24,810	35.99
Transferred to equity awards on modification	—	—	—	—	—	—	—	—	—	—
Vested and settled	(251,883)	30.33	(265)	31.98	—	—	—	—	(19,877)	27.45
Forfeited	(159,889)	33.21	(6,651)	34.27	—	—	—	—	—	—
Outstanding, December 31, 2019	428,724	$ 32.89	237,420	$ 29.72	—	$ —	—	$ —	$ 118,368	$ 29.64
Granted	303,829	42.09	45,781	51.36	—	—	—	—	19,146	47.01
Vested and settled	(156,238)	31.94	(98,542)	27.68	—	—	—	—	—	—
Forfeited	(33,639)	36.60	(49,722)	28.14	—	—	—	—	—	—
Outstanding, December 31, 2020	542,676	$ 38.09	134,937	$ 39.14	—	$ —	—	$ —	$ 137,514	$ 32.06

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(1) Liability-classified PSUs include PSUs awarded under the employee PSU plan and the previous 2013 PSU plan, in place prior to 2015, are cash-settled and not subject to market vesting conditions.

The total market value of liability-classified share units vested and released during the year ended December 31, 2020 was nil (2019: $774,000; 2018: $410,000). The Company modified the employee PSU plans from liability-classified to equity-classified share units prior to the 2018 vesting.

Senior executive and employee PSU plans

The Company grants PSUs under a senior executive PSU plan and an employee PSU plan (the “PSU Plans”). Under the PSU Plans, the number of PSUs that vest is conditional upon specified market, service, and/or performance vesting conditions being met. The PSU Plans allow the Company to choose whether to settle the awards in cash or in shares. The Company intends to settle by issuance of shares. With respect to settling in shares, the Company has the option to either (i) arrange for the purchase shares on the open market on the employee’s behalf based on the cash value that otherwise would be delivered, or (ii) to issue a number of shares equal to the number of units that vest.

24. Share-based payments (continued)

Share unit plans (continued)

The fair value of the equity-classified PSUs awarded in 2020 and 2019 is estimated using the 20-day volume weighted average price of the Company's common shares listed on the New York Stock Exchange, as these awards are not subject to market vesting conditions. PSUs awarded in 2018 contained market vesting conditions and their fair value is estimated on modification date and on the date of grant using a Monte-Carlo simulation model. The significant assumptions used to estimate the fair value of the equity-classified PSUs awarded in 2018 are presented in the following table on a weighted average basis:

Year ended December 31,	**2018**
Risk free interest rate	1.92 %
Expected dividend yield	2.09 %
Expected lives of the PSUs	3 years
Expected volatility	31.1 %
Average expected volatility of comparable companies	34.1 %

Risk free interest rate is estimated using Bloomberg's United States dollar Swap Rate as of the valuation date. Expected dividend yield assumes a continuation of the most recent quarterly dividend payments. Given the limited historical information available for the PSUs, the Company estimated the expected life of PSUs with reference to the expected life of stock options. Stock options have five-year expected lives, whereas PSUs vest after three years. As such, the Company estimates the expected life of the PSUs to equal the three-year vesting period. Expected volatility is estimated from Bloomberg's volatility surface of the common shares as of the valuation date.

As at December 31, 2020, the unrecognized share unit expense related to equity-classified PSUs was $10,447,000, which is expected to be recognized over a weighted average period of 2.0 years.

RSUs

The Company has RSU plans that are equity-settled and not subject to market vesting conditions.

Fair values of RSUs are estimated on grant date using the 20-day volume weighted average price of the Company's common shares listed on the New York Stock Exchange.

As at December 31, 2020, the unrecognized share unit expense related to equity-classified RSUs was $1,980,000, which is expected to be recognized over a weighted average period of 1.7 years.

DSUs

The Company has DSU plans that are cash-settled and not subject to market vesting conditions.

Fair values of DSUs are estimated on grant date and at each reporting date using the 20-day volume weighted average price of the Company's common shares listed on the New York Stock Exchange. DSUs are granted under the DSU plan to members of the Board of Directors. There is no unrecognized share unit expense related to liability-classified DSUs as they vest immediately and are expensed upon grant.

24. Share-based payments (continued)

Share unit plans (continued)

DSUs (continued)
As at December 31, 2020, the Company had a total share unit liability of $9,597,000 (2019: $5,130,000) in respect of share units under the DSU plans presented in other payable within current liabilities.

Modifications
The Company modified various share-based payment plans in 2018. The nature and impact of these modifications are discussed further below.

Employee and Executive PSU Plan modification
On March 1, 2018, the Company modified the market and performance vesting conditions for the PSUs. Concurrently, the PSUs under the employee PSU plan were reclassified to equity awards based on the Company's settlement intentions. The weighted average fair value of the PSU awards outstanding on the modification date was $31.35. The incremental compensation recognized as a result of the vesting condition modification was $1,400,000. The share unit liability related to the employee PSUs, representing the portion of the fair value attributable to past service, was $6,701,000, which was reclassified to equity on that date. No incremental compensation was recognized as a result of the employee PSU settlement modification.

Sign-on Grants modifications
On September 11, 2018, the Company modified the performance vesting conditions of the Sign-on Grant ("SOG") PSUs related to our former Chief Executive Officer. The modification impacted the third and fourth tranches of PSUs to vest. As a result of the modification, the actual number of units to vest will be determined by the Board of Directors of the Company based on absolute Total Shareholder Return ("TSR") performance over the period commencing on July 1, 2017, and ending on the fourth and fifth anniversaries of the grant date. Prior to this modification, the absolute TSR performance period commenced on August 11, 2014.

The weighted average fair value of the PSU awards outstanding on the modification date was $43.34. The incremental compensation recognized as a result of the vesting condition modification was $838,000. It was determined based on the change in fair value of the equity-classified SOG PSUs immediately before and after modification. Significant assumptions used to estimate the fair value of the equity-classified SOG PSUs to determine the incremental compensation cost were as follows:

September 11, 2018	2018
Risk free interest rate	2.7 %
Expected dividend yield	1.53 %
Expected lives of the PSU	1 year
Expected volatility	29.2 %

Unrecognized compensation expense based on the fair value of the SOG PSU award on the modification has already amortized over the remaining service period.

Employee share purchase plan

The Company has an employee share purchase plan that allows all employees that have completed two months of service to contribute funds to purchase common shares at the current market value at the time of share purchase. Employees may contribute up to 4% of their salary. The Company will match between 50% and 100% of the employee's contributions, depending on the employee's length of service with the Company.

25. Leases

The Company's breakdown of lease expense is as follows:

Year ended December 31,	**2020**	**2019**
Operating lease cost	$ 16,927	$ 17,878
Finance lease cost		
Amortization of leased assets	9,268	7,510
Interest on lease liabilities	915	800
Short-term lease cost	9,799	9,090
Sublease income	(429)	(559)
	$ 36,480	$ 34,719

The lease expenditure charged to earnings during the year ended December 31, 2020 was $26,726,000 (2019: $26,968,000; 2018: $27,734,000).

Operating leases

The Company has entered into commercial leases for various auction sites and offices located in North America, Europe, the Middle East and Asia. The majority of these leases are non-cancellable. The Company also has further operating leases for computer equipment, certain motor vehicles and small office equipment where it is not in the best interest of the Company to purchase these assets.

The majority of the Company's operating leases have a fixed term with a remaining life between one month and 20 years, with renewal options included in the contracts. The leases have varying contract terms, escalation clauses and renewal options. Generally, there are no restrictions placed upon the lessee by entering into these leases, other than restrictions on use of property, sub-letting and alterations. At the inception of a lease, the Company determines whether it is reasonably certain to exercise a renewal option and includes the options in the determination of the lease term and the lease liability where it is reasonably certain to exercise the option. If the Company's intention is to exercise an option subsequent to the commencement of the lease, the Company will re-assess the lease term. The Company has included certain renewal options in its operating lease liabilities for key property leases for locations that have strategic importance to the Company such as its Corporate Head Office. The Company has not included any purchase options available within its operating lease portfolio in its determination of its operating lease liability.

The future aggregate minimum lease payments under non-cancellable operating leases are as follows:

2021	15,103
2022	13,758
2023	12,127
2024	10,297
2025	10,162
Thereafter	104,348
Total future minimum lease payments	$ 165,795
less: imputed interest	(42,554)
Total operating lease liability	$ 123,241
less: operating lease liability - current	(10,423)
Total operating lease liability - non-current	$ 112,818

At December 31, 2020, the weighted average remaining lease term for operating leases is 15.0 years and the weighted average discount rate is 4.0%.

25. Leases (continued)

Finance leases

The Company has entered into finance lease arrangements for certain vehicles, computer and yard equipment and office furniture. The majority of the leases have a fixed term with a remaining life of one month to six years with renewal options included in the contracts. In certain of these leases, the Company has the option to purchase the leased asset at fair market value or a stated residual value at the end of the lease term. For certain leases such as vehicle leases the Company has included renewal options in the determination of its lease liabilities.

As at December 31, 2020, the net carrying amount of computer and yard equipment and other assets under finance leases is $25,649,000 (December 31, 2019: $23,258,000), and is included in the total property, plant and equipment as disclosed on the consolidated balance sheets.

Assets recorded under finance leases are as follows:

As at December 31, 2020	**Cost**	**Accumulated depreciation**	**Net book value**
Computer equipment	$ 16,597	$ (8,317)	$ 8,280
Yard and others	28,234	(10,865)	17,369
	$ 44,831	$ (19,182)	$ 25,649

As at December 31, 2019	**Cost**	**Accumulated depreciation**	**Net book value**
Computer equipment	$ 15,314	$ (7,832)	$ 7,482
Yard and others	21,525	(5,749)	15,776
	$ 36,839	$ (13,581)	$ 23,258

The future aggregate minimum lease payments under non-cancellable finance leases are as follows:

2021	9,958
2022	8,030
2023	5,840
2024	3,383
2025	625
Thereafter	—
Total future minimum lease payments	$ 27,836
less: imputed interest	(1,534)
Total finance lease liability	$ 26,302
less: finance lease liability - current	(9,193)
Total finance lease liability - non-current	$ 17,109

At December 31, 2020, the weighted average remaining lease term for finance leases is 3.2 years and the weighted average discount rate is 3.8%.

Subleases

As at December 31, 2020, the total future minimum sublease payments expected to be received under non-cancellable subleases is $69,000 (2019: $616,000; 2018: $1,187,000).

26. Commitments

Commitments for expenditures

As at December 31, 2020, the Company had committed to, but not yet incurred, $751,000 in capital expenditures for property, plant and equipment and intangible assets (December 31, 2019: $2,697,000).

Commitment for inventory purchase

The Company entered into a two-year non-rolling stock surplus contract with the U.S. Government Defense Logistics Agency (the "DLA") in December 2017 with the option to extend for up to four-years. Pursuant to the contract, the original performance period commenced in April 2018 and concluded in March 2020. The Company has exercised its option for one year, extending the performance period to March 2021. The contract will terminate in April 2021, and the Company currently intends to participate in the bid process.

The Company has committed to purchase between 150,000 and 245,900 units of property with an expected minimum value of $11,104,000 and up to $51,028,000 annually to the extent that goods are available from the DLA over the initial 12 month period relating to the purchase of inventory. At December 31, 2020, the Company has purchased $17,681,000 pursuant to the 12 month period of this contract which commenced in April 2020.

27. Contingencies

Legal and other claims

The Company is subject to legal and other claims that arise in the ordinary course of its business. Management does not believe that the results of these claims will have a material effect on the Company's consolidated balance sheet or consolidated income statement.

Guarantee contracts

In the normal course of business, the Company will in certain situations guarantee to a consignor a minimum level of proceeds in connection with the sale at auction of that consignor's equipment.

At December 31, 2020, there were $22,773,000 of assets guaranteed under contract, of which 23% is expected to be sold prior to March 31, 2021 with the remainder to be sold by December 31, 2021 (December 31, 2019: $63,612,000 of which 39% was expected to be sold prior to the end of March 31, 2020 with the remainder to be sold by June 30, 2020).

The outstanding guarantee amounts are undiscounted and before estimated proceeds from sale at auction.

28. Selected quarterly financial data (unaudited)

Certain comparative figures have been restated to conform to current presentation. The following is a summary of selected quarterly financial information (unaudited):

				Attributable to stockholders		
					Earnings per share	
2020	**Revenues**	**Operating income**	**Net income**	**Net income**	**Basic**	**Diluted**
First quarter	$ 273,255	$ 34,082	$ 22,829	$ 22,809	$ 0.21	$ 0.21
Second quarter	389,050	88,802	53,120	53,042	0.49	0.49
Third quarter	331,542	67,384	45,490	45,387	0.42	0.41
Fourth quarter	383,413	72,892	48,919	48,857	0.45	0.44

				Attributable to stockholders		
					Earnings per share	
2019	**Revenues**	**Operating income**	**Net income**	**Net income**	**Basic**	**Diluted**
First quarter	$ 303,429	$ 33,588	$ 18,172	$ 18,164	$ 0.17	$ 0.17
Second quarter	393,222	77,970	54,131	54,036	0.50	0.49
Third quarter	289,796	40,160	25,272	25,266	0.23	0.23
Fourth quarter	332,194	71,484	51,565	51,573	0.47	0.47

				Attributable to stockholders		
					Earnings (loss) per share	
2018	**Revenues**	**Operating income**	**Net income (loss)**	**Net income (loss)**	**Basic**	**Diluted**
First quarter	$ 260,178	$ 32,873	$ 17,207	$ 17,138	$ 0.16	$ 0.16
Second quarter	308,530	64,795	45,727	45,717	0.42	0.42
Third quarter	245,346	31,194	23,112	23,138	0.21	0.21
Fourth quarter	355,972	56,327	35,460	35,486	0.33	0.32

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

Not applicable.

ITEM 9A: CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

Management of the Company, including the Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO"), have evaluated the effectiveness of the Company's disclosure controls and procedures as of the end of the year covered by this Form 10-K. The term "disclosure controls and procedures" means controls and other procedures established by the Company that are designed to ensure that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the Company's management, including its CEO and CFO, as appropriate, to allow timely decisions regarding required disclosure.

Based upon their evaluation of the Company's disclosure controls and procedures, as of December 31, 2020, the CEO and the CFO concluded that the disclosure controls were not effective, due to the material weaknesses in internal control over financial reporting described below, to provide reasonable assurance that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is accumulated and communicated to management, including the CEO and CFO, as appropriate, to allow timely decisions regarding required disclosure and were not effective to provide reasonable assurance that such information is recorded, processed, summarized and reported within the time periods specified by the SEC's rules and forms.

The Company completed the acquisition of Rouse on December 8, 2020 and Rouse's total assets and revenues constituted 11.2% and 0.14 %, respectively, of the Company's total assets and revenues as shown in our consolidated financial statements as of and for the year ended December 31, 2020. As the acquisition occurred in the fourth quarter of 2020, we excluded Rouse from the scope of our assessment over the effectiveness of the Company's disclosure controls and procedures. This exclusion is in accordance with the guidance issued by the Staff of the Securities and Exchange Commission that an assessment of a recently acquired business may be omitted from our scope in the year of acquisition, if specified conditions are satisfied.

The Company, including its CEO and CFO, does not expect that its internal controls and procedures will prevent or detect all error and all fraud. A control system, no matter how well conceived or operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

Management's Annual Report on Internal Control Over Financial Reporting

In accordance with Item 308 of SEC Regulation S-K, management is required to provide an annual report regarding internal controls over our financial reporting. This report, which includes management's assessment of the effectiveness of our internal controls over financial reporting, is found below.

Management's Report on Internal Control over Financial Reporting

Management of the Company is responsible for establishing and maintaining adequate internal controls over financial reporting for the Company as defined in Rule 13a-15(f) and 15d-15(f) under the Exchange Act. The Company's internal control over financial reporting is a process designed under the supervision of the Company's CEO and CFO, overseen by the Company's Board of Directors and implemented by the Company's management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the financial statements for external purposes in accordance with U.S. generally accepted accounting principles, and the requirements of the SEC.

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 policies and procedures may deteriorate.

Management has assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2020. In making this assessment, management used the criteria described in "Internal Control – Integrated Framework" issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 Framework) ("COSO"). Based on its assessment under the framework in COSO, management has concluded that based on the existence of material weaknesses described below, internal control over financial reporting was not effective as of December 31, 2020.

A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the Company's annual or interim financial statements will not be prevented or detected on a timely basis.

The Company identified a material weakness over the review of the recording of manual journal entries in one of its geographies; specifically, controls were not operating effectively to ensure that journal entries were prepared with appropriate supporting documentation. Additionally, the Company identified a material weakness over the completeness and accuracy of key reports used in the performance of controls to address the occurrence and measurement of revenue.

There were no adjustments required in the 2020 interim or annual consolidated financial statements due to these material weaknesses. The Company is committed to maintaining a strong internal control environment and will make it a priority to implement measures designed to help ensure that control deficiencies contributing to the material weaknesses are remediated. Management with oversight from the Audit Committee and the Board of Directors is currently in the process of designing a remediation plan which will include a review of the Company's internal controls over financial reporting. Such remediation efforts are intended to address the identified material weaknesses and enhance the Company's overall financial control environment.

The Company completed the acquisition of Rouse on December 8, 2020 and Rouse's total assets and revenues constituted 11.2% and 0.14 %, respectively, of the Company's total assets and revenues as shown in its consolidated financial statements as of and for the year ended December 31, 2020. As the acquisition occurred in the fourth quarter of 2020, the Company excluded Rouse from the scope of its assessment over the effectiveness of its internal control over financial reporting. This exclusion is in accordance with the guidance issued by the Staff of the Securities and Exchange Commission that an assessment of a recently acquired business may be omitted from its scope in the year of acquisition, if specified conditions are satisfied.

Ernst & Young LLP, the Company's independent registered public accounting firm, has audited the effectiveness of the Company's internal control over financial reporting as of December 31, 2020.Their assessment is included in their accompanying report which appears immediately following this report.

Attestation Report of Registered Public Accounting Firm

The attestation report required under this Item 9A is set forth below under the caption "Report of Independent Registered Public Accounting Firm."

Changes in Internal Control over Financial Reporting

Management, with the participation of the CEO and CFO, concluded that there were no changes in the Company's internal control over financial reporting during the year ended December 31, 2020 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting, other than the material weaknesses described above.

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Ritchie Bros. Auctioneers Incorporated

Opinion on Internal Control over Financial Reporting

We have audited Ritchie Bros. Auctioneers Incorporated's internal control over financial reporting as of December 31, 2020, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the "COSO" criteria). In our opinion, because of the effect of the material weaknesses described below on the achievement of the objectives of the control criteria, Ritchie Bros. Auctioneers Incorporated (the "Company") has not maintained effective internal control over financial reporting as of December 31, 2020, based on the COSO criteria.

As indicated in the accompanying Management's Report on Internal Control over Financial Reporting, management's assessment of and conclusion on the effectiveness of internal control over financial reporting did not include the internal controls of Rouse Services LLC ("Rouse") which is included in the 2020 consolidated financial statements of the Company and constituted 11% and 25% of total and net assets, respectively, as of December 31, 2020 and 0.14% and 0.11% of revenues and net income, respectively, for the year then ended. Our audit of internal control over financial reporting of the Company also did not include an evaluation of the internal control over financial reporting of Rouse acquired on December 8, 2020.

A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the company's annual or interim consolidated financial statements will not be prevented or detected on a timely basis. The following material weaknesses have been identified and included in management's assessment. Management has identified material weaknesses in the review of manual journal entries in one geography and controls over the completeness and accuracy of key reports used in the performance of controls to address the occurrence and measurement of revenue.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the consolidated balance sheets of the Company as of December 31, 2020 and 2019, the related consolidated statements of income, comprehensive income, changes in equity and cash flows for each of the three years in the period ended December 31, 2020, and the related notes. These material weaknesses were considered in determining the nature, timing and extent of audit tests applied in our audit of the 2020 consolidated financial statements, and this report does not affect our report dated February 18, 2021, which expressed an unqualified opinion thereon.

Basis for Opinion

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

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

Definition and Limitations of Internal Control Over Financial Reporting

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

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

/s/Ernst & Young LLP
Chartered Professional Accountants

Vancouver, Canada
February 18, 2021

ITEM 9B: OTHER INFORMATION

None.

PART III

ITEM 10: DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information responsive to this Item is incorporated by reference to our definitive Proxy Statement for our 2021 Annual and Special Meeting of Shareholders, to be filed 120 days of December 31, 2020, pursuant to Regulation 14A under the Securities Exchange Act of 1934, as amended (the 2021 Proxy Statement).

We have adopted a written code of business conduct and ethics, which applies to all of our directors, officers and employees, including our principal executive officer and our principal financial and accounting officer. Our Code of Business Conduct and Ethics is available on our website, https://www.rbauction.com/cms_assets/pdf/corporate-governance/09-2018-Ritchie-Bros-Code-of-Business-Conduct-and-Ethics.pdf, and can be obtained by writing to Ritchie Bros. Investor Relations, 9500 Glenlyon Parkway, Burnaby, British Columbia, Canada V5J 0C6 or by sending an email to our Investor Relations department at IR@ritchiebros.com. The information contained on our website is not incorporated by reference into this Annual Report on Form 10-K. Any amendments, other than technical, administrative or other non-substantive amendments, to our Code of Business Conduct and Ethics or waivers from the provisions of the Code of Business Conduct and Ethics for our principal executive officer and our principal financial and accounting officer will be promptly disclosed on our website following the effective date of such amendment or waiver.

ITEM 11: EXECUTIVE COMPENSATION

The information responsive to this Item is incorporated by reference to our 2021 Proxy Statement.

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

The information responsive to this Item is incorporated by reference to our 2021 Proxy Statement.

ITEM 13: CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information responsive to this Item is incorporated by reference to our 2021 Proxy Statement.

ITEM 14: PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information responsive to this Item is incorporated by reference to our 2021 Proxy Statement.

PART IV

ITEM 15: EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) Documents Filed with this Report:

1. FINANCIAL STATEMENTS

2. FINANCIAL STATEMENT SCHEDULES
   None.

3. EXHIBITS
   The exhibits listed in (b) below are filed as part of this Annual Report on Form 10-K and incorporated herein by reference.

(b) Exhibits:

Exhibit Number	Document
2.1*	Agreement and Plan of Merger, dated August 29, 2016, by and among the Company, Topaz Mergersub, Inc., IronPlanet, and Fortis Advisors LLC (as representative of the indemnifying securityholders thereunder) (incorporated by reference to Exhibit 2.1 to the Company’s Current Report on Form 8-K filed on August 31, 2016)
3.1	Articles of Amalgamation and Amendments (incorporated by reference to Exhibit 3.1 to the Company’s Annual Report on Form 10-K filed on February 25, 2016)
3.2	Amended and Restated By-law No. 1 (incorporated by reference to Exhibit 99.1 to the Company’s Current Report on Form 6-K furnished on February 27, 2015)
4.1	Amended and Restated Shareholder Rights Plan Agreement dated as of February 28, 2019, between Ritchie Bros. Auctioneers Incorporated and Computershare Investor Services, Inc., as Rights Agent (incorporated by reference to Exhibit 4.1 to the Company’s Current Report on Form 8-K filed on February 28, 2019)
4.2	Description of the Company’s Securities Registered Pursuant to Section 12 of the Exchange Act (incorporated by reference to Exhibit 4.2 to the Company’s Annual Report on Form 10-K filed on February 27, 2020)
4.3	Indenture, dated as of December 21, 2016, among the Company, the guarantors party thereto and US Bank National Association, as trustee, relating to the Company’s 5.375% Senior Notes due 2025 (includes form of note) (incorporated by reference to Exhibit 4.1 to the Company’s Current Report on Form 8-K filed on December 21, 2016)
10.1#	Amended and Restated Stock Option Plan, dated May 2, 2016 (incorporated by reference to Exhibit 10.1 to the Company’s Quarterly Report on Form 10-Q filed on August 8, 2016)
10.2#	Form of Stock Option Agreement (incorporated by reference to Exhibit 10.2 to the Company’s Annual Report on Form 10-K filed on February 25, 2016)
10.3#	Amended and Restated Executive Long-Term Incentive Plan (incorporated by reference to Exhibit 10.4 to the Company’s Annual Report on Form 10-K filed on February 25, 2016)
10.4#	Non-Executive Director Long-Term Incentive Plan (incorporated by reference to Exhibit 10.5 to the Company’s Annual Report on Form 10-K filed on February 25, 2016)

10.5#	Amended and Restated Senior Executive Restricted Share Unit Plan (incorporated by reference to Exhibit 4.1 to the Company’s registration statement on Form S-8 filed on November 9, 2017)
10.6#	Form of Restricted Share Unit Grant Agreement for Amended and Restated Senior Executive Restricted Share Unit Plan (incorporated by reference to Exhibit 10.7 to the Company’s Annual Report on Form 10-K filed February 26, 2018)
10.7#	Form of Restricted Share Unit Special Grant Agreement for Amended and Restated Senior Executive Restricted Share Unit Plan (incorporated by reference to Exhibit 10.8 to the Company’s Annual Report on Form 10-K filed February 26, 2018)
10.8#	Amended and Restated Employee Restricted Share Unit Plan (incorporated by reference to Exhibit 4.2 to the Company’s registration statement on Form S-8 filed on November 9, 2017)
10.9#	Form of Restricted Share Unit Grant Agreement for Amended and Restated Employee Restricted Share Unit Plan (incorporated by reference to Exhibit 10.10 to the Company’s Annual Report on Form 10-K filed February 26, 2018)
10.10#	Amended and Restated Non-Executive Director Deferred Share Unit Plan (incorporated by reference to Exhibit 10.11 to the Company’s Annual Report on Form 10-K filed February 26, 2018)
10.11#	Executive Nonqualified Excess Plan (United States 10/10 Program) (incorporated by reference to Exhibit 10.14 to the Company’s Annual Report on Form 10-K filed on February 25, 2016)
10.12#	Amended Executive Nonqualified Excess Plan (incorporated by reference to Exhibit 10.1 to the Company’s Quarterly Report on Form 10-Q filed on May 10, 2018)
10.13#	Canada and All Non-United States Locations: 10/10 Compensation Arrangement (Canada 10/10 Program) (incorporated by reference to Exhibit 10.15 to the Company’s Annual Report on Form 10-K filed on February 25, 2016)
10.14#	Senior Executive Performance Share Unit Plan (March 2015) (incorporated by reference to Exhibit 10.16 to the Company’s Annual Report on Form 10-K filed on February 25, 2016)
10.15#	Amendment No. 1 to Senior Executive Performance Share Unit Plan dated August 8, 2018 (incorporated by reference to Exhibit 10.1 to the Company’s Quarterly Report on Form 10-Q filed on November 11, 2018)
10.16#	Form of Performance Share Unit Grant Agreement for Senior Executive Performance Share Unit Plan (March 2015) (incorporated by reference to Exhibit 10.17 to the Company’s Annual Report on Form 10-K filed on February 25, 2016)
10.17#	Employee Performance Share Unit Plan (March 2015) (incorporated by reference to Exhibit 10.18 to the Company’s Annual Report on Form 10-K filed on February 25, 2016)
10.18#	Amendment No. 1 to Employee Performance Share Unit Plan dated August 8, 2018 (incorporated by reference to Exhibit 10.2 to the Company’s Quarterly Report on Form 10-Q filed on November 11, 2018)
10.19#	Form of Performance Share Unit Grant Agreement for Employee Performance Share Unit Plan (March 2015) (incorporated by reference to Exhibit 10.19 to the Company’s Annual Report on Form 10-K filed on February 25, 2016)
10.20#	1999 Employee Stock Purchase Plan (as amended December 14, 2017) (incorporated by reference to Exhibit 10.21 to the Company’s Annual Report on Form 10-K filed February 26, 2018)
10.21#	Employment Agreement between Ritchie Bros. Auctioneers (Canada) Ltd. and Ann Fandozzi, dated December 14, 2019 (incorporated by reference to Exhibit 10.21 to the Company’s Annual Report on Form 10-K filed on February 27, 2020)
10.22#	Employment Agreement between Ritchie Bros. Auctioneers (America) Inc. and Jim Barr, dated November 3, 2014 (incorporated by reference to Exhibit 10.22 to the Company’s Annual Report on Form 10-K filed on February 25, 2016)
10.23#	Employment Agreement between Ritchie Bros. Auctioneers (America) Inc. and Karl Werner, dated January 1, 2015 (incorporated by reference to Exhibit 10.25 to the Company’s Annual Report on Form 10-K filed on February 25, 2016)
10.24#	Employment Agreement between Ritchie Bros. Auctioneers (Canada) Ltd. and Todd Wohler, dated January 6, 2015 (incorporated by reference to Exhibit 10.26 to the Company’s Annual Report on Form 10-K filed on February 25, 2016)
10.25#	Amendment to Employment Agreement between Ritchie Bros. Auctioneers (Canada) Ltd. and Todd Wohler, dated January 20, 2015 (incorporated by reference to Exhibit 10.27 to the Company’s Annual Report on Form 10-K filed on February 25, 2016)
10.26#	Employment Agreement between Ritchie Bros. Auctioneers (America) Inc. and Kieran Holm, dated March 29, 2017 (incorporated by reference to Exhibit 10.2 to the Company’s Quarterly Report on Form 10-Q filed on May 10, 2018)

10.27#	Employment Agreement between Ritchie Bros. Auctioneers (Canada) Ltd. and Darren Watt, dated May 25, 2015 (incorporated by reference to Exhibit 10.32 to the Company’s Annual Report on Form 10-K filed on February 25, 2016)
10.28#	Employment Agreement between Ritchie Bros. Auctioneers (Canada) Ltd. and Sharon Driscoll, dated May 20, 2015 (incorporated by reference to Exhibit 10.33 to the Company’s Annual Report on Form 10-K filed on February 25, 2016)
10.29#	Form of Change of Control Agreement (incorporated by reference to Exhibit 10.37 to the Company’s Annual Report on Form 10-K filed on February 25, 2016)
10.30#	Form of Indemnity Agreement (incorporated by reference to Exhibit 10.38 to the Company’s Annual Report on Form 10-K filed on February 25, 2016)
10.31	Lease Agreement with Great-West Life Assurance Company and London Life Insurance Company dated August 12, 2008 (incorporated by reference to Exhibit 10.39 to the Company’s Annual Report on Form 10-K filed on February 25, 2016)
10.32	Development Agreement with Great-West Life Assurance Company and London Life Insurance Company dated August 12, 2008 (incorporated by reference to Exhibit 10.40 to the Company’s Annual Report on Form 10-K filed on February 25, 2016)
10.33	Pre-Handover Occupancy Rental Agreement and Amendment to Development Agreement with Great-West Life Assurance Company and London Life Insurance Company dated November 25, 2009 (incorporated by reference to Exhibit 10.41 to the Company’s Annual Report on Form 10-K filed on February 25, 2016)
10.34	Lease Modification Agreement with Great-West Life Assurance Company and London Life Insurance Company dated February 12, 2010 (incorporated by reference to Exhibit 10.42 to the Company’s Annual Report on Form 10-K filed on February 25, 2016)
10.35	Lease Confirmation and Amendment to Development Agreement with Great-West Life Assurance Company and London Life Insurance Company dated May 6, 2010 (incorporated by reference to Exhibit 10.43 to the Company’s Annual Report on Form 10-K filed on February 25, 2016)
10.36#	Summary of Short-term Incentive Plan (incorporated by reference to Exhibit 10.44 to the Company’s Annual Report on Form 10-K filed on February 25, 2016)
10.37#	Amendment to Employment Agreement between Ritchie Bros. Auctioneers (Canada) Ltd. and Sharon Driscoll, dated February 26, 2016 (incorporated by reference to Exhibit 10.45 to the Company’s Annual Report on Form 10-K filed on February 21, 2017)
10.38#	Employment Agreement between Ritchie Bros. Auctioneers (Canada) Ltd. and Marianne Marck, dated February 29, 2016 (incorporated by reference to Exhibit 10.1 to the Company’s Quarterly Report on Form 10-Q filed on May 9, 2016)
10.39**	Strategic Alliance and Remarketing Agreement, entered into as of August 29, 2016, by and between the Company, IronPlanet, Inc. and Caterpillar, Inc. (incorporated by reference to Exhibit 10.1 to the Company’s Quarterly Report on Form 10-Q filed on November 9, 2016)
10.40	Amended and Restated Commitment Letter, dated September 16, 2016, from Goldman Sachs Bank USA and Royal Bank of Canada (incorporated by reference to Exhibit 10.3 to the Company’s Quarterly Report on Form 10-Q filed on November 9, 2016)
10.41	Credit Agreement, dated as of October 27, 2016, by and among the Company, the other borrowers and guarantors party thereto, Bank of America, N.A., as administrative agent, U.S. swing line lender and L/C issuer, Royal Bank of Canada, as Canadian swing line lender and L/C issuer, and the other lenders party thereto (incorporated by reference to Exhibit 10.1 to the Company’s Current Report on Form 8-K/A filed on November 4, 2016)
10.42	First Amendment, dated as of January 17, 2017, to Credit Agreement, dated as of October 27, 2016, by and among the Company, the other borrowers and guarantors party thereto, Bank of America, N.A., as administrative agent, U.S. swing line lender and L/C issuer, Royal Bank of Canada, as Canadian swing line lender and L/C issuer, and the other lenders party thereto (incorporated by reference to Exhibit 10.50 to the Company’s Annual Report on Form 10-K filed on February 21, 2017)

10.43	Third Amendment to Credit Agreement, dated as of August 14, 2020, among the Company, certain of its subsidiaries, each as a borrower and/or a guarantor, the lenders party thereto and Bank of America, N.A., as administrative agent, U.S. swing line lender and letter of credit issuer (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on August 17, 2020)
10.44#	IronPlanet, Inc. 1999 Stock Plan (incorporated by reference to Exhibit 4.1 to the Company's registration statement on Form S-8 filed on June 1, 2017)
10.45#	Form of Stock Option Agreement for IronPlanet, Inc. 1999 Stock Plan (incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q filed on August 8, 2017)
10.46#	IronPlanet Holdings, Inc. 2015 Stock Plan (incorporated by reference to Exhibit 4.2 to the Company's registration statement on Form S-8 filed on June 1, 2017)
10.47#	Form of Stock Option Agreement for IronPlanet Holdings, Inc. 2015 Stock Plan (incorporated by reference to Exhibit 10.5 to the Company's Quarterly Report on Form 10-Q filed on August 8, 2017)
10.48#	Form of Ritchie Bros. Auctioneers Incorporated Stock Option Assumption Notice (incorporated by reference to Exhibit 10.6 to the Company's Quarterly Report on Form 10-Q filed on August 8, 2017)
10.49#	Employment Agreement between Ritchie Bros. Auctioneers (America) Inc. and Douglas Feick, dated August 29, 2016 (incorporated by reference to Exhibit 10.7 to the Company's Quarterly Report on Form 10-Q filed on August 8, 2017)
10.50#	Employment Agreement between Ritchie Bros. Auctioneers (America) Inc. and James Jeter, dated August 28, 2016 (incorporated by reference to Exhibit 10.8 to the Company's Quarterly Report on Form 10-Q filed on August 8, 2017)
10.51#	Employment Agreement between Ritchie Bros. Auctioneers (Canada) Ltd. and Carmen Thiede, dated February 26, 2020 (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on May 7, 2020)
10.52#	Employment Agreement between Ritchie Bros. Auctioneers (Canada) Ltd. and Baron Concors, dated March 13, 2020 (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed on May 7, 2020)
10.53#	Employment Agreement between Ritchie Bros. Auctioneers (Canada) Ltd. and James Kessler dated May 1, 2020 (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on August 6, 2020)
10.54#	Employment Agreement between Ritchie Bros. Auctioneers (Canada) Ltd. and Kevin Geisner, dated August 4, 2020 (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed on November 5, 2020)
10.55#	Membership Interest Purchase Agreement, dated October 28, 2020, between the Company, Ritchie Bros. Auctioneers (America) Inc., Rouse, the members of Rouse, and Scott Rouse, in his capacity as seller representative (incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q filed on November 5, 2020)
21.1	List of Company Subsidiaries
23.1	Consent of Ernst & Young LLP
31.1	Certificate of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certificate of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certificate of Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2	Certificate of Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS	XBRL Instance 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 for the Company's Annual Report on Form 10-K for the year ended December 31, 2020, formatted in Inline XBRL

\# Indicates management contract or compensatory plan or arrangement.

* Schedules have been omitted pursuant to Item 601(b)(2) of Regulation S-K. The registrant will furnish copies of any such schedules to the U.S. Securities and Exchange Commission upon request.

** Certain portions of this exhibit have been omitted pursuant to a request for confidential treatment and have been filed separately with the U.S. Securities and Exchange Commission.

ITEM 16: FORM 10-K SUMMARY

Not applicable.

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.

RITCHIE BROS. AUCTIONEERS INCORPORATED

Date: February 18, 2021

By: *_/s/ Ann Fandozzi_*
Ann Fandozzi
Chief Executive Officer

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

By:	/s/ *Ann Fandozzi* Ann Fandozzi	Chief Executive Officer (principal executive officer)	February 18, 2021
By:	/s/ *Sharon R. Driscoll* Sharon R. Driscoll	Chief Financial Officer (principal financial officer and principal accounting officer)	February 18, 2021
By:	*/s/ Erik Olsson* Erik Olsson	Chair of the Board	February 18, 2021
By:	*/s/ Beverley A. Briscoe* Beverley A. Briscoe	Director	February 18, 2021
By:	*/s/ Robert G. Elton* Robert G. Elton	Director	February 18, 2021
By:	*/s/ Adam DeWitt* Adam DeWitt	Director	February 18, 2021
By:	*/s/ Sarah Raiss* Sarah E. Raiss	Director	February 18, 2021
By:	*/s/ Christopher Zimmerman* Christopher Zimmerman	Director	February 18, 2021
By:	*/s/ Amy Guggenheim Skenkan* Amy Guggenheim Skenkan	Director	February 18, 2021
By:	*/s/ Kim Fennell* Kim Fennell	Director	February 18, 2021

Exhibit 21.1

Name of subsidiary	Incorporation	Ownership Interest	Principal activity
Ritchie Bros. Holdings Inc.	USA (Washington)	100%	Holding company
RBA Holdings Inc.	USA (Delaware)	100%	Holding company
Ritchie Bros. Auctioneers (America) Inc.	USA (Washington)	100%	Auction services
Ritchie Bros. Properties Inc.	USA (Washington)	100%	Property management
Ritchie Bros. Financial Services (America) Inc.	USA (Washington)	100%	Brokerage services
AssetNation, Inc.	USA (Delaware)	100%	E-commerce marketplace
Mascus USA Inc.	USA (Florida)	100%	E-commerce marketplace
Xcira, LLC	USA (Delaware)	75%	Auction services
SalvageSale Mexico Holding LLC	USA (Delaware)	100%	Holding company
IronPlanet, Inc	USA (Delaware)	100%	
IronPlanet Motors, LLC	USA (Delaware)	100%	
Kruse Energy & Equipment Auctioneers, LLC	USA (Texas)	100%	
IronPlanet Mexico, S. de R.L. de C.V.	Mexico	100%	
Leake Auction Company	USA (Oklahoma)	100%	Auction services
Rouse Services LLC	USA	100%	
Rouse Appraisals LLC	USA	100%	
Rouse Sales LLC	USA	100%	
Rouse Analytics LLC	USA	100%	
Ritchie Bros. Holdings Ltd.	Canada	100%	Holding company
Ritchie Bros. Auctioneers (Canada) Ltd.	Canada	100%	Auction services
Ritchie Bros. Real Estate Service Ltd.	Canada	100%	Real estate services
Ritchie Bros. Properties Ltd.	Canada	100%	Property management
Ritchie Bros. Financial Services Ltd.	Canada	100%	Brokerage services
Ritchie Bros. Finance Ltd.	Canada	100%	Holding company
IronPlanet Canada Ltd.	Canada	100%	
Ritchie Bros. Investment Holdings (Luxembourg) SARL	Luxembourg	100%	Holding company
Ritchie Bros. Auctioneers (ME) Limited	Cyprus	100%	Auction services
Ritchie Bros. Auctioneers India Private Limited	India	100%	Auction services
IronPlanet Limited	Ireland	100%	
Ritchie Bros. Holdings B.V.	The Netherlands	100%	Holding company
Ritchie Bros. B.V.	The Netherlands	100%	Auction services
Ritchie Bros. Shared Services B.V.	The Netherlands	100%	Administrative services
Ritchie Bros. Properties B.V.	The Netherlands	100%	Property management
Mascus International Holdings B.V.	The Netherlands	100%	E-commerce marketplace
Mascus International B.V.	The Netherlands	100%	E-commerce marketplace
Mascus IP B.V.	The Netherlands	100%	E-commerce marketplace
Mascus A/S	The Netherlands	100%	E-commerce marketplace
Ritchie Bros. Finland Oy	Finland	100%	E-commerce marketplace
Ritchie Bros. Sweden AB	Sweden	100%	E-commerce marketplace
Ritchie Bros. Polska Sp. Z.o.o.	Poland	100%	Auction services
Ritchie Bros. Properties S.r.l.	Italy	100%	Property management
Ritchie Bros. Italia S.r.l.	Italy	100%	Auction services
Ritchie Bros. Auctioneers (Spain) S.L.U.	Spain	100%	Auction services
Ritchie Bros. Properties (Spain) S.L.U.	Spain	100%	Property management
Ritchie Bros. UK Limited	United Kingdom	100%	Auction services
IronPlanet UK Limited	United Kingdom	100%	
Ritchie Bros. Deutschland GmbH	Germany	100%	Auction services
Ritchie Bros. Auctioneers France SAS	France	100%	Auction services
R.B. Services SARL	France	100%	Administrative services
R.B. Holdings SARL	France	100%	Holding company
R.B. Properties EURL	France	100%	Property management

Ritchie Bros. Holdings Pty Ltd.	Australia	100%	Holding company
Ritchie Bros. Auctioneers Pty Ltd.	Australia	100%	Auction services
Ritchie Bros. Properties Pty Ltd.	Australia	100%	Property management
Ritchie Bros. Properties Japan K.K.	Japan	100%	Property management
Ritchie Bros. Auctioneers (Japan) K.K.	Japan	100%	Auction services
Ritchie Bros. Auctioneers Pte Ltd.	Singapore	100%	Auction services
Ritchie Bros. Auctioneers (Beijing) Co. Ltd.	China	100%	Auction services
Ritchie Auction (Beijing) Co. Ltd.	China	100%	Auction services
Ritchie Bros. Auctioneers Mexico Services, S. de R.L. de C.V.	Mexico	100%	Administrative services
Ritchie Bros. Auctioneers de Mexico, S. de R.L. de C.V.	Mexico	100%	Auction services
Ritchie Bros. Properties, S. de R.L. de C.V.	Mexico	100%	Property management
SalvageSale De Mexico S. de R.L. de C.V.	Mexico	100%	E-commerce marketplace
SalvageSale Servicios, S. de R.L. de C.V.	Mexico	100%	Administrative services
Ritchie Bros. Auctioneers (Panama) S.A.	Panama	100%	Auction services
Ritchie Bros. Auctioneers Comercial de Equipamentos Industriais Ltda	Brazil	100%	Administrative services
Ritchie Bros. Auctioneers Muzayede Danismanlik ve Ticaret Limited Sirketi	Turkey	100%	Auction services
Ritchie Bros. (NZ) Limited	New Zealand	100%	Auction Services

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statements on Form S-8 (Nos. 333-65533, 333-188350, 333-202636, 333-211112, 333-213114, 333-218398, 333-221439 and 333-231330) of **Ritchie Bros. Auctioneers Incorporated** of our reports dated February 18, 2021, with respect to the consolidated financial statements of **Ritchie Bros. Auctioneers Incorporated** and the effectiveness of internal control over financial reporting of **Ritchie Bros. Auctioneers Incorporated** included in this Annual Report (Form 10-K) of **Ritchie Bros. Auctioneers Incorporated** for the year ended December 31, 2020.

Vancouver, Canada
February 18, 2021

/s/Ernst & Young LLP
Chartered Professional Accountants

EXHIBIT 31.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER PURSUANT TO RULE 13a-14(a) OF THE SECURITIES EXCHANGE ACT OF 1934

I, Ann Fandozzi, certify that:

1. I have reviewed this annual report on Form 10-K of Ritchie Bros. Auctioneers Incorporated;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 18, 2021

/s/ Ann Fandozzi

Ann Fandozzi
Chief Executive Officer

EXHIBIT 31.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER PURSUANT TO RULE 13a-14(a) OF THE SECURITIES EXCHANGE ACT OF 1934

I, Sharon R. Driscoll, certify that:

1. I have reviewed this annual report on Form 10-K of Ritchie Bros. Auctioneers Incorporated;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 18, 2021

/s/ Sharon R. Driscoll

Sharon R. Driscoll
Chief Financial Officer

EXHIBIT 32.1

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

In connection with the Annual Report of Ritchie Bros. Auctioneers Incorporated (the "Company") on Form 10-K for the period ended December 31, 2020, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Ann Fandozzi, Chief Executive Officer, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 18, 2021

/s/ Ann Fandozzi

Ann Fandozzi
Chief Executive Officer

EXHIBIT 32.2

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

In connection with the Annual Report of Ritchie Bros. Auctioneers Incorporated (the "Company") on Form 10-K for the period ended December 31, 2020, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Sharon R. Driscoll, Chief Financial Officer, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 18, 2021

/s/ Sharon R. Driscoll

Sharon R. Driscoll
Chief Financial Officer