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, 2021

or

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

For the transition period from to

Commission file number: 001-13425

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 and Zip Code)	(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, 2021 (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 $6,537,241,609. The number of common shares of the registrant outstanding as of February 16, 2022, was 110,633,712.

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, 2021, in connection with the registrant's 2021 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, 2021

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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 ("COVID-19") and the direct and indirect impact of such pandemic on our operations and personnel, commercial activity and demand across our business and our customers' businesses, as well as responses to the pandemic by the government, business and consumers;
- 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 our 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;
- potential future mergers and acquisitions, including the planned acquisition of Euro Auctions;
- 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, credit facilities and debt.

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, 2021 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 and disposition technologies for commercial assets, selling $5.5 billion of used equipment and other assets during 2021. Our expertise, unprecedented global reach, market insights, and trusted portfolio of brands provide us with a unique position within the used equipment market.

Through our unreserved auctions, online marketplaces, listings, and private brokerage services, we sell a broad range of primarily used commercial and industrial assets as well as government surplus. Construction and transportation assets comprise the majority of the equipment sold by GTV dollar value. 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 construction, transportation, agriculture, energy, and natural resources.

We also provide our customers with a wide array of value added 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. 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. Additionally, we offer our customers an innovative technology platform that supports equipment lifecycle management and parts procurement integration with both original equipment manufacturers and dealers, as well as software as a service platform for end-to-end parts procurement and digital catalogs and diagrams.

We operate globally with locations in 12 countries, including the U.S., Canada, Australia, the United Arab Emirates, and the Netherlands, and maintain a presence in 48 countries where customers are able to sell from their own yards. In addition, we employ more than 2,700 full-time employees worldwide.

Acquisition of SmartEquip

On November 2, 2021, we completed the acquisition of SmartEquip, a Delaware, United States corporation. SmartEquip has a multi-manufacturer platform that provides customers with real-time service and diagnostic support, dynamically customized, via serial number, to each asset in their fleet, and enables the electronic procurement of parts from original equipment manufacturers and their dealers. We acquired SmartEquip for a purchase price of $174 million. We also issued 63,971 common shares valued at $4.4 million, to certain continuing employees subject to their continuing employment over a three year vesting period from the date of acquisition.

We expect that the acquisition of SmartEquip will enable and accelerate adoption of parts and service sales on behalf of our dealer and OEM partners by providing a seamless experience for end users, will deepen our inventory management system connectivity and will further enable digital solutions at scale around inspections and ancillary services while enabling better optimization of search and advertising revenue streams. The acquisition further aligns to our execution strategy of becoming a trusted global marketplace for insights, services and transaction solutions for commercial assets. SmartEquip will continue to maintain its physical presence in Connecticut, United States for the foreseeable future.

Acquisition of Euro Auctions

On August 9, 2021, we entered into a Sale and Purchase Agreement ("SPA") pursuant to which we have agreed to purchase Euro Auctions Limited, William Keys & Sons Holdings Limited, Equipment & Plant Services Ltd, and Equipment Sales Ltd. (collectively, "Euro Auctions"), each being a private limited company incorporated in Northern Ireland (the "Euro Auctions Acquisition"), for a purchase price of approximately £775 million (approximately $1.05 billion) in cash, to be paid on closing.

Founded in 1998, Euro Auctions conducts unreserved heavy equipment auctions with on site and online bidding under the brands Euro Auctions and Yoder & Frey, and employs over 200 employees in 14 countries. Similar to Ritchie Bros., Euro Auctions also sells items through a timed auction format and a daily marketplace with Buy Now and Make Offer options.

The acquisition of Euro Auctions is aligned with our accelerated growth efforts and with our strategy as stated above. Euro Auctions will enhance our international presence and accelerate our international growth by offering diversified choice to customers around the world, facilitate better price discovery and more equipment selection. We will expand our overall footprint to access equipment, while also tapping into new revenue streams with service offerings to Euro Auctions customers, including inventory management services, data solution, financing, warranty, insurance, inspections, refurbishing, shipping, and more. We plan to retain the Euro Auctions employees and its brand, both of which are highly regarded in the Europe, the Middle East, and Africa regions. In addition, we anticipate both companies will achieve synergy by unlocking value for Euro Auctions customers post acquisition through adoption of our inventory management system platform.

On December 21, 2021, the Company completed its offering of two series of senior unsecured notes for approximately $935.0 million aggregate principal. The Company intends to use the net proceeds from the offering of the two series of senior unsecured notes, together with proceeds from our delayed-draw term loan and, on an as-needed basis, cash on hand available or borrowings under our revolving facilities to fund the consideration payable of the acquisition of Euro Auctions. The gross proceeds from the offering will be held in escrow pending the consummation of the acquisition of Euro Auctions. On December 23, 2021, the Company entered into two deal contingent foreign exchange forward currency contracts, with no upfront cash cost, to manage its exposure to foreign currency exchange rate fluctuations against the U.S. and Canadian dollar on £343.0 million of the £775.0 million purchase consideration for the proposed Euro Auctions Acquisition.

Impact of COVID-19 to our Business

In March 2020, the World Health Organization declared the outbreak of COVID-19 as a pandemic, which quickly spread throughout the world, resulting in significant global economic disruption that 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 2021, our ability to move equipment to and from our auction sites and across borders varied across regions, with Asia and Australia particularly impacted, as regional governments enforced heavy travel restrictions and quarantine requirements. In these regions, the restrictions also resulted in some challenges in customer interactions and challenges for our customers to complete equipment inspections. In the United States and Canada, COVID-19 did not materially impact our ability to operate our businesses and move equipment. Globally, we continued to see surges in shipping and freight costs combined with extended lead times, making transportation of equipment both more costly and more challenging, negatively impacting the buying and selling behaviours of our customers. Additionally, COVID-19 in combination with various macro economic factors impacted the supply chains of new equipment production, which in turn negatively affected the supply of used equipment being sold throughout our regions, most predominantly in North America.

Our top priority regarding COVID-19 remains the health and welfare of our employees, customers, suppliers and others with whom we partner to run our business activities. We continue to adhere to all local government and jurisdictional safety guidelines, and, in some instances, we are applying additional over-and-above safety measures. Many of our employees continue to work from home on a temporary basis and travel continues to be limited given ongoing travel restrictions.

Since the beginning of COVID-19, we continue to be 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 operations in March 2020 to transition all of our traditional live on site industrial auctions and events to online bidding. Buyers are generally still able to visit our auction sites in advance of the auctions to conduct inspections and pick up equipment post auction, but we have generally not been holding live auction events in our theatres. As restrictions continue to ease in the US and elsewhere, we will consider a further transition back to some measure of in-person attendance at certain of our on site auction events.

The extent of the ongoing impact of COVID-19 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 in light of new variants, and any related restrictions implemented by governments in various jurisdictions, 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 auctions in all regions, there is no assurance that our operations could not be impacted in the future.

We continue to actively monitor the evolving impact that COVID-19 is having in the world and remain ready to take further actions or adjust our response based on any new governmental guidance or recommendations. It is unknown how long the pandemic will last, or whether we will see a resurgence of cases as new variants develop or spread, how many people are ultimately going to be affected by it, and the long-term implications to local or global economies. Equally, the effects of COVID-19 on equipment supply, buyer demand, and potential pricing volatility, or the potential impact on our buyers' continued ability to pay or secure financing remain uncertain. Additionally, there is a level of uncertainty about the long-term impact of COVID-19 on our third party vendors, partners and the service providers with whom we currently do business. As such, given the ongoing nature of COVID-19, we are not currently able to reasonably estimate the future impacts of COVID-19 on our business operations, results of operations, cash flows, financial performance or our ability to pay dividends.

Strategy

Our strategy to become *the trusted global marketplace for insights, services and transaction solutions for commercial assets* will help us address the large and fragmented used equipment marketplace that we operate in today. We believe our strategy will help us unlock significant growth opportunities by building on Ritchie Bros.' core business and expanding into additional services. 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 transaction solutions that we are already well known for. 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 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	rb 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	rb PRIVATE TREATY A Ritchie Bros. Solution	■ Confidential, negotiated sale of large equipment

Gross Transaction Value (“GTV”)
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.

Contract options
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 2021, our underwritten business accounted for approximately 18% of our GTV, compared to 20% in 2020 and 2019.

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;
- providing equipment sales and rental data intelligence and performance benchmarking solutions; and
- providing an innovative technology platform that supports customers' management of the equipment lifecycle and integrates parts procurement with both original equipment manufacturers and dealers

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	Ritchie Bros. Financial Services	■ Loan origination service that uses a brokerage model to match loan applicants with appropriate financial lending institutions
Appraisal Service	Appraisal Services A Ritchie Bros. Solution Rouse	■ Unbiased, certified appraisal services
Inspection Service	Ritchie Bros. Inspection Services	■ Truck and lease return inspection services
Online Listing Service	Ritchie Bros. Mascus Ritchie List	■ Online equipment listing service and B2B dealer portal
Ancillary Services		■ Repair, paint, and other make-ready services
Logistical Service	Ritchie Bros. Logistics Services	■ End-to-end transportation and customs clearance solution for sellers and buyers with shipping needs
Software Service	Ritchie Bros. Asset Solutions	■ Cloud-based platform to manage end-to-end disposition
Data Service	Rouse	■ A leading provider of construction equipment market intelligence
Parts Service	SmartEquip Be Ready.	■ Digital marketplace connecting equipment owners with parts manufacturers

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 $300.0 billion. We estimate the used equipment auction segment is $30 billion. Ritchie Bros. is the largest auction company with approximately $5.5 billion in GTV volume in 2021. 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 OEMs, 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 digital channels as well as a global network of over 40 auction sites in 12 countries, including the U.S., Canada, Australia, the United Arab Emirates, and the Netherlands. Our online bidding technology and Ritchie Bros. website are currently available in 10 and 22 languages, respectively. Our global presence allows us to generate deep pools of liquidity for transactions enabling global market pricing for our equipment sellers, helping to deliver strong and efficient price realization for assets.

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
Our platform provides us with the ability to meet all the buyers' and sellers' unique needs in a one-stop-shop manner. By delivering choice through our disposition channels, 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.

In addition to transaction solutions, Ritchie Bros. offers a variety of value-added services to our customers including financial services, market data, valuation insights, inspections, appraisals, transportations, refurbishment and digital parts procurement.

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. Additionally, Rouse Services is the leading provider of rental metrics benchmarks and equipment valuations 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.

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.

Our People

Human Capital
As of December 31, 2021, we employed approximately 2,700 full-time employees (up 7.9% from 2020) and 1,600 part time employees worldwide, representing approximately 64% and 36%, respectively, of our global workforce. We also periodically hire contractors as needed to support our auctions, various businesses, and other projects. In November 2021, with the acquisition of SmartEquip, we welcomed 71 additional full-time employees.

Of our total full-time employees, 950 people work locally in the field to support our global auction operations (2020: 867) and 394 people are focused on sales and solutions for our customers (2020: 425). In 2021, keeping our employees and customers safe remained top of mind and our daily practices supported this mission. We set up flexible work arrangement guidelines that provided support to our employees and leaders and continued to serve our customers while maintaining our remote work arrangements.

Development and Engagement

We believe that our people are our greatest asset and that engaged employees are paramount to the health and success of our business. We invest in a variety of training, development and engagement practices to deliver on our growth agenda and create more leaders.

In 2021, we invested $1.7 million in employee development (2020: $1.7 million). All full-time employees are encouraged to have development plans that focus on functional and career growth. We provide all our employees access to instructor-led courses as well as a library of over 3000 online courses, videos, books, and resources for ongoing personal, functional, and professional growth. In addition, our Tuition Reimbursement program provides tuition assistance to eligible employees for professional development courses outside of the organization. In response to COVID-19, we have curated tools and resources and developed training programs to provide our leaders and employees with the skills to successfully work remotely and 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.

During 2021, we achieved the following objectives to strengthen the development and engagement of our people:

I. Rolled out PRINT®, a human motivation model, to our people-leaders to gain insights on what drives them so that they can operate at their highest level. 50% of our leaders completed the PRINT® assessment and training;
II. Initiated the 360° Leadership Feedback program, for employees to receive feedback on how their manager, colleagues, and direct reports perceive their effectiveness as a leader;
III. Shifted to quarterly performance conversations to drive performance and engagement and simplified the year-end review process by removing performance ratings to allow for more meaningful conversations about accomplishments, values and opportunities; and
IV. Invited our full-time employees to help assess the effectiveness of their leaders and identify areas of development through a My Leader Pulse Survey; of the 57% who responded, almost all communicated favorably about the effectiveness of their leaders.

We continue to look for ways to create on the-job learning opportunities so that our employees feel invested and engaged. Employees are involved in strategic initiatives and finding ways to better serve our customers and each other.

One of our key objectives and priorities is to drive employee candidate experiences. In 2021, the Company was ranked 2nd out of 132 participating companies and 1st of 65 global in North America in the Annual Talent Board Candidate Experience Awards, which recognizes companies that provide the best candidate experience. This is our first time winning this award on Best Candidate Experience of its kind.

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 2021 completion rate for the safety orientation program was 98% (2020: 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 2021 we had over 14,000 (2020: 10,000) risk identification cards completed by our staff.

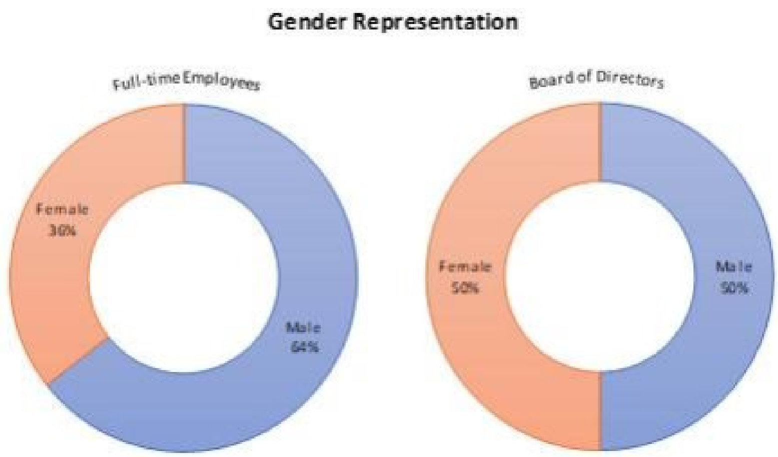
We also conduct annual online safety training with employees who perform certain operational tasks. In 2021 our completion rate for this training was over 98.5% (2020: 98%). Additionally, in 2021 managers at our sites were also required to complete a series of online courses as part of their professional development. In 2021 we had a completion rate of over 94.5% (2020: 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 by being below the industrial average. TRIR for 2021 was 1.38, which was below the industrial average.

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
We aspire to have a culture that fosters respect, inclusion and opportunity for all. 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, customers and stakeholders. Outlined below are the initiatives that demonstrate our dedication to diversity, equity and inclusion (“DE&I”).

Gender diversity and equality
We continue to be committed to gender diversity. Female representation at our most senior executive leadership level is at 40%, which is the highest in the Company’s history (up from 31% in 2020). We also continue to maintain strong female representation at the Board of Directors level with five (out of ten) female Board members, representing 50% (2020: 45%). Our full time employees include 36% female representation and 64% male representation.



For the first time in 2021, we participated in The Prosperity's Project's Annual Report Card on Gender Diversity and Leadership. This initiative collects intersectional data on women's representation at the leadership level in Canada and will provide valuable benchmarking information to assist us as we continue our journey related to gender diversity.

In 2022 and beyond, we will continue to measure and analyze recruitment efforts and strive to increase the number of candidates and hires from underrepresented groups. We plan to improve our partnership with diversity-focused organizations and increase the number of outreach campaigns to candidates from underrepresented groups.

Employee Resource Groups ("ERG")

Women's LINK, our first ERG, established in 2018, which focuses on gender diversity and equality, surpassed 200 members in 2021 (2020: 190 members), appointed its first male Co-Chair demonstrating the importance of allyship in gender equality, and also launched a Spotlight Series promoting women's visibility.

Our second ERG, the Black Lives Matter ("BLM") Committee, which was established in 2020, maintains a membership of around 100 members, representing 5 countries, 3 provinces and 14 states. The BLM Committee encourages courageous conversations by releasing regular feature stories related to issues affecting and contributions made by the Black community and formed a Book Club to further foster connections and dialogue among its members.

We also delivered on our commitment to create a framework to support our employees' diverse needs by establishing two new ERGs:

- ***Pride (LGBTQ+) ERG***: Focuses on having Ritchie Bros. be a welcoming and inclusive workplace for lesbian, gay, bisexual, transgender, queer or questioning, and nonbinary (LGBTQ+) employees.
- ***SERVE ERG***: Embraces our proud community of military service members and Veteran colleagues, by building awareness and providing resources to past or present military service members and their families.

In addition to ERGs, the Company participates in numerous programs throughout the year to promote a diverse and inclusive environment such as the Diverse Voices of RB podcast series, discussion panels, feature stories, speaker series and a partnership with DiversityJobs.com. In 2022, we also plan to enact a new DE&I-related training program to understand our personal biases and learn how to address them and create an inclusive environment.

At Ritchie Bros, we are committed to investing the time and resources needed to ensure we continue to live up to our DE&I vision of having a culture that fosters respect, inclusion and opportunity of growth for all.

Community Giving
The Company has been rooted in community since our founding over 60 years ago and we are committed to use our global scale and success to give back to our local communities. Our objective is to continue to maintain our community giving legacy.

In 2021 after soliciting employee input, we developed a community giving framework centered around supporting local economies with the aim of helping the communities and the people in the communities in which we operate.

Flexible Workplace
COVID-19 has changed the way we work and, to maintain the health and well-being of all employees, roles that were able to work remotely continued to do so throughout 2021. We received a 2021 Stevie Award for Most Exemplary Employer (COVID Response), which recognized organizations that have demonstrated extra commitment to keeping employees working, paid and safe during the pandemic.

We are committed to allowing flexibility in our workplace to promote performance, retention, and DE&I while also continuing to meet customer and business needs. In 2022, we will continue to monitor COVID-19 and we will adjust guidelines as necessary to support workplace flexibility while maintaining the health and safety of all.

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 dependent 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 look 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, processes 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 by taking certain actions, including the following:

- 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 COVID-19 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 includes commissions earned at our 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.

Investors and others should note that we announce material financial information using our company website (www.ritchiebros.com), our investor relations website (https://investor.ritchiebros.com), SEC filings, press releases, public conference calls, and webcasts. Information about Ritchie Bros., its business, and its results of operations may also be announced by posts on the following social media channels:

- Facebook: https://www.facebook.com/RitchieBros
- LinkedIn: https://www.linkedin.com/company/ritchie-bros/
- Twitter: https://twitter.com/RitchieBros
- YouTube: https://www.youtube.com/ritchiebros

The information that we post on these social media channels could be deemed to be material information. As a result, we encourage investors, the media, and others interested in Ritchie Bros. to review the information that we post on these social media channels. These channels may be updated from time to time on Ritchie Bros.'s investor relations website. The information on or accessible through our websites and social media channels is not incorporated by reference in this Annual Report on Form 10-K.

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 Committee 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 COVID-19.
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 COVID-19 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.

COVID-19 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, COVID-19 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.

Acquisitions are subject to a number of conditions and may not be completed on the terms or timeline currently contemplated, or at all.

The completion of the Euro Auctions acquisition is subject to certain conditions, including, among other things: (i) customary conditions relating to the obtaining of antitrust clearance in the United Kingdom, (ii) the vendors providing certain assistance and financial information, and (iii) other customary closing conditions. The terms of the agreement also entitle the purchaser of the Euro Auctions (an indirect, wholly-owned subsidiary of the Company) to terminate the agreement in certain circumstances. The agreement may also terminate automatically if the closing conditions are not satisfied by the extended longstop date of June 28, 2022. In each such case, the acquisition would not proceed. Other acquisitions are, or may be, subject to similar or different conditions.

We cannot assure you that the Euro Auctions Acquisition or any other acquisition will be consummated on the terms or timeline currently contemplated, or at all. Many of the conditions to completion of acquisitions are not within our control, and we cannot predict when or if these conditions will be satisfied. The failure to meet any or all of the required conditions could delay the completion of an acquisition for a significant period of time or prevent it from occurring. Any delay in completing an acquisition could cause Ritchie Bros. not to realize some or all of the benefits that it expects to achieve if the acquisition was successfully completed within its expected timeframe. The Company intends to fund the Euro Auctions Acquisition Pound Sterling purchase price using proceeds from a GBP term loan draw, as well as the issuances of senior USD and CAD notes that are being held in escrow.

Since a significant portion of the funding must be converted to Pound Sterling to pay for Euro Auctions, the Company is exposed to foreign currency risk. To mitigate a portion of this risk, the Company entered into GBP/USD and GBP/CAD deal contingent forward foreign exchange contracts, which are described in Note 4 of the consolidated financial statements.

We may not realize the anticipated benefits of, and synergies from, acquisitions and may become responsible for certain liabilities and integration costs as a result.

Business acquisitions involve the integration of new businesses that have previously operated independently from us. The integration of our operations with those of acquisition targets, including the Euro Auctions, is expected to result in financial and operational benefits, including certain tax and run-rate synergies. There can be no assurance, however, regarding when or the extent to which we will be able to realize these and other benefits. Integration may also be difficult, unpredictable and subject to delay because of possible company culture conflicts and different opinions on future business development. We may be required to integrate or, in some cases, replace, numerous systems, including those involving management information, purchasing, accounting and finance, sales, billing, employee benefits, payroll and regulatory compliance, many of which may be dissimilar. Difficulties associated with the integration of acquired businesses could have a material adverse effect on our business.

In addition, in connection with acquisitions, we have assumed, and may assume in connection with future acquisitions, certain potential liabilities. To the extent such liabilities are not identified by us or to the extent indemnifications obtained from third parties are insufficient to cover such liabilities, these liabilities could have a material adverse effect on our business.

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. Additionally, we have two vendor contracts with the U.S. Government’s Defense Logistics Agency (“DLA”) pursuant to which we acquire, manage and resell certain assets of the DLA. Each of the DLA contracts obliges the Company to purchase rolling and 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.

The availability and performance of our technology infrastructure, including our websites, is critical to our business and continued growth.
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, our business and our continued growth. We currently rely on both our own proprietary technology, licensed on-premise systems, 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, denial of service attacks and other cybersecurity 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, 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 or the loss of the functionality of our internet systems could significantly increase our expenses and otherwise result in delays in provisioning of our services and could harm our business and results of operations 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.

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. In addition, 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 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 teams rely on asset, pricing and other data including personal 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 customers with consent. In the future, any of these parties could change their data sharing policies and terms of use, including making them more restrictive, terminate or not renew agreements, or, in the case of customers, revoke consent, 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 and related products, as well as adversely affecting our business and our ability to generate revenue.

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, digital, sales and similar 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.

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 impair IT systems and devices and the data processed thereby become more sophisticated and change frequently, the risk of a cybersecurity event increases as we may not be able to anticipate these malicious tools and techniques or to implement adequate preventative and protective measures. Unauthorized parties have in the past, and may also in the future, attempt to gain access to our and our providers' primary and backup 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. For example, late in the fourth quarter of 2021, we detected a cybersecurity event where a third party gained unauthorized access to portions of our IT systems, which included the deployment of ransomware to certain systems and the misappropriation of a number of files from our internal network some of which were made available on the dark web by the third party (the "Incident"). Although the unauthorized third party deployed ransomware to portions of our IT systems, we successfully recovered substantially all of our systems and our data from backups, and the Incident did not cause any interruption in our ability to serve our customers and business partners. At this time, we do not believe the Incident will have a material adverse effect on our business. In addition, employee error, malfeasance, or other errors or negligence in the storage, use, or transmission of our data could also result in an actual or perceived privacy or security breach or other security incident. Although we have policies restricting the access to the personal and confidential information we store, there is a risk that these policies may not be effective in all cases. Further, breaches experienced by other companies may also be leveraged against us and sophisticated actors can mask their attacks, making them increasingly difficult to identify and prevent. There can be no assurance that impacts from these incidents will not be material or significant in the future.

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, use insecure 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. Further, users on our platforms could have vulnerabilities on their own devices that are entirely unrelated to our systems and platforms but could mistakenly attribute their own vulnerabilities to us. Under credit card payment rules and our contracts with credit card processors, if there is a breach of payment card information used 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.

Although we implement, maintain and adjust information security measures to mitigate our risks with respect to IT-related cybersecurity incidents, such as the Incident, there can be no assurance that these measures, will continue to ensure that our operations are not disrupted, that we will be immune from any cybersecurity risks, that we will prevent an attack from occurring in the future, or that our internal controls, for instance relating to user access management, will perform as intended to prevent unauthorized access to our systems and data. Any breach of our IT systems may have a material adverse impact on our business, the assessment of the performance of our internal control environment, results of operations, reputation, stock price and our ability to access capital markets, and may also be deemed to contribute to a material weakness in internal controls over financial reporting.

Security events, such as the Incident, hacking or other malicious or surreptitious activity (or the perception that such activities have occurred), 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, governmental investigations and enforcement actions or litigation and possible liability for damages. We may be required to make significant expenditures and divert management attention to monitor, detect and prevent security events, to remediate known or potential security vulnerabilities, or to alleviate problems caused by any security events. In addition, circumvention of our security measures, may result in the loss or misappropriation of valuable business data, intellectual property or trade secret information, misappropriation of our customers' or employees' personal information, damage to our computing infrastructure, networks and stored data, service delays, key personnel being unable to perform duties or communicate throughout the organization, loss of sales, significant costs for data restoration and other adverse impacts on our business. Further, such a breach may require us to incur significant expenses to notify governmental agencies, individuals or other third parties pursuant to various privacy and security laws.

Ransomware attacks are becoming increasingly prevalent and severe, and can lead to significant interruptions in our operations, loss of data and income, reputational loss, and diversion of funds. The costs of mitigating cybersecurity risks are significant and are likely to increase in the future. Our third-party service providers may be vulnerable to interruption or loss of valuable business data and information of our customers and employees (among others). Data stored by our third party providers might be improperly accessed or unavailable due to a variety of events beyond our control, including, but not limited to, employee error or negligence, natural disasters, terrorist attacks, telecommunications failures, computer viruses, hackers and other security issues. 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 grow. 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.

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 and security 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, operator 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, operator, 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 United States, Canada, 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 United States, which prevent non-certified equipment from entering into commerce in the United States. 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, on any of our revenues or expenses, 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.

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, 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.

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 our compliance with current and evolving domestic or foreign laws and regulations regarding the processing of personal information and other data may increase our costs, impact our marketing efforts, decrease adoption and use of our products and services, and our failure to comply with those laws and regulations may expose us to liability and reputational harm.
Governments around the world continue to propose and adopt new, or modify existing, laws and regulations addressing data privacy, data protection, data sovereignty and the processing of data, generally. Although we monitor the regulatory environment and have invested in addressing these developments, such as through our cybersecurity and privacy readiness programs, these laws may require us to incur further compliance costs to make changes to our practices, products and services to enable us or our customers to meet the new legal requirements. In addition, if we are found to have breached any such laws or regulations, we may be subject to enforcement actions that require us to change our practices, products and services, which may negatively impact our revenue, as well as expose us to liability through new or higher potential penalties and fines for non-compliance, civil and criminal penalties, and litigation for alleged violations, as well as adverse publicity that could cause our customers to lose trust in us and negatively impact our reputation and business in a manner that harms our financial position. These new or proposed laws and regulations are subject to differing interpretations that may change over time resulting in further compliance costs as well as diversion of resources to monitor

developments. For example, following recent developments in Europe, regulators are now interpreting existing data transfer provisions under European law differently and the use of certain transfer mechanisms now require companies to conduct risk assessments and implement supplementary measures. New and proposed laws and regulations may also 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 otherwise 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 United States, Canada, Australia the European Union 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, the use of machine learning and big data, 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 law 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 United States. and all or a substantial portion of their assets, as well as a substantial portion of our assets, are located outside the United States. As a result, it may be difficult for investors to effect service of process within the United States 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 United States.

Additionally, rights predicated solely upon civil liability provisions of U.S. federal securities laws or any other laws of the United States 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.
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 or in the 2021 interim consolidated financial statements due to these material weaknesses. In order to address the material weaknesses in internal control over financial reporting noted above, management with oversight and direction from the Audit Committee and the Board of Directors, implemented remediation initiatives in 2021 to remediate the material weaknesses. Such remediation efforts were intended to address the identified material weaknesses and enhance our overall financial control environment. As of December 31, 2021, these material weaknesses have been remediated and we have concluded that our internal control over financial reporting was effective. However, we recognize that maintaining adequate internal control over financial reporting will continue to require significant management attention and expense, and we cannot assure you that we will not identify material weaknesses in the future. If new material weaknesses are identified in our internal controls then the accuracy and timing of our financial reporting may be adversely affected, could result in violations of applicable

securities laws or stock exchange listing requirements, may subject us to litigation and investigations, may negatively affect investor confidence in our financial statements, and could adversely impact our stock price and ability to access capital markets.

Significant costs have been incurred and are expected to be incurred in connection with the consummation of the acquisition and integration of acquisition targets, including Euro Auctions, including legal, accounting, financial advisory and other costs.
We expect to incur one-time costs in connection with integrating our operations, products and personnel with those of acquisition targets, including the Euro Auctions, in addition to costs related directly to completing the acquisition. We would expect similar costs to be incurred in connection with any future acquisition. These costs may include expenditures for:

- reorganization or closures of facilities;
- employee redeployment, relocation or severance; and
- integration of operations and information systems.

In addition, we expect to incur a number of non-recurring costs associated with combining our operations with those of acquisition targets. Additional unanticipated costs may be incurred as we integrate our business with acquisition targets. Although we expect the elimination of duplicative costs, as well as the realization of other efficiencies related to the integration of our operations with acquisition targets, may offset incremental transaction and transaction-related costs over time, this net benefit may not be achieved in the near term.

We will incur a substantial amount of debt to complete the Euro Auctions Acquisition. This indebtedness could have a material adverse effect on our business and financial condition.
We will incur significant debt to complete the Euro Auctions Acquisition including the issuance of the 2021 Notes (defined below) and our intention to draw on the DDTL Facility (defined below) for the remainder. Our ability to make payments on our debt, fund our other liquidity needs and make planned capital expenditures will depend on our ability to generate cash in the future. Our historical financial results have been, and we anticipate that our future financial results will be, subject to fluctuations. Our ability to generate cash is subject in part to general economic, financial, competitive, legislative, regulatory and other factors that are beyond our control. We cannot guarantee that our business will generate sufficient cash flow from our operations or that future borrowings will be available to us in an amount sufficient to enable us to make payments of our debt, fund other liquidity needs and make planned capital expenditures. If our cash flows and capital resources are insufficient to fund debt service obligations, we could face substantial liquidity problems and could be forced to reduce or delay investments and capital expenditures or to dispose of material assets or operations, seek additional debt or equity capital or restructure or refinance our indebtedness.

We may not be able to effect any such alternative measures on commercially reasonable terms or at all and, even if successful, those alternatives may not allow us to meet our scheduled debt service obligations. The degree to which we are currently leveraged and will be leveraged following the completion of the Euro Auctions Acquisition could have important consequences for shareholders. For example, it could:

- limit our ability to obtain additional financing to fund future working capital, capital expenditures, acquisitions or other general corporate requirements;
- require us to dedicate a substantial portion of our cash flow from operations to the payment of debt service, reducing the availability of our cash flow to fund working capital, capital expenditures, acquisitions, dividends and other corporate purposes;
- increase our vulnerability to general adverse economic or industry conditions;
- expose us to the risk of increased interest rates for any borrowings at variable rates of interest;
- limit our flexibility in planning for and reacting to changes in our industry; and
- place us at a competitive disadvantage compared to businesses in our industry that have less debt.

Additionally, our debt agreements contain a number of covenants that impose operating and financial restrictions on Ritchie Bros. and may limit our ability to engage in acts that may be in our long-term best interests. The debt agreements contain customary restrictions and limitations on the ability of Ritchie Bros. and its subsidiaries to take certain actions, including incurring additional indebtedness, granting liens, making certain investments and making dividend payments or other distributions, in each case subject to customary carve-outs and exceptions. The debt agreements also includes a requirement that Ritchie Bros. maintain certain leverage and interest coverage ratios. Any failure to comply with covenants in the instruments governing our debt could result in an event of default which, if not cured or waived, would have a material adverse effect on us.

In conjunction with the Euro Auctions Acquisition, we may grant security interests in favor of our lenders over a substantial portion of the assets of Ritchie Bros. and certain of our subsidiaries, which may have a material adverse effect on us.
To secure our obligations under our debt agreements, as a result of the Euro Auctions Acquisition we may enter into certain security agreements under which we will grant security interests in favor of our lenders over a substantial portion of the assets of Ritchie Bros. and certain of our subsidiaries. An event of default under such debt agreements may allow our lenders to accelerate their debt and terminate all commitments to extend further credit thereunder, including the right to proceed against the collateral securing the indebtedness. In any of these events, we may seek to refinance our indebtedness but be unable to do so on commercially reasonable terms. As a result, such event of default could result in the loss of our interests in the secured assets and have a material adverse effect on us, including by limiting our ability to conduct our business, to raise additional debt or equity financing and to compete effectively or take advantage of new business opportunities.

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, 2021, we have $1.7 billion of total debt outstanding, consisting of:

- $319.1 million under an amended and extended credit agreement entered into on September 21, 2021, which extends the maturity of the credit facilities from October 27, 2023 to September 21, 2026 (the “Credit Agreement”) with a syndicate of lenders;
- $500.0 million aggregate principal amount of 5.375% senior unsecured notes issued December 21, 2016 (the “2016 Notes”);
- $600.0 million aggregate principal amount of 4.750% senior notes issued into escrow on December 21, 2021 (the “2021 USD Notes”);
- $425.0 million Canadian dollar aggregate principal amount of 4.950% senior notes issued into escrow on December 21, 2021 (the “2021 CAD Notes”, collectively with the 2021 USD Notes, the “2021 Notes” and collectively with the 2021 USD Notes and the 2016 Notes, the “Notes”); and
- net of $9.0 million of unamortized debt issue costs.

There are no current drawings under our foreign credit facilities. There is $720.6 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 indentures 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, the 2016 Notes indenture, and the 2021 Notes indentures, 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 indentures governing the 2016 Notes and the 2021 Notes contain 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.

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.

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 businesses:

- A European head office in Breda, Netherlands;
- IronPlanet's head office in Pleasanton, United States;
- Rouse's head office in Los Angeles, United States;
- SmartEquip's head office in Connecticut, 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, Nebraska, 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 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. We have 23 local satellite yards (18 were added in 2021) globally to reduce transportation barriers for our customers and increase their accessibility to our auctions and online marketplaces. We also have 31 GovPlanet yards in the US, which are used for servicing our US military agreements.

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

Location	Number of Auction Sites	Owned Acreage	Leased Acreage
Main auction sites			
United States	21	1,732	222
Canada	10	732	51
Europe	6	259	66
Australia	2	82	—
Other	3	341	44
Total	42	3,146	383
Local satellite yards			
United States	12	113	112
Canada	3	—	26
Europe	4	—	18
Australia	4	—	15
Total	23	113	171
GovPlanet yards			
United States	31	—	241
Total	31	—	241

We believe that our administrative offices and auction sites are adequate and suitable to conduct our operations. In 2021, many of our employees continued to work remotely under our foundation of *Flexible Work Arrangement*, which is our approach to honour business needs and employee preferences regarding their work location. As a result, the majority of our employees who work in administrative offices now work either remotely or on a hybrid model (part remotely or on site). The longer-term strategy is still for our current sites and offices to be re-occupied, albeit under a hybrid model, or a remote model depending on employee work preferences, once it is safe 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 17, 2022, there were 639 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

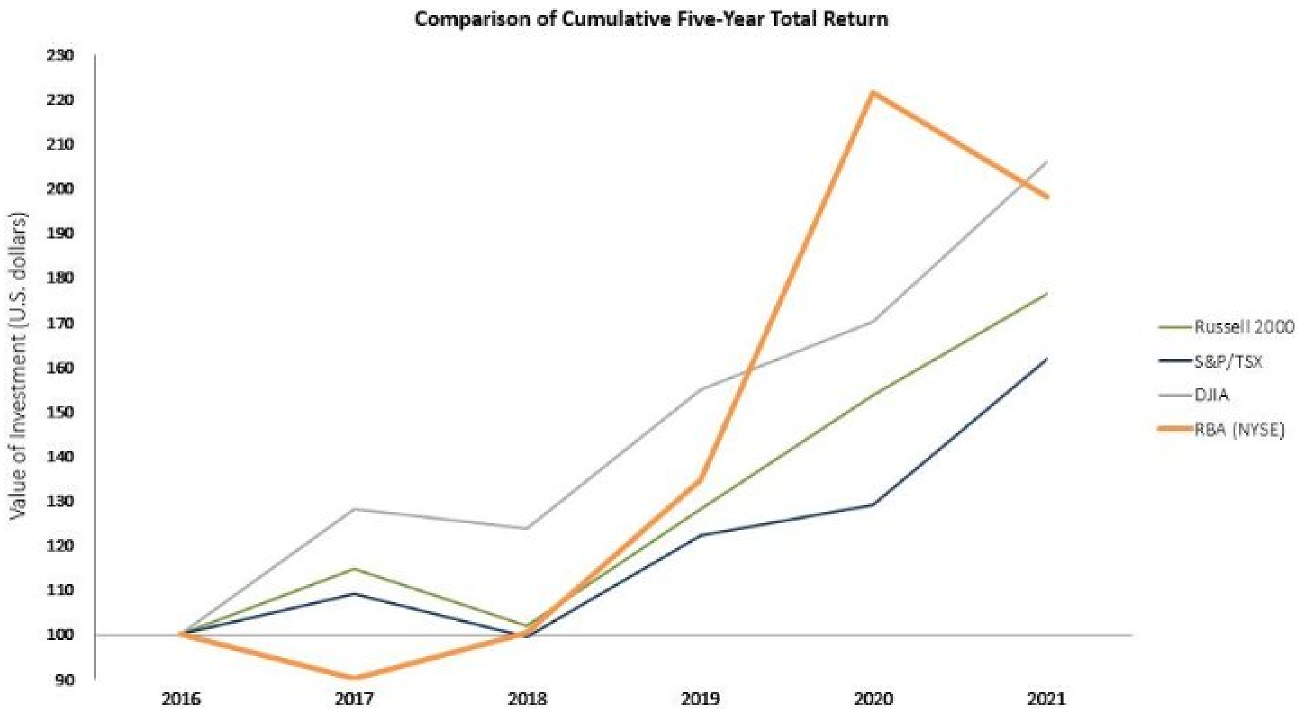
We currently pay a regular quarterly cash dividend of $0.25 per common share. We currently intend to continue to declare and pay a regular quarterly cash dividend on our common shares; however, any decision to declare and pay dividends in the future will be made at the discretion of our Board, after 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, 2016 through December 31, 2021, 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	2016	2017	2018	2019	2020	2021
RBA (NYSE)	$ 100.0	$ 90.1	$ 100.5	$ 134.6	$ 221.6	$ 198.1
Russell 2000	$ 100.0	$ 114.6	$ 102.0	$ 128.0	$ 153.5	$ 176.4
S&P/TSX	$ 100.0	$ 109.1	$ 99.4	$ 122.1	$ 128.9	$ 161.8
DJIA	$ 100.0	$ 128.1	$ 123.7	$ 155.0	$ 170.1	$ 206.0

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, 2021.

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	3,848,984 (1)	$ 58.77 (2)	6,331,190 (3)
Equity compensation plans not approved by security holders	—	—	—
Total	3,848,984	$ 58.77	6,331,190

(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 and can result in participants earning between 0% and 300% of the target number of PSUs granted. Further, we have the option to settle the PSUs in cash or in shares. For further discussion on the PSUs granted under our Plans, refer to Note 24 of the financial statements, Share-based payments.

(2) Weighted average exercise price does not include the effect of our outstanding share units. The remaining term of our stock options is 7.0 years.
(3) Consists of: (a) 4,705,117 common shares available for issuance under the Stock Option Plan; (b) no common shares are available for issuance under the IronPlanet Stock Plans; (c) 1,012,810 common shares that we may elect to issue upon settlement of our PSUs granted under the PSU Plans; and (d) 613,264 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 promulgated 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 by a U.S. Resident Holder (as defined below).

This summary is restricted to beneficial owners 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), (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 in respect of common shares held by such entity.

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 does 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 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 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 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 share will not constitute “taxable Canadian property” of the U.S. Resident Holder at the time of disposition provided that such share is listed on a “designated stock exchange” for purposes of the Canadian Tax Act (which currently includes the TSX and NYSE) unless at any time during the 60-month period immediately preceding the 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 such common share 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
Dividends paid or credited, or deemed to be paid or credited, on common shares to a U.S. Resident Holder will generally be subject to Canadian withholding tax. Under the Canadian Tax Act, the rate of withholding tax is 25% of the gross amount of such dividends, which rate may be subject to reduction under the provisions of an applicable income tax treaty or convention. Under the Convention, a U.S. Resident Holder who is a beneficial owner of a dividend will generally be subject to Canadian withholding tax at the rate of 15% of the gross amount of such dividend, 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%.

ITEM 6: RESERVED

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; SmartEquip, an innovative technology platform offering equipment lifecycle support and part procurement; 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 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 2021 and 2020 items and year-to-year comparisons between 2021 and 2020. Discussions of 2019 items and year-to-year comparisons between 2020 and 2019 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, 2020. This discussion and analysis should be read in conjunction with the "Cautionary Note Regarding Forward-Looking Statements" 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 17, 2022.

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 2021 decreased 11% to $151.9 million compared to $170.1 million in 2020. Diluted earnings per share (“EPS”) attributable to stockholders decreased 12% to $1.36 from $1.54 per share. Non-GAAP adjusted net income attributable to stockholders* increased 4% to $216.1 million in 2021 as compared to $208.7 million in 2020. Non-GAAP diluted adjusted EPS attributable to stockholders* increased 3% to $1.94 per share in 2021 as compared to $1.89 per share in 2020.

In 2021, we updated the calculation of our non-GAAP diluted adjusted EPS attributable to stockholders* to add-back share-based payments expense, all acquisition-related costs (including any share-based continuing employment costs recognized in acquisition-related costs), amortization of acquired intangible assets, and gain or loss on disposition of property, plant and equipment. We have also adjusted for certain non-recurring advisory, legal and restructuring costs and the change in fair value of derivatives. These adjustments in 2021 have been applied retrospectively to all periods presented, as applicable.

For the year ended December 31, 2021 as compared to the year ended December 31, 2020:

Consolidated results:

- Total revenue increased 3% to $1.4 billion
    - Service revenue increased 5% to $917.8 million
    - Inventory sales revenue decreased 1% to $499.2 million
- Operating income decreased 9% to $240.1 million
- Non-GAAP adjusted operating income* increased 3% to $323.5 million
- Net income decreased 11% to $151.9 million
- Non-GAAP adjusted Earnings Before Interest, Taxes, Depreciation and Amortization* (“EBITDA”) increased 3% to $385.3 million
- Cash provided by operating activities was $317.6 million for the year ended December 31, 2021
- Cash on hand was $1.4 billion, of which $326 million was unrestricted and $933.5 million was restricted relating to our two senior notes entered into in December 2021 to finance the proposed Euro Auctions Acquisition, and the remainder is restricted for use

Auctions & Marketplaces segment results:

- GTV increased 2% to $5.5 billion and decreased 0.4% when excluding the impact of foreign exchange
- A&M total revenue increased 1% to $1.3 billion
    - Service revenue increased 3% to $759.4 million
    - Inventory sales revenue decreased 1% to $499.2 million

Other Services segment results:

- Other Services total revenue increased 20% to $158.4 million
    - RBFS revenue increased 46% to $47.0 million
    - Rouse revenue of $26.4 million was recognized in 2021, which was its full year since its acquisition on December 8, 2020
    - SmartEquip revenue of $2.9 million was recognized in Q4 2021, which was its first two months since its acquisition on November 2, 2021

Operational highlights

In 2021, the organization focused on the needs of our customers while keeping the health and safety of all our stakeholders a top priority. We continue to execute against our growth strategy of becoming *the trusted global marketplace for insights, services, and transaction solutions for commercial assets*. Ritchie Bros continues to focus on the customer and despite the ongoing COVID-19 and the economic uncertainties, we are executing on factors that we can control to drive strong operational results and profitable growth:

- GTV from Marketplace-E, our online reserved format, increased 20% year-over-year driven by continued strong North America adoption of the platform.

- We held a hybrid-style global auction event in Orlando, Florida, selling in excess of US$191 million. The six-day sale was a spectacular success, as we sold more than 12,000 items in six days for US$191+ million, making it the largest-ever 100% online equipment auction.

- In March 2021, we conducted our largest Texas auction ever, attracting 76% more bidders from 79 countries year over year and achieving US$95 million in GTV surpassing our previous Texas sales record, set in June 2020, by 17 %

- In May 2021, we conducted 71 farm auctions to disperse farm retirement equipment across Western Canada, attracting more than 160,000 bidders, generating over $1.6 million online equipment views and over CA$104 million of GTV.

- In August 2021, Ritchie Bros. conducted its largest-ever, single-owner auction for Barrilleaux Inc., an oilfield pipeline construction company based in New Mexico and Texas and sold in excess of US $99 million of pipeline construction equipment in less than two days.

- In 2021, we won the two new East and West contracts, covering the consolidated surplus rolling stock and surplus non-rolling stock assets for the U.S. Department of Defense.

- Ritchie Bros. Inspection Services and its 400+ team members completed more than 600,000 equipment inspections in 2021, taking over 15 million photos and analyzing hundreds of thousands of oil samples in its in-house fluid analysis lab.

- Ritchie Bros. Financial Services (RBFS) total funded volume hit $747.8 million, increasing 43% year over year, driven by investments in the team in 2020 and strategic efforts over sales activities in 2021 leading to enhanced lender alignment.

We accelerated our journey against many of our strategic pillars by completing the acquisition of SmartEquip, a leading parts and service technology company in November of 2021 for a purchase price of $173 million which furthers our goal of providing the best experience for our customers. We also entered into a SPA agreement to acquire Europe's leading plant and machinery auction house, Euro Auctions, for an enterprise value of £775 million (approximately US$1.08 billion). In addition to the acquisition, we took several steps to advance our new growth strategy in 2021 highlighted below:

Customer Experience
- Improved digital experience with more comprehensive video inspections, upgraded mobile platform, launched new concierges virtual yard walks and equipment demos, and implemented RitchieID which enables single customer identity across all Ritchie Bros. digital properties
- Launched Ritchie List to give our customers more ways to bring their equipment to market. RitchieList.com is an easy-to-use equipment listing service which offers our customers a suite of a la carte services to make private selling more efficient and safe, including a secure transaction management service, complete with invoicing.
- Simplified contracts for sellers to focus on a better experience
- Improved customer call center wait times by launching call back feature and improved routing

Best Employee Experience
- Launched enhanced safety programs for field employees to make sure employees return home every day the way they came to work
- Created training experience for members in the Sale organization and leadership development program for international teams
- Launched Pride (LGBTQ+) and Serve (Military Veterans) Employee Resource Group and Diverse Voices, a Ritchie Bros. Podcast for employees
- Drove employee engagement by crowdsourcing ESG Social Giving Initiatives

Modern Architecture
- Launched cloud-based inspection microservice to enable scalable growth
- Began improving Iron Planet experiences for customers by starting a migration of our systems and platforms to the cloud

Inventory Management System
- Launched business version of our inventory management system (“IMS”), which offers our customers end-to-end asset management and disposition services, data analytics, dashboards, branded e-commerce sites and multiple external sales channels to help our customers achieve optimal returns
- Organizations activated on IMS grew at a ~83% compounded average quarterly growth rate in 2021 using Q1 2021 as the base
- Improved digital experience by adding a number of customer centric features
- Improved backend systems and processes to enable faster growth

- Increased use of IMS for transactional workflow

Accelerate growth: Test, learn and scale
- Scaled Local Satellite Yards with 18 new locations in 2021
- Successfully implemented new sales coverage model in Texas by disaggregating territory manager role into Account Manager, Business Development Manager, and Inside Territory Manager

While focusing on growth and our strategic initiatives, we continued to make progress on our Environmental, Social, and Governance (ESG) mission. Our choice of expansion through local satellite yards is ensuring we continue to enable the circular economy on a local basis by growth in a low-cost and environmentally friendly way. We have made significant progress against our goals to enhance our employee experience in the areas of diversity, equity and inclusion (DE&I) and community. We have several new active employee-led groups driving initiatives, and also made strides on female representation at the senior leadership level.

Results of Operations

(in U.S. $000's, except EPS and percentages)	2021	2020	2019	% Change 2021 over 2020	% Change 2020 over 2019
	Year ended December 31,				
Service revenue:					
Commissions	$ 469,718	$ 452,882	$ 431,781	4 %	5 %
Fees	448,041	418,714	372,243	7 %	12 %
Total service revenue	917,759	871,596	804,024	5 %	8 %
Inventory sales revenue	499,212	505,664	514,617	(1)%	(2)%
Total revenue	1,416,971	1,377,260	1,318,641	3 %	4 %
Costs of services	146,862	157,296	164,977	(7)%	(5)%
Cost of inventory sold	447,921	458,293	480,839	(2)%	(5)%
Selling, general and administrative expenses	464,599	417,523	382,389	11 %	9 %
Total operating expenses	1,176,824	1,114,100	1,095,439	6 %	2 %
Operating income	240,147	263,160	223,202	(9)%	18 %
Operating income as a % of total revenue	16.9 %	19.1 %	16.9 %	(220)bps	220 bps
Non-GAAP adjusted operating income*	323,471	314,514	259,915	3 %	21 %
Non-GAAP adjusted operating income* as a % of total revenue	22.8 %	22.8 %	19.7 %	— bps	310 bps
Net income attributable to stockholders	151,868	170,095	149,039	(11)%	14 %
Non-GAAP adjusted net income attributable to stockholders*	216,106	208,660	173,969	4 %	20 %
Diluted earnings per share attributable to stockholders	$ 1.36	$ 1.54	$ 1.36	(12)%	13 %
Non-GAAP diluted adjusted EPS attributable to stockholders*	$ 1.94	$ 1.89	$ 1.59	3 %	19 %
Effective tax rate	26.0 %	27.8 %	21.8 %	(180)bps	600 bps
Total GTV	5,533,931	5,411,218	5,140,587	2 %	5 %
Service GTV	5,034,719	4,905,554	4,625,970	3 %	6 %
Service revenue as a % of total GTV	16.6 %	16.1 %	15.6 %	50 bps	50 bps
Inventory GTV	499,212	505,664	514,617	(1)%	(2)%
Service revenue as a % of total revenue	64.8 %	63.3 %	61.0 %	150 bps	230 bps
Inventory sales revenue as a % of total revenue	35.2 %	36.7 %	39.0 %	(150)bps	(230)bps
Cost of inventory sold as a % of operating expenses	38.1 %	41.1 %	43.9 %	(300)bps	(280)bps
Service GTV as a % of total GTV - Mix	91.0 %	90.7 %	90.0 %	30 bps	70 bps
Inventory sales revenue as a % of total GTV - Mix	9.0 %	9.3 %	10.0 %	(30)bps	(70)bps

Total GTV

Total GTV increased 2% to $5.5 billion as compared to 2020. Total GTV decreased 0.4% in 2021 as compared to 2020, when excluding the impact of foreign exchange.

In 2021, GTV increased primarily in International and Canada, while remaining flat in the US. GTV volume increased primarily due to strong price performance across all regions as a result of high demand for used equipment, predominantly in the construction and transportation sectors, and these increases were partially offset by an unfavorable tight supply environment which impacted all regions. In International, GTV volume increases were driven by the lifting of border restrictions, improved economic climate and higher activity in Australia with new auctions, higher number of private treaty deals and a new agricultural event. We also saw strong performance in France with the growth of local satellite yards, partially offset by lower volume in Europe due to supply constraints. In Canada, we saw an increase in volumes across several auctions, most notably within the Canadian agricultural market with the shift to online driving a higher number of events and a larger buyer base. In addition, we saw a strong performance in Toronto throughout the year due to unprecedented demand. Canada also benefited from significant volume increases in RBFS from providing escrow services for private brokered transactions. These increases were partially offset by softer year-over-year performances across our Western region due to supply chain constraints. In the US, we saw strong performances by our US regional sales team and also GovPlanet. US region performance was strong with a $99.0 million pipeline construction equipment event in New Mexico and Texas as well as a $35.0 million construction event in Alabama, partially offset by lower year-over-year performances in our Fort Worth, Orlando, and Las Vegas auctions and our regional combined events. GovPlanet saw higher volumes with the new non-rolling and rolling stock contracts effective June 1, 2021. However, offsetting these increases, total US GTV was flat with lower volume in our US strategic accounts sales team and also the non-repeat of a collector car event. US strategic accounts were down mainly in the finance, OEM and rental sectors as high asset utilization, supply chain challenges and new inventory availability have continued to impact disposition volumes.

Total revenue
Total revenue increased 3% to $1.4 billion as compared to 2020, with total service revenue increasing by 5%, offset by a decrease in inventory sales revenue by 1%.

Foreign currency fluctuation also had a favourable impact on our revenue primarily due to the appreciation of the Canadian dollar, the Euro and the Australian dollar relative to the US dollar.

Service Revenue
In 2021, total service revenue increased 5% with fees revenue increasing 7% and commissions revenue increasing 4%. 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 Ancillary Services, RBFS, Rouse, Mascus, RB Logistics, RB Asset Solutions and SmartEquip.

Service GTV increased 3% driven by positive results across all regions due to the continued strong pricing despite the unfavourable supply environment. In Canada, positive year-over-year performances in our Canadian agricultural market and Toronto auction, and an increase in escrow services provided by our RBFS business contributed to higher Service GTV, which was partially offset by softer performances in our Western region. International saw higher service GTV as a result of increased activity in Australia combined with a new agricultural event, and higher activity in Europe, most notably in France with the growth of local satellite yards, and as well as due to the improved market economic conditions and the ease of restrictions from the gradual recovery of COVID-19, despite the supply constraints. In the US, Service GTV remained relatively flat. We saw large dispersals of $99.0 million pipeline construction equipment and a $35.0 million construction event in Alabama, however, these increases were offset by overall softer performances most notably in Fort Worth, Orlando and Las Vegas due to the tight supply environment. In addition, the non-repeat of a collector car event also contributed to lower volume.

Fees revenue increased 7%, mainly due to fee revenue earned from Rouse which was acquired in early December 2020, higher fees driven by higher funded volumes in RBFS, and higher buyer fees in line with higher GTV of 2%. Buyer fees increased in part due to an increase in buyer fees implemented earlier in the year, as well as from the re-instatement of fees at the Canadian on-the-farm auctions at the beginning of the year. These increases were partially offset by lower fees on mix of lower proportion of small value lots across all regions, most notably in the US, and lower fees from our Ancillary services as some sellers have elected to forgo paint or repair services driven by a strong market demand for used equipment and lower unit of volumes in the construction and transportation end markets. We also saw lower listing fees in line with lower online volumes, and lower document fees due to decline in the total number of titled lots sold. The non-repeat of a collector car event in the US also contributed to lower fee revenue.

Commissions revenue increased 4%, largely driven by the increase in Service GTV of 3%. The remaining increase in commission revenue was driven by improved rates on guarantee contracts in the US driven by strong pricing performance. We also saw stronger straight commission rate performance in our GovPlanet business driven by favourable mix of contracts and a lower proportion of GTV sourced from our US strategic accounts.

Inventory Sales Revenue
Inventory sales revenue as a percent of total GTV decreased to 9% from 9.3% in 2020.

In 2021, inventory sales revenue decreased 1% primarily in Canada and the US due to lower mix of inventory contracts, offset by International. In Canada, we had a large inventory package dispersal of pipeline equipment in Grand Prairie which did not repeat and lower inventory volumes in Edmonton. In the US, we saw lower inventory volumes in Fort Worth and Orlando, partially offset by higher GovPlanet volume following the government shut down in response to COVID-19 in prior year. These decreases were offset by strong year-over-year performance in International mainly driven by higher activity including increased number of private treaty transactions in Australia, and across various countries in Europe due to the overall improved economic conditions and the addition of several new auctions.

Underwritten Contracts

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, decreased to 18% in 2021, compared to 20% 2020 primarily due to decreased GTV signed with guarantee contracts.

Operating income

Operating income decreased 9% to $240.1 million compared to $263.2 million in 2020. This decrease was primarily due to the 6% increase in total operating expenses to support our growth initiatives, partially offset by a 5% increase in service revenue in 2021. Operating expenses included higher selling and general administrative expenses due to increases in our employee wages, salaries and benefits, and higher buildings, facilities and technology costs. We also saw higher non-recurring advisory, legal and restructuring costs in the fourth quarter of 2021. In addition, we incurred $30.2 million in acquisition-related costs for the acquisitions of Euro Auctions, SmartEquip and Rouse. We also began amortizing the acquired intangible assets from Rouse and SmartEquip in 2021. In terms of ongoing operations, cost of services was lower, partially offset by a lower flow through from inventory sales.

Income tax expense and effective tax rate

We recorded an income tax expense of $53.4 million in 2021 compared to $65.5 million in 2020. Our effective tax rate was 26.0% compared to 27.8% in 2020. The decrease in the effective tax rate over the comparative period was primarily due to a decrease in the estimate of non-deductible expenses, lower income taxes related to tax uncertainties, and higher tax deduction for share unit expenses in excess of compensation expense. Partially offsetting this decrease was a higher estimate of income taxed in jurisdictions with higher tax rates and lower deduction for stock options exercised.

On April 8, 2020, the United States Department of Treasury and the Internal Revenue Service (“IRS”) clarified income tax benefits related to hybrid financing arrangements would not be deductible (“Hybrid Interest”). The lower estimate of non-deductible expenses is primarily due to the net income tax benefits of approximately $7.8 million in the twelve months ended December 31, 2019 which were no longer deductible and accordingly were reversed in 2020.

Net income

Net income attributable to stockholders decreased 11% to $151.9 million compared to $170.1 million in 2020. The decrease was primarily related to lower operating income and lower other income. We also recognized a $1.2 million loss due to the change in the fair value of derivatives which are being used to manage our exposure to foreign currency exchange rate fluctuations on our purchase consideration for the acquisition of Euro Auctions. These decreases were partially offset by the decrease in the income tax expense driven by the lower effective tax rate.

Diluted EPS

Diluted EPS attributable to stockholders decreased 12% to $1.36 per share compared to $1.54 in 2020. This decrease was primarily due to the decrease in net income attributable to stockholder, combined with an increase in the weighted average number of dilutive shares outstanding over 2020.

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	**2021**	**2020**	**2019**	**2021 over 2020**	**2020 over 2019**
Period-end exchange rate					
Canadian dollar	0.7846	0.7843	0.7656	0 %	2 %
Euro	1.1322	1.2296	1.1202	(8)%	10 %
Australian dollar	0.7250	0.7689	0.7002	(6)%	10 %
Average exchange rate -Year ended December 31,					
Canadian dollar	0.7977	0.7462	0.7537	7 %	(1)%
Euro	1.1834	1.1413	1.1195	4 %	2 %
Australian dollar	0.7514	0.6901	0.6951	9 %	(1)%

In 2021, approximately 45% of our revenues and 47% of our operating expenses were denominated in currencies other than the U.S. dollar, compared to 43% and 48%, respectively, in 2020.

We recognized $0.8 million in foreign exchange losses in 2021 and $1.6 million of losses in 2020. Foreign exchange had a favourable impact on total revenue and an unfavourable impact on expenses. These impacts were mainly due to the fluctuations in the Canadian dollar, the Euro and the 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 recurring and non-recurring items that we do not consider to be part of our normal operating results.

In 2021, we updated our calculation of non-GAAP measures and included the impact of share-based payments expense, all acquisition-related costs (including any share-based continuing employment costs recognized in acquisition-related costs), amortization of acquired intangible assets and gain or loss of disposition of property, plant and equipment. We have also adjusted for certain non-recurring advisory, legal and restructuring costs and the change in fair value of derivatives. These adjustments in 2021 have been applied retrospectively to all periods presented, as applicable.

Non-GAAP adjusted net income attributable to stockholders* increased 4%, to $216.1 million compared to $208.7 million in 2020.

Non-GAAP diluted adjusted EPS attributable to stockholders* increased 3% to $1.94 per share compared to $1.89 per share in 2020.

Non-GAAP adjusted Earnings Before Interest, Taxes, Depreciation and Amortization ("EBITDA")* increased 3% to $385.3 million compared to $374.3 million in 2020.

Debt at December 31, 2021 represented 11.5 times net income for 2021, compared to debt at December 31, 2020, which represented 3.9 times net income for 2020. The increase in this debt/net income multiplier was primarily due to higher debt balances and higher operating expense mainly due to an increase in acquisition-related costs on the acquisitions of Rouse, Euro Auctions and SmartEquip for the year ended December 31, 2021 compared to December 31, 2020. The non-GAAP adjusted net debt/non-GAAP adjusted EBITDA* was 1.3 times at December 31, 2021 compared to 1.0 times at December 31, 2020. The increase in non-GAAP adjusted net debt/non-GAAP adjusted EBITDA* was primarily due to higher non-GAAP adjusted net debt* balance at December 31, 2021, partially offset by a 3% increase in non-GAAP 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, 2021			Year ended December 31, 2020			Year ended December 31, 2019		
(in U.S $000's)	**A&M**	**Other**	**Consolidated**	**A&M**	**Other**	**Consolidated**	**A&M**	**Other**	**Consolidated**
Service revenue	$ 759,303	$ 158,456	$ 917,759	$ 740,043	131,553	$ 871,596	$ 678,823	$ 125,201	$ 804,024
Inventory sales revenue	499,212	—	499,212	505,664	—	505,664	514,617	—	514,617
Total revenue	1,258,515	158,456	1,416,971	1,245,707	131,553	1,377,260	1,193,440	125,201	1,318,641
Ancillary and logistical service expenses	—	52,301	52,301	—	59,982	59,982	—	59,252	59,252
Other costs of services	85,415	9,146	94,561	92,195	5,119	97,314	99,821	5,904	105,725
Cost of inventory sold	447,921	—	447,921	458,293	—	458,293	480,839	—	480,839
SG&A expenses	414,287	50,312	464,599	388,442	29,081	417,523	358,016	24,373	382,389
Segment profit	310,892	46,697	357,589	306,777	37,371	344,148	254,764	35,672	290,436

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)	**2021**	**2020**	**2019**	**2021 over 2020**	**2020 over 2019**
Service revenue	$ 759,303	$ 740,043	$ 678,823	3 %	9 %
Inventory sales revenue	499,212	505,664	514,617	(1)%	(2)%
Total revenue	1,258,515	1,245,707	1,193,440	1 %	4 %
A&M service revenue as a % of total A&M revenue	60.3 %	59.4 %	56.9 %	90 bps	250 bps
Inventory sales revenue as a % of total A&M revenue	39.7 %	40.6 %	43.1 %	(90)bps	(250)bps
Costs of services	85,415	92,195	99,821	(7)%	(8)%
Cost of inventory sold	447,921	458,293	480,839	(2)%	(5)%
SG&A expenses	414,287	388,442	358,016	7 %	8 %
A&M segment expenses	947,623	938,930	938,676	1 %	0 %
Cost of inventory sold as a % of A&M expenses	47.3 %	48.8 %	51.2 %	(150)bps	(240)bps
A&M segment profit	310,892	306,777	254,764	1 %	20 %
Total GTV	5,533,931	5,411,218	5,140,587	2 %	5 %
A&M service revenue as a % of total GTV- Rate	13.7 %	13.7 %	13.2 %	- bps	50 bps

Gross Transaction Value

In response to COVID-19, in March 2020, we transitioned all our traditional on site auctions to online bidding utilizing our existing online bidding technology and simultaneously ceased almost 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 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 Timed Auctioned Lots (TAL) solutions for selected International and on-the-farm agriculture events.

We believe it is meaningful to consider revenue in relation to GTV. Total GTV and Service GTV by geographical regions, as well as GTV by sector, are presented below for the comparative reporting period.

GTV by Geography

(in U.S. $000's)		Year ended December 31,			% Change	
		2021	2020	2019	2021 over 2020	2020 over 2019
Total GTV by Geography						
United States	$	3,230,708	3,235,548	3,027,459	(0)%	7 %
Canada		1,441,929	1,392,249	1,254,857	4 %	11 %
International		861,294	783,421	858,271	10 %	(9)%
Total GTV		5,533,931	5,411,218	5,140,587	2 %	5 %
Service GTV by Geography						
United States		3,029,661	3,017,404	2,756,843	0 %	9 %
Canada		1,410,252	1,307,992	1,214,223	8 %	8 %
International		594,806	580,158	654,904	3 %	(11)%
Total Service GTV[1]		5,034,719	4,905,554	4,625,970	3 %	6 %

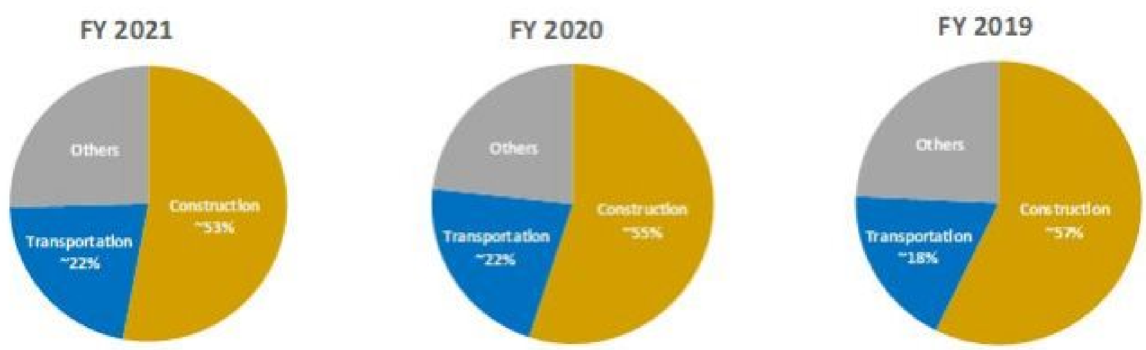
[1] Service GTV is calculated as total GTV less inventory sales revenue

GTV by Sector

The following pie charts illustrate the breakdown of total GTV by sector for the year ended December 31, 2021, December 31, 2020, and December 31, 2019.

The construction sector includes heavy equipment such as trucks, excavators, cranes and dozers. The transportation sector includes vehicles, buses, trailers and trucks that are used for transport. The other sector primarily includes equipment sold in the agricultural, forestry and energy industries.

In 2021, total GTV mix compared to 2020 decreased by 2% in the construction sector and remained flat in the transportation sector.



Total Auction Metrics

We review a number of metrics including the following key metrics, to evaluate our business, measure our performance, identify trends affecting our business, formulate business plans and make strategic decisions.

Bids per lot sold. Each bid is completed electronically through our real-time online bidding system. A "lot" is defined as a single asset to be sold, or a group of assets bundled for sale as one unit. This metric calculates the total number of bids received for a lot divided by the total number of lots sold.

Total lots sold. We define a lot as a single asset to be sold, or a group of assets bundled for sale as one unit. Low value assets are sometimes bundled into a single lot, collectively referred to as “small value lots”.

	For the year ended December 31,				
				% Change	
	2021	2020	2019	2021 over 2020	2020 over 2019
Bids per lot sold *	28	24	18	17 %	33 %
Total lots sold *	493,371	543,342	506,510	(9)%	7 %

* Management reviews industrial equipment auction metrics excluding GovPlanet; as a result, GovPlanet business metrics are excluded from these metrics

The number of bids per lot sold increased 17% to 28 in 2021 driven by a higher demand for used equipment from buyers in a tight supply market, as well as due to our increased marketing efforts and higher online activity.

The total lots sold decreased 9% to 493,371 in 2021 primarily impacted by the tight supply market, and the shift to a lower proportion of small value lots sold across all regions, partially offset by higher average selling prices.

Online bidding

Across all channels, 100% of total GTV was purchased by online buyers compared to 94% in 2020. The increase in internet bidders and online buyers is a direct impact of COVID-19, as we pivoted to 100% online bidding from our traditional on site auctions where on site attendance was not permitted. We will continue to monitor the evolving impact of COVID-19 going forward and consider when a transition back to some measure of in-person attendance at our on site auction events is safe.

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, 2021 increased 6.3% to $14.2 million per Revenue Producer as compared to $13.4 million per Revenue Producer in 2020, primarily as a result of a decrease in the number of Revenue Producers combined with the increase in GTV.

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A&M revenue
Total A&M revenue increased 1% to $1.3 billion as compared to 2020.

A&M revenue by geographical region are presented below:

	Year ended December 31,				
				% Change	
(in U.S. $000's, except percentages)	2021	2020	2019	2021 over 2020	2020 over 2019
A&M Revenue by Geography					
United States					
Service revenue	473,064	475,482	419,164	(1)%	13 %
Inventory sales revenue	201,047	218,144	270,616	(8)%	(19)%
A&M revenue- United States	674,111	693,626	689,780	(3)%	1 %
Canada					
Service revenue	193,722	179,397	167,389	8 %	7 %
Inventory sales revenue	31,677	84,257	40,634	(62)%	107 %
A&M revenue- Canada	225,399	263,654	208,023	(15)%	27 %
International					
Service revenue	92,517	85,164	92,270	9 %	(8)%
Inventory sales revenue	266,488	203,263	203,367	31 %	(0)%
A&M revenue- International	359,005	288,427	295,637	24 %	(2)%
Total					
Service revenue	759,303	740,043	678,823	3 %	9 %
Inventory sales revenue	499,212	505,664	514,617	(1)%	(2)%
A&M total revenue	1,258,515	1,245,707	1,193,440	1 %	4 %

United States
Service revenue remained flat, in line with Service GTV. The decrease was primarily due to lower fees on a lower proportion of small value lots, lower listing fees driven by lower online volumes and lower document fees driven by a decline in the total number of titled lots sold. These decreases were offset by an increase in buyer fees implemented earlier in the year. We saw positive rate performances in our guarantee contracts driven by strong pricing and positive rate performances in our GovPlanet business due to favourable mix and in our straight commission contracts driven by a lower proportion of GTV sourced from strategic accounts.

Inventory sales revenue decreased 8% primarily due to lower volumes of inventory contracts sourced at our combined regional events, and at several of our other auctions, but primarily in Fort Worth and Orlando. These decreases were partially offset by higher volumes sold through our GovPlanet business as a result of the new non-rolling and rolling stock contracts effective June 1, 2021 and higher volumes due to the government shutdowns in the prior year in response to COVID-19.

Canada
Service revenue increased 8% in line with the 8% increase in Service GTV. The increase in fees was primarily due to the re-instatement of fees waived at the Canadian on-the-farm auctions in 2020 as part of our COVID-19 response, and higher buyer fees implemented earlier in the year. These increases were offset by softer rates in GTV contributed by RBFS from facilitating financing arrangements.

Inventory sales revenue decreased 62%, primarily due the non-repeat of a large inventory package dispersal of pipeline equipment in Grand Prairie, and lower mix of inventory contracts contributing to lower year-over-year performances in our Western region, mainly in Edmonton.

International
Service revenue increased 9%, partly due to the 3% increase in Service GTV. The remaining increase was due to the higher buyer fees implemented earlier in the year and a higher buyer fee structure on higher volumes sold in Australia.

Inventory sales revenue increased 31%, primarily driven by positive year-over-year performance from higher volumes of inventory contracts sourced in Australia with new auctions and a new agricultural event. We also saw higher private treaty deals in Australia, strong performances at our auctions in Europe with the addition of several new auctions and local satellite yards, and higher inventory volumes from the improved economic conditions from the gradual recovery of COVID-19 in Australia, Europe and the Middle East.

Costs of services
A&M cost of services decreased 7% to $85.4 million primarily driven by cost savings in travel, advertising and promotion expense primarily in Q1 2021 as a result of lower activity at our on site auctions with 100% online bidding and increased utilization of TAL solutions. We also saw cost savings in employee compensation costs from lower activity at our on site auctions and cost reductions in building, facilities and technology expenses primarily due to the non-repeat of costs relating to a collector car event in Q1 2020. These decreases were partially offset by higher employee compensation expenses in our GovPlanet and Xcira businesses to support our growth strategy, as well as an unfavourable foreign exchange impact.

Cost of inventory sold
A&M cost of inventory sold decreased 2% to $447.9 million, primarily in line with the 1% decrease in inventory sales revenue.

SG&A expenses
A&M segment SG&A expenses increased 7% to $414.3 million which reflects an unfavourable foreign exchange impact as well as higher wages, salaries and benefit expenses driven by higher headcount to accelerate our growth initiatives and our transformational journey to a trusted global marketplace. Theses increases were partially offset by the non-repeat of a one-time severance of $4.3 million related to realignment of leadership in 2020 and lower short term incentive expenses driven by a softer performance and the non-repeat of a COVID-19 incentive benefit. Building, facilities and technology costs also increased primarily in our GovPlanet business as a result of the new non-rolling and rolling stock contracts effective June 1, 2021 and due to higher licensing and subscription technology expenses as we shift to cloud-based solutions to improve customer experience.

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)	**2021**	**2020**	**2019**	**2021 over 2020**	**2020 over 2019**
Service revenue	$ 158,456	$ 131,553	$ 125,201	20 %	5 %
Ancillary and logistical service expenses	52,301	59,982	59,252	(13)%	1 %
Other costs of services	9,146	5,119	5,904	79 %	(13)%
SG&A expenses	50,312	29,081	24,373	73 %	19 %
Other services profit	$ 46,697	$ 37,371	$ 35,672	25 %	5 %

Other Services revenue increased 20% to $158.5 million due to the increase in revenue from Rouse of $24.5 million, higher RBFS revenues of $14.8 million, $2.9 million of higher revenues from the acquisition of SmartEquip on November 2, 2021, and higher revenues in Mascus and RB Logistics. These increases were partially offset by lower ancillary revenue of $14.6 million as some sellers have elected to forgo paint or repair services, and lower fees earned on redeployment of assets in the US. We also saw lower revenues of $3.1 million in our asset appraisal services.

Ancillary and logistical service expenses decreased 13% to $52.3 million, in line with lower ancillary revenues. Other costs of services increased 79% to $9.1 million mainly due to the inclusion of Rouse as this is the full year of costs recognized since acquisition and due to the inclusion of SmartEquip which was acquired on November 2, 2021. SG&A expense increased 73% to $50.3 million primarily in wages, salaries and benefits expenses in line with the growth in our RBFS business and the inclusion of Rouse and SmartEquip.

RBFS revenue increased 46% driven by higher funded volume and improved rate on fees earned from facilitating financing arrangements as well as the growth in our PurchaseSafe service to provide escrow services to private brokered transactions. Some of the positive performance in RBFS also benefited from the favourable impact of foreign exchange fluctuation, as well as from a larger dedicated sales team driving increased volumes compared to 2020. Funded volume, which represents the amount of lending brokered by RBFS, increased 43% to $747.6 million, and increased 33% when excluding the impact of foreign exchange.

Other Services profit increased 25% to $46.7 million driven by our Rouse and RBFS operations, offset by less profits on lower ancillary services and asset appraisal services.

Additionally, in the first quarter of 2021, we launched a business version of our inventory management system (“IMS”), which offers our customers end-to-end asset management and disposition services, data analytics, dashboards, branded e-commerce sites and multiple external sales channels to help our customers achieve optimal returns. We continue to grow the number of organizations activated on IMS. In 2021, the compounded average quarterly growth rate for organizations activated on our IMS was ~83% using Q1 2021 as the base.

As we evolve to a marketplace, we also facilitate retail and peer-to-peer auction events and equipment sale transactions via our online technology in exchange for hosting fees. In 2021, customers that used this service disposed of $142.8 million of assets, which is an increase of 67% as compared to prior year.

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 or in 2021 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 September 21, 2021. In addition, we have senior notes currently being held in escrow to fund the Euro Auctions Acquisition.

In 2021, our operational liquidity was not materially impacted by COVID-19. We believe that our existing working capital, availability under our credit facilities, and senior notes held in escrow are sufficient to satisfy our present operating requirements and contractual obligations. Our material short-term cash requirements include (a) inventory purchases, (b) capital expenditures for intangible assets and property, plant and equipment, (c) payment of quarterly dividends on an as-declared basis, (d) settlement of contracts with consignors and other suppliers, (e) personnel expenditures, with a majority of bonuses paid annually in the first quarter following each fiscal period, (f) income tax payments, primarily paid in quarterly instalments, (g) lease payments, and (h) principal payments on short-term and current portions of long-term debt, and (i) interest payments related to our current debt obligations. Note 26 of our consolidated financial statements details our commitments for expenditures on property, plant and equipment and intangible assets, as well as our commitment for inventory purchases under two-year contracts. Other long-term cash requirements include long-term debt principal repayments, which are listed according to maturity date in Note 21 of our consolidated financial statements, as well as interest payments related to our non-current debt obligations. We are also committed under various letters of credit and provide certain guarantees in the normal course of business. The Euro Auctions Acquisition funding will constitute a material cash requirement upon closing, as could the funding of any future share repurchases or mergers and acquisitions.

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 such as mergers and acquisitions, including the Euro Auctions Acquisition. The execution of these growth strategies may affect our financing needs and ability to make payments on our debt, fund our other liquidity needs and make planned capital expenditures. Upon sale of our Bolton, Ontario property we intend to relocate to a replacement auction site in Amaranth, Ontario. The proceeds of the sale will be used to largely repay debt while the replacement property will be funded from cashflow from ongoing operations.

If we were to consider further acquisitions to deliver on our strategic growth drivers, we may seek financing through equity markets or additional debt markets. The sale of equity securities may result in dilution to our shareholders. Issuances of preferred equity securities could provide for rights, preferences or privileges senior to those of our common stock. Further, this additional capital may not be available on reasonable terms, or at all.

We assess our liquidity based on our ability to generate cash and secure credit 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 our Delayed-Draw Term Loan Facility (“DDTL Facility”). We believe our principal sources of liquidity, combined with the senior notes held in escrow, the new upsized DDTL Facility of $205.0 million, and approximately $170.0 million ($210.0 million CAD) of anticipated proceeds on the sale of our Bolton, Ontario, property are sufficient to fund our current operating activities and future growth strategies, including the proposed acquisition of Euro Auctions.

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.

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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.

As previously discussed, we have agreed pursuant to the SPA (subject to anti-trust and other customary closing conditions) to purchase Euro Auctions for £775.0 million (approximately $1.05 billion). On September 21, 2021, we amended our existing Credit Agreement, increasing our DDTL Facility to $295.0 million, of which $205.0 million remains undrawn at December 31, 2021 and is available to fund the acquisition of Euro Auctions. On December 21, 2021, we issued $933.0 million of new senior notes into escrow, which are also available to fund the Euro Auctions Acquisition. Consequently, we cancelled the commitments entered into in Q3 for the senior secured revolving facility, senior secured term loan facility and the senior unsecured bridge facility from Goldman Sachs Bank USA. The Company intends to fund the Euro Auctions Acquisition GBP purchase price by using proceeds from a GBP term loan draw, as well as the issuances of the new senior notes, which are denominated in US and Canadian dollars. Since a significant portion of the funding must be converted to GBP to pay for Euro Auctions, the Company is exposed to foreign currency risk. To mitigate a portion of this risk, the Company entered into GBP/USD and GBP/CAD deal contingent forward foreign exchange contracts, which are described in Note 4 of the consolidated financial statements.

Cash flows

	Year ended December 31,				
				% Change	
(in U.S. $000's, except percentages)	**2021**	**2020**	**2019**	**2021 over 2020**	**2020 over 2019**
Cash provided by (used in):					
Operating activities	$ 317,586	$ 257,872	332,793	23 %	(23)%
Investing activities	(214,066)	(276,722)	(36,057)	(23)%	667 %
Financing activities	960,908	(111,461)	(187,218)	(962)%	(40)%
Effect of changes in foreign currency rates	(8,871)	16,950	5,171	(152)%	228 %
Net increase in cash, cash equivalents, and restricted cash	$ 1,055,557	$ (113,361)	114,689	(1,031)%	(199)%

Net cash provided by operating activities increased $59.7 million in 2021 mainly due to higher net cash inflow from the change in operating assets and liabilities. This change arose primarily from a cash inflow driven by higher auction proceeds payable related to the timing, size, and number of auctions with higher GTV in the month of December 2021 versus December 2020, as well as net inflows from inventory with lower investments in Australia and higher sales in Europe. These increases were partially offset by negative cash flows driven by larger bonus payments and the timing of payments related to local payroll, consumption and income taxes over the comparative period, as well as the prepayment of one quarter’s interest on the senior notes held in escrow.

Net cash used in investing activities decreased $62.7 million in 2021. This decrease was primarily due to the $171.0 million cash outflows for the November 2, 2021 SmartEquip acquisition being less than the $250.0 million cash outflows for the December 8, 2020 Rouse acquisition. Partially offsetting this change was lower cash proceeds from land sales and equity investments in 2021 compared to 2020. In the comparative period, these inflows included $15.5 million of net proceeds on the sale of land in the United States, $4.2 million of proceeds on the distribution of equity investments, and $1.7 million of proceeds on contingent consideration from equity investments.

Net cash provided by financing activities increased $1.1 billion in 2021. This increase was primarily due to the following changes over the comparative period:

- $933.5 million net proceeds from long-term debt from the December 21, 2021 issuance senior notes held in escrow to fund the Euro Auctions Acquisition;
- $137.5 million net proceeds from long-term debt from draws on our revolving credit facility to fund the SmartEquip acquisition in November 2021; and
- No share repurchases in 2021, whereas we spent $53.2 million on share repurchases in Q1 2020.

Partially offsetting this change was a $27.9 million decrease in cash generated from the issuance of share capital on exercise of stock options and $12.1 million more dividends paid to shareholders over the comparative period.

Working capital

Working capital is calculated as total current assets less total current liabilities. Working capital at December 31, 2021 was $173.8 million, an increase of $131.6 million compared to 2020. The increase in working capital is primarily attributed to $317.6 million in cash provided from operations related to net income after adjusting for items not affecting cash and net changes in operating assets and liabilities. This increase was partially offset by $103.8 million of cash outflows for the payment of dividends and $43.5 million of intangible asset and property, plant and equipment purchases.

Dividend information

We declared and paid a regular cash dividend of $0.22 per common share for the quarters ended September 30, 2020, December 31, 2020, and March 31, 2021. We declared and paid regular cash dividends of $0.25 per common share for the quarter ended June 30, 2021 and September 30, 2021. We have declared, but not yet paid, a dividend of $0.25 per common share for the quarter ended December 31, 2021. All dividends that we pay are "eligible dividends" for Canadian income tax purposes unless indicated otherwise.

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 decreased 390 bps to 6.8% in 2021 from 10.7% in 2020. This decrease is primarily due to a $630.4 million, or 40%, increase in average invested capital over the comparative period, which was driven by the senior notes issued into escrow on December 21, 2021 and revolving credit facility draws to fund SmartEquip in November 2021. Also contributing to this change is a $18.2 million decrease net income attributable to stockholders over the comparative period. Return on invested capital ("ROIC") excluding escrowed debt (non-GAAP measure) decreased 100 bps to 12.3% in 2021 from 13.3% in 2020.

Credit facilities

On August 14, 2020, we entered into an amendment of the Credit Agreement dated October 27, 2016 totaling US$630.0 million with a syndicate of lenders comprising:

(1) Multicurrency revolving facilities of up to US$530.0 million (the "Revolving Facilities"); and,

(2) A delayed-draw term loan facility of up to US$100.0 million (the "DDTL Facility" and together with the Revolving Facilities, the "Facilities").

On September 21, 2021, we entered into another amendment of the Credit Agreement ("September 2021 Amendment"). The September 2021 Amendment, among other things, (i) extended the maturity date of the Facilities from October 27, 2023 to September 21, 2026, (ii) increased the total size of the Facilities provided under the Credit Agreement to up to $1.045 billion, including $295.0 million of commitments under the DDTL Facility, (iii) reduced the applicable margin for base rate loans and LIBOR loans at each pricing tier level, (iv) reduced the applicable percentage per annum used to calculate the commitment fee in respect of the unused commitments under the Revolving Facilities at each pricing tier level and (v) included customary provisions to provide for the eventual replacement of LIBOR as a benchmark interest rate.

Immediately prior to the September 2021 Amendment, the aggregate principal amount outstanding under the DDTL Facility was $90.0 million ($118.9 million CAD). In connection with the amendment, we refinanced that amount with the proceeds from a borrowing under the DDTL Facility. There are no mandatory principal repayments of borrowings under the DDTL Facility until the remaining $205.0 million is drawn. Once the DDTL Facility is fully drawn, borrowings are subject to mandatory principal repayments at an annual amortization rate of 5%, payable in quarterly installments, with the balance payable at maturity.

Credit facilities at December 31, 2021 and 2020 were as follows:

(in U.S. $000's, except percentages)	December 31, 2021	December 31, 2020	% Change
Committed			
DDTL Facility	$ 298,284	$ 98,420	203 %
Revolving credit facilities	750,000	530,000	42 %
Uncommitted			
Revolving credit facilities	10,000	10,000	— %
Total credit facilities	$ 1,048,284	$ 628,420	67 %
Unused			
DDTL Facility	$ 205,000	$ —	0 %
Revolving credit facilities	525,581	455,124	15 %
Total credit facilities unused	$ 730,581	$ 455,124	61 %

Revolving credit facilities
At December 31, 2021, of the $760.0 million in revolving credit facilities, $750.0 million relates to our syndicated credit facility and $10.0 million relates to credit facilities in certain foreign jurisdictions.

On December 31, 2021, we had $525.6 million of unused revolving credit facilities, which consisted of:
- $515.6 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 drawn term loan in 2021. During 2020, we made voluntary prepayments totaling $62.7 million on the drawn term loan denominated in U.S. dollars. Prepayments are applied against future scheduled mandatory payments. The term loan currently drawn from the DDTL Facility was only available to finance the IronPlanet acquisition and is not available for other corporate purposes upon repayment of those borrowed amounts. We intend to use the undrawn $205.0 million available under the DDTL Facility to partially finance the Euro Auctions Acquisition and any related fees and expenses**.**

Senior unsecured notes

2016 Notes
At December 31, 2021, we had senior unsecured notes (the “2016 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 2016 Notes were used to finance the IronPlanet acquisition. The 2016 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.

2021 Notes
On December 21, 2021, we completed the offering of two series of senior notes: (i) $600.0 million aggregate principal amount of 4.750% senior notes due December 15, 2031 (the “2021 USD Notes”) and (ii) $425.0 million Canadian dollar aggregate principal amount of 4.950% due December 15, 2029 (the “2021 CAD Notes”, and together with the 2021 USD Notes, the “2021 Notes”).

The gross proceeds from the offering together with certain additional amounts including prepaid interest were placed into escrow accounts and will be held in escrow until the completion of the Euro Auctions Acquisition. If the Euro Auctions Acquisition is not consummated on or before September 30, 2022 or the SPA is terminated prior to such date, we will redeem all of the outstanding 2021 Notes at a redemption price equal to 100% of the original offering price of the 2021 Notes, plus accrued and unpaid interest. Once out of escrow, interest on the 2021 Notes is payable semi-annually.

We intend to use the net proceeds from the offering of the 2021 Notes to partially fund the consideration payable of the Euro Auctions Acquisition and any related fees and expenses. Until completion of the Euro Auctions Acquisition, the 2021 Notes are secured only by the amounts deposited into certain escrow accounts established in connection with the issuance of the 2021 Notes. Upon consummation of the proposed Euro Auctions Acquisition, the 2021 Notes will be, jointly and severally, fully and unconditionally guaranteed, on a senior unsecured basis, subject to certain exceptions, by each of our subsidiaries that is a borrower or guarantees indebtedness under our Credit Agreement and 2016 Notes. Euro Auctions, and its respective subsidiaries that become a borrower or guarantor under the Credit Agreement are expected to become guarantors following the consummation of the Euro Auctions Acquisition.

Debt covenants
We were in compliance with all financial and other covenants applicable to our credit facilities at December 31, 2021. 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 financial covenants of a consolidated leverage ratio and a consolidated interest coverage ratio. 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 COVID-19 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.

Our senior notes were issued pursuant to indentures, dated December 21, 2016 and December 21, 2021, with U.S. Bank National Association as trustee, and in the case of the 2021 CAD Notes with TSX Trust Company as Canadian co-trustee. The indentures contain 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 indentures also provide 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.

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. COVID-19 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 cash flows and growth rates, gross margins, attrition rates, royalty rates, discount rates, and terminal value and forecast period 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 or shareholders which are measured at the fair value on acquisition date and amortized to acquisition-related costs until restrictions lapse and the common shares have vested.

Goodwill
Goodwill is not amortized, but it is tested annually for impairment as of December 31, 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, Rouse and SmartEquip.

We have the option of performing a qualitative assessment of a reporting unit to determine whether a quantitative impairment test is necessary. A qualitative assessment involves evaluating factors to determine the existence of events or circumstances that would indicate whether it is more likely than not that the fair value of the reporting unit to which goodwill belongs is less than its carrying amount. If the qualitative assessment indicates that the fair value of the reporting unit is more likely than not less than the carrying amount, then a quantitative impairment test would be performed.

If a quantitative impairment test is required, the process is to identify potential impairment by comparing the reporting unit's fair value with its carrying amount. The reporting unit's fair value is determined using various valuation methodologies based on an income approach or a market approach. In determining the reporting unit's fair value, management is required to make judgments and assumptions relating to future cash flows, growth rates and economic and market conditions. 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, 2021, we performed a qualitative assessment of the A&M reporting unit and we concluded there were no indicators of impairment that existed.

Mascus reporting unit goodwill
For the year ended December 31, 2021, we performed a quantitative assessment of the Mascus reporting unit using an income approach based on discounted cash flows. 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 57% to 62% from 2022 to 2026. We estimated a discount rate of 15.5% 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, we concluded that Mascus goodwill was not impaired at December 31, 2021.

Rouse reporting unit goodwill
For the year ended December 31, 2021, we performed a quantitative assessment of the Rouse reporting unit using an income approach based on discounted cash flows. The fair value of the Rouse 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 4% to 14% and an operating margin ranging between 40% to 51% from 2022 to 2031. We estimated a discount rate of 11% 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 Rouse reporting unit was greater than its carrying amount, we concluded that Rouse goodwill was not impaired at December 31, 2021.

SmartEquip reporting unit goodwill
For the year ended December 31, 2021, we performed a qualitative assessment of the SmartEquip 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, 2021 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, 2021.

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. Our assessment concluded that the carrying amounts of our long-lived assets are recoverable as at December 31, 2021.

Recoverability of trade receivables
Our trade receivables are generally secured by the equipment. 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 on site auction or online marketplace events. 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, 2021, we reviewed our Inventory to ensure that it is recorded at the lower of cost and net realizable value. Refer to Note 14 of the financial statements, Inventory, regarding the activity in inventory write-downs.

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 805
Effective October 1, 2021, we have early adopted ASU 2021-08, Business Combinations (Topic 805): *Accounting for Contract Assets and Contract Liabilities from Contracts with Customers*. The update primarily addresses the accounting for contract assets and contract liabilities from revenue contracts with customers acquired in a business combination. An entity that early adopts in an interim period should apply the amendments (1) retrospectively to all business combinations for which the acquisition date occurs on or after the beginning of the fiscal year that includes the interim period of early application and (2) prospectively to all business combinations that occur on or after the date of initial application. We have applied the amendments to the SmartEquip acquisition, which was completed on November 2, 2021.

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*, and in March 2020, the FASB issued an update to the standard. The standard provides relief for companies preparing for the discontinuation of reference rates such as LIBOR. This guidance is effective March 12, 2020 through to December 31, 2022. The adoption of the ASU and the recent updates have not and are not expected to have a material impact on our consolidated financial statements.

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 (*).

Non-GAAP Adjusted Operating Income* Reconciliation

We believe that non-GAAP adjusted operating income* provides useful information about the growth or decline of our operating income 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.

Adjusting operating income* eliminates the financial impact of adjusting items which are significant recurring and non-recurring items that we do not consider to be part of our normal operating results, such as share-based payments expense, acquisition-related costs, amortization of acquired intangible assets, management reorganization costs, and certain other items, which we refer to as ‘adjusting items’.

In 2021, we updated the calculation of non-GAAP adjusted operating income* to add-back share-based payments expense, all acquisition-related costs (including any share based continuing employment costs recognized in acquisition-related costs), amortization of acquired intangible assets, and gain or loss on disposition of property, plant and equipment. We have also adjusted for certain non-recurring advisory, legal and restructuring costs and the change in fair value of derivatives. These adjustments in 2021 have been applied retrospectively to all periods presented, as applicable.

The following table reconciles non-GAAP 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)	**2021**	**2020**	**2019**	**2021 over 2020**	**2020 over 2019**
Operating income	$ 240,147	$ 263,160	$ 223,202	(9)%	18 %
Share-based payments expense	23,106	21,882	16,405	6 %	33 %
Acquisition-related costs	30,197	6,014	777	402 %	674 %
Amortization of acquired intangible assets	27,960	21,098	20,638	33 %	2 %
Gain on disposition of property, plant and equipment	(1,436)	(1,559)	(1,107)	(8)%	41 %
Non-recurring advisory, legal and restructuring costs	3,497	3,919	—	(11)%	100 %
Non-GAAP adjusted operating income*	$ 323,471	$ 314,514	$ 259,915	3 %	21 %

(1) Please refer to pages 65-66 for a summary of adjusting items during the years ended December 31, 2021, 2020, and 2019.

(2) Non-GAAP adjusted operating income* represents operating income excluding the effects of adjusting items.

(3) Non-recurring advisory, legal and restructuring costs include $1.4 million of terminated and ongoing transaction and legal costs relating to mergers and acquisition activity, $1.6 million of SOX remediation costs relating to our efforts to remediate the material weaknesses identified in 2020, and $0.5 million of advisory costs relating to a cybersecurity incident detected in Q4 2021. In addition, we have reclassified severance costs incurred in 2020 as non-recurring advisory, legal and restructuring costs.

Non-GAAP Adjusted Net Income Attributable to Stockholders* and Non-GAAP Diluted Adjusted EPS Attributable to Stockholders* Reconciliation

We believe that non-GAAP 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. Non-GAAP diluted Adjusted EPS attributable to stockholders* eliminates the financial impact of adjusting items which are after-tax effects of significant non-recurring or recurring items that we do not consider to be part of our normal operating results, such as share-based payments expense, acquisition-related costs, amortization of acquired intangible assets, management reorganization costs, and certain other items, which we refer to as 'adjusting items'.

In 2021, we updated the calculation of non-GAAP diluted adjusted EPS attributable to stockholders* to add-back share-based payments expense and all acquisition-related costs (including any share based continuing employment costs recognized in acquisition-related costs), amortization of acquired intangible assets, and gain or loss on disposition of property, plant and equipment. We have also adjusted for certain non-recurring advisory, legal and restructuring costs and the change in fair value of derivatives. These adjustments in 2021 have been applied retrospectively to all periods presented, as applicable.

The following table reconciles non-GAAP adjusted net income attributable to stockholders* and non-GAAP 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.

(in U.S. $000's, except share and per share data, and percentages)	Year ended December 31, 2021	2020	2019	% Change 2021 over 2020	2020 over 2019
Net income attributable to stockholders	$ 151,868	$ 170,095	$ 149,039	(11)%	14 %
Share-based payments expense	23,106	21,882	16,405	6 %	33 %
Acquisition-related costs	30,197	6,014	777	402 %	674 %
Amortization of acquired intangible assets	27,960	21,098	20,638	33 %	2 %
Gain on disposition of property, plant and equipment	(1,436)	(1,559)	(1,107)	(8)%	41 %
Change in fair value of derivatives	1,248	—	—	100 %	— %
Non-recurring advisory, legal and restructuring costs	3,497	3,919	—	(11)%	100 %
Related tax effects of the above	(20,334)	(20,544)	(11,783)	(1)%	74 %
Change in uncertain tax provision - tax effect	—	7,755	—	(100)%	100 %
Non-GAAP adjusted net income attributable to stockholders*	$ 216,106	$ 208,660	$ 173,969	4 %	20 %
Weighted average number of dilutive shares outstanding	111,406,830	110,310,984	109,759,123	1 %	1 %
Diluted earnings per share attributable to stockholders	$ 1.36	$ 1.54	$ 1.36	(12)%	13 %
Non-GAAP diluted adjusted EPS attributable to Stockholders*	$ 1.94	$ 1.89	$ 1.59	3 %	19 %

(1) Please refer to pages 65-66 for a summary of adjusting items during the years ended December 31, 2021, 2020, and 2019.

(2) Non-GAAP adjusted net income attributable to stockholders* represents net income attributable to stockholders excluding the effects of adjusting items.

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

(4) Non-recurring advisory, legal and restructuring costs include $1.4 million of terminated and ongoing transaction and legal costs relating to mergers and acquisition activity, $1.6 million of SOX remediation costs relating to our efforts to remediate the material weaknesses identified in 2020, and $0.5 million of advisory costs relating to a cybersecurity incident detected in Q4 2021. In addition, we have reclassified severance costs incurred in 2020 as non-recurring advisory, legal and restructuring costs.

Non-GAAP Adjusted EBITDA*

We believe non-GAAP adjusted EBITDA* provides useful information about the growth or decline of our net income when compared between different financial periods. We use non-GAAP adjusted EBITDA as a key performance measure because we believe it facilitates operating performance comparisons from period to period.

In 2021, we updated the calculation of non-GAAP adjusted EBITDA* to add-back share-based payments expense and all acquisition-related costs (including any share based continuing employment costs recognized in acquisition-related costs), and gain or loss on disposition of property, plant and equipment. We have also adjusted for certain non-recurring advisory, legal and restructuring costs and the change in fair value of derivatives. These adjustments in 2021 have been applied retrospectively to all periods presented, as applicable.

The following table reconciles non-GAAP 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)	**2021**	**2020**	**2019**	**2021 over 2020**	**2020 over 2019**
Net income	$ 151,854	$ 170,358	$ 149,140	(11)%	14 %
Add: depreciation and amortization expenses	87,889	74,921	70,501	17 %	6 %
Add: interest expense	36,993	35,568	41,277	4 %	(14)%
Less: interest income	(1,402)	(2,338)	(3,802)	(40)%	(39)%
Add: income tax expense	53,378	65,530	41,623	(19)%	57 %
EBITDA	328,712	344,039	298,739	(4)%	15 %
Share-based payments expense	23,106	21,882	16,405	6 %	33 %
Acquisition-related costs	30,197	6,014	777	402 %	674 %
Gain on disposition of property, plant and equipment	(1,436)	(1,559)	(1,107)	(8)%	41 %
Change in fair value of derivatives	1,248	—	—	100 %	— %
Non-recurring advisory, legal and restructuring costs	3,497	3,919	—	(11)%	100 %
Non-GAAP adjusted EBITDA*	$ 385,324	$ 374,295	$ 314,814	3 %	19 %

(1) Please refer to pages 65-66 for a summary of adjusting items during the years ended December 31, 2021, 2020, and 2019.

(2) Non-GAAP adjusted EBITDA* is calculated by adding back depreciation and amortization expenses, interest expense, income tax expense, and subtracting interest income from net income, as well as adding back share-based payments expense, acquisition-related costs, and excluding the effects of any non-recurring or unusual adjusting items.

(3) Non-recurring advisory, legal and restructuring costs include $1.4 million of terminated and ongoing transaction and legal costs relating to mergers and acquisition activity, $1.6 million of SOX remediation costs relating to our efforts to remediate the material weaknesses identified in 2020, and $0.5 million of advisory costs relating to a cybersecurity incident detected in Q4 2021. In addition, we have reclassified severance costs incurred in 2020 as non-recurring advisory, legal and restructuring costs.

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Non-GAAP Adjusted Net Debt* and Non-GAAP Adjusted Net Debt*/Non-GAAP Adjusted EBITDA* Reconciliation
We believe that comparing non-GAAP adjusted net debt*/non-GAAP 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 non-GAAP adjusted net debt* to debt, non-GAAP adjusted EBITDA* to net income, and non-GAAP adjusted net debt*/non-GAAP 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)	**2021**	**2020**	**2019**	**2021 over 2020**	**2020 over 2019**
Short-term debt	$ 6.1	$ 29.1	$ 4.7	(79)%	519 %
Long-term debt	1,737.4	636.7	645.5	173 %	(1)%
Debt	1,743.5	665.8	650.2	162 %	2 %
Less: long-term term in escrow	(933.5)	—	—	— %	— %
Less: Cash and cash equivalents	(326.1)	(278.8)	(359.7)	17 %	(22)%
Non-GAAP adjusted net debt*	483.9	387.0	290.5	25 %	33 %
Net income	$ 151.9	$ 170.4	$ 149.1	(11)%	14 %
Add: depreciation and amortization expenses	87.9	74.9	70.5	17 %	6 %
Add: interest expense	37.0	35.6	41.3	4 %	(14)%
Less: interest income	(1.4)	(2.3)	(3.8)	(40)%	(39)%
Add: income tax expense	53.4	65.5	41.6	(19)%	57 %
EBITDA	328.8	344.1	298.7	(4)%	15 %
Share-based payments expense	23.1	21.9	16.4	6 %	34 %
Acquisition-related costs	30.2	6.0	0.8	402 %	674 %
Gain on disposition of property, plant and equipment	(1.4)	(1.6)	(1.1)	(10)%	41 %
Change in fair value of derivatives	1.2	—	—	100 %	— %
Non-recurring advisory, legal and restructuring costs	3.5	3.9	—	(11)%	— %
Non-GAAP adjusted EBITDA*	$ 385.4	$ 374.3	$ 314.8	3 %	19 %
Debt/net income	11.5 x	3.9 x	4.4 x	194 %	(11)%
Non-GAAP adjusted net debt*/Non-GAAP adjusted EBITDA*	1.3 x	1.0 x	0.9 x	21 %	12 %

(1) Please refer to pages 65-66 for a summary of adjusting items during the years ended December 31, 2021, 2020, and 2019.
(2) Non-GAAP adjusted EBITDA* is calculated by adding back depreciation and amortization expenses, interest expense, income tax expense, and subtracting interest income from net income, as well as adding back share-based payments expense, acquisition-related costs, gain/ loss on disposition of property, plant and equipment, terminated and ongoing transaction costs, and excluding the effects of any non-recurring or unusual adjusting items.
(3) Non-GAAP adjusted net debt* is calculated by subtracting cash and cash equivalents from short and long-term debt.
(4) Non-GAAP adjusted net debt*/Non-GAAP adjusted EBITDA* is calculated by dividing non-GAAP adjusted net debt* by non-GAAP adjusted EBITDA*.
(5) Non-recurring advisory, legal and restructuring costs include $1.4 million of terminated and ongoing transaction and legal costs relating to mergers and acquisition activity, $1.6 million of SOX remediation costs relating to our efforts to remediate the material weaknesses identified in 2020, and $0.5 million of advisory costs relating to a cybersecurity incident detected in Q4 2021. In addition, we have reclassified severance costs incurred in 2020 as non-recurring advisory, legal and restructuring costs.

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)	**2021**	**2020**	**2019**	**2020 over 2019**	**2020 over 2019**
Cash provided by operating activities	$ 317.6	$ 257.9	$ 332.8	23 %	(23)%
Property, plant and equipment additions	9.8	14.3	13.6	(31)%	5 %
Intangible asset additions	33.7	28.9	27.4	17 %	5 %
Proceeds on disposition of property plant and equipment	(1.9)	(16.4)	(5.9)	(88)%	178 %
Net capital spending	$ 41.6	$ 26.8	$ 35.1	55 %	(24)%
OFCF*	$ 276.0	$ 231.1	$ 297.7	19 %	(22)%

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

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Non-GAAP 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.

In 2021, we updated the calculation of non-GAAP diluted adjusted EPS attributable to stockholders* to add-back share-based payments expense and all acquisition-related costs (including any share based continuing employment costs recognized in acquisition-related costs), amortization of acquired intangible assets, and gain or loss on disposition of property, plant and equipment. These adjustments in 2021 have been applied retrospectively to all periods presented. We have also adjusted for certain non-recurring advisory, legal and restructuring costs and the change in fair value of derivatives.

The following table reconciles non-GAAP 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)	2021	2020	2019	2021 over 2020	2020 over 2019
Net income attributable to stockholders	$ 151.9	$ 170.0	$ 149.0	(11)%	14 %
Share-based payments expense	23.1	21.9	16.4	6 %	33 %
Acquisition-related costs	30.2	6.0	0.8	402 %	674 %
Amortization of acquired intangible assets	28.0	21.1	20.6	33 %	2 %
Gain on disposition of property, plant and equipment	(1.4)	(1.6)	(1.1)	(10)%	41 %
Change in fair value of derivatives	1.2	—	—	100 %	— %
Non-recurring advisory, legal and restructuring costs	3.5	3.9	—	(10)%	100.0 %
Related tax effects of the above	(20.3)	(20.5)	(11.8)	(1)%	74 %
Change in uncertain tax provision - tax effect	—	7.8	—	(100)%	100 %
Non-GAAP adjusted net income attributable to stockholders*	$ 216.2	$ 211.5	$ 176.9	2 %	20 %
Opening long-term debt	$ 636.7	$ 645.5	$ 711.3	(1)%	(9)%
Ending long-term debt	1,737.4	636.7	645.5	173 %	(1)%
Less: long-term debt in escrow	933.5	—	—	100 %	— %
Non-GAAP adjusted ending long-term debt*	803.9	636.7	645.5	26 %	(1)%
Average long-term debt	1,187.1	641.1	678.4	85 %	(5)%
Non-GAAP adjusted average long-term debt*	720.3	641.1	678.4	12 %	(5)%
Opening stockholders' equity	$ 1,007.2	$ 901.8	$ 830.6	12 %	9 %
Ending stockholders' equity	1,070.7	1,007.2	901.8	6 %	12 %
Average stockholders' equity	1,039.0	954.5	866.2	9 %	10 %
Average invested capital	$ 2,226.1	$ 1,595.6	$ 1,544.6	40 %	3 %
Non-GAAP adjusted average invested capital	1,759.3	1,595.6	1,544.6	10 %	3 %
Return on average invested capital	6.8 %	10.7 %	9.6 %	(390)bps	110 bps
Non-GAAP ROIC*	9.7 %	13.3 %	11.5 %	(360)bps	180 bps
Non-GAAP ROIC* excluding escrowed debt	12.3 %	13.3 %	11.5 %	(100)bps	180 bps

(1) Please refer to pages 65-66 for a summary of adjusting items for the years ended December 31, 2021, 2020, and 2019.
(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 non-GAAP 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.
(5) Non-recurring advisory, legal and restructuring costs include $1.4 million of terminated and ongoing transaction and legal costs relating to mergers and acquisition activity, $1.6 million of SOX remediation costs relating to our efforts to remediate the material weaknesses identified in 2020, and $0.5 million of advisory costs relating to a cybersecurity incident detected in Q4 2021. In addition, we have reclassified severance costs incurred in 2020 as non-recurring advisory, legal and restructuring costs.

Adjusting Items Non-GAAP Measures
In 2021, we began adjusting for the following items that we do not consider to be part of our normal operating results. These adjustments in 2021 have been applied retrospectively to all periods presented.

The following describes the nature of these adjusting items recognized:

- Share-based payments expense - includes stock option compensation expense, and compensation expense for equity classified share units, liability classified share units, and employer contributions related to our employee share purchase plan.

- Amortization of acquired intangible assets – includes amortization of all intangible assets acquired primarily from the acquisitions of IronPlanet, Rouse and Mascus.

- Gain or loss on disposition of property, plant and equipment – includes any gain or loss recognized for the difference between the sales proceeds and the carrying amount of the disposed property, plant and equipment.

The following are additional adjusting items during the year which we do not consider to be part of our normal operating results.

Additional adjusting items for the year ended December 31, 2021:

Recognized in the fourth quarter of 2021
- $14.0 million ($11.6 million after tax, or $0.10 per diluted share) of acquisition-related costs related to the acquisitions of Rouse, and SmartEquip and the proposed acquisition of Euro Auctions.
- $1.2 million ($1.1 million after tax, or $0.01 per diluted share) loss due to the change in fair value of derivatives to manage our exposure to foreign currency exchange rate fluctuations on the purchase consideration for the proposed acquisition of Euro Auctions.
- $2.6 million ($1.9 million after tax, or $0.01 per diluted share) of non-recurring advisory, legal and restructuring costs which include $1.4 million ($1.0 million after tax, or $0.01 per diluted share) of terminated and ongoing transaction and legal costs relating to mergers and acquisition activity, $0.7 million ($0.5 million after tax, or $0.00 per diluted share) of SOX remediation costs relating to our efforts to remediate the material weaknesses identified in 2020, and $0.5 million ($0.4 million after tax, or $0.00 per diluted share) of advisory costs relating to a cybersecurity incident detected in Q4 2021.

Recognized in the third quarter of 2021
- $10.3 million ($8.3 million after tax, or $0.07 per diluted share) of acquisition-related costs related to the acquisitions of Rouse, and SmartEquip and proposed acquisition of Euro Auctions.
- $0.7 million ($0.5 million after tax, or $0.00 per diluted share) of non-recurring advisory, legal and restructuring costs related to SOX remediation costs relating to our efforts to remediate the material weaknesses identified in 2020, which has been retrospectively applied to Q3 2021.

Recognized in the second quarter of 2021
- $0.2 million ($0.2 million after tax, or $0.00 per diluted share) of non-recurring advisory, legal and restructuring costs related to SOX remediation costs relating to our efforts to remediate the material weaknesses identified in 2020, which has been retrospectively applied to Q2 2021.

Recognized in the first quarter of 2021
- There were no adjustment items recognized in the first quarter of 2021.

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. These severance costs were reclassified to non-recurring advisory, legal and restructuring costs in 2021.

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.

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, 2021, 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 2021, we recorded a net decrease in our foreign currency translation adjustment balance of $21.7 million, compared to a net increase of $24.8 million in 2020 and a net decrease of $2.9 million in 2019. 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, 2021, 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 $23.2 million in our consolidated comprehensive income, of which $24.1 million relates to our foreign currency translation adjustment and is offset by $0.9 million to our net income.

On August 9, 2021, we entered the SPA to acquire Euro Auctions at a purchase price of £775.0 million. Since we intend to finance a portion of the acquisition using U.S. and Canadian dollars, we are exposed to foreign currency exchange rate fluctuations against the Pound Sterling purchase price. To manage our exposure to this risk, we entered two deal contingent foreign exchange forward currency contracts on December 23, 2021, with no upfront cash cost. The notional amounts of the derivative instruments are £216.0 million (U.S dollar forward) and £127.0 million (Canadian dollar forward) as of December 31, 2021. These forward contracts expire if the Euro Auctions Acquisition terminates or does not close by September 29, 2022.

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 floating rate customarily used by the syndicate and depending on the borrowing currency, including LIBOR, SOFR, SONIA, €STR, EURIBOR, and TIBOR. In either case, an applicable margin is added to the rate. As at December 31, 2021, we had a total of $319.1 million in loans (facilities drawn and term loans) bearing floating rates of interest, as compared to $173.7 million at December 31, 2020. Based on the amount owing as at December 31, 2021, and assuming all other variables remain constant, a change in the interest rate by 100 bps would result in an increase/decrease of approximately $3.2 million in the pre-tax interest we accrue per annum.

Our exposure to interest rate risk decreased at December 31, 2021 compared to December 31, 2020, primarily due to the increase in senior notes issued into escrow in December 2021. The 2016 Notes, 2021 USD Notes, and 2021 CAD Notes totaling $1.4 billion and representing 91% of our long-term debt, bear interest at a fixed rate of 5.375% per annum, 4.750% per annum, and 4.950% per annum, respectively. The proportion of fixed-to-floating interest rates is expected to decrease after we draw on our DDTL Facility to fund a portion of the Euro Auctions acquisition. In addition, we may consider refinancing fixed rate debt with floating rate debt, which would further decrease the fixed-to-floating interest rates ratio. These increases would be partially offset by any principal repayments on our revolver loans or term loans as part of our de-leveraging or other 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. If our costs were to become subject to significant inflationary pressures, we may not be able to fully offset such higher costs through price increases for services. Our inability to do so could harm our business, financial condition or results of operations.

ITEM 8: FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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, 2021 and 2020, 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, 2021, 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, 2021 and 2020, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2021, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the Company's internal control over financial reporting as of December 31, 2021, based on 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 17, 2022 expressed an unqualified 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 U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the 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 and Rouse reporting units

Description of the Matter	At December 31, 2021, the Company's goodwill related to the Mascus and Rouse reporting units was $19.9 million and $164.0 million, respectively. As discussed in Note 2(s) 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 tests related to the Mascus and Rouse reporting units involved subjective auditor judgment due to the significant estimation uncertainly in determining the fair value of the reporting units. The fair value estimates were made using discounted cash flow models. Significant judgment was required in assessing the assumptions used, in particular projected revenue growth rates, terminal growth rates, projected earnings before interest, taxes, depreciation and amortization (EBITDA) margins and discount rates.
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 values of the Mascus and Rouse reporting units, 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 values of the reporting units 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 evaluation of the Company's discount rates by comparing the rates against a discount rate range that was independently developed by our valuation specialists using publicly available market data for comparable entities.

Accounting for Acquisition of SmartEquip, Inc.

Description of the Matter	As disclosed in Note 4 to the consolidated financial statements, on November 2, 2021, the Company completed its acquisition of SmartEquip, Inc. ("SmartEquip") for net consideration of $173.7 million. The transaction was accounted for as a business combination. Auditing the Company's accounting for its acquisition of SmartEquip 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 $50.7 million and developed technology of $18.9 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 discounted cash flow models to measure the customer relationships and developed technology intangible assets. The significant assumptions used to estimate the value of the customer relationships intangible assets included discount rates 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. The significant assumptions used to estimate the value of the developed technology intangible assets included the discount rate and certain assumptions that form the basis of the forecasted results, in particular revenue growth rates, obsolescence rates and royalty rates. 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 customer relationships and developed technology intangible assets and controls over management's review of the significant assumptions described above. To test the estimated fair value of the customer relationships and developed technology intangible assets, 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, forecast period and obsolescence rates to current industry, market and economic trends, the historical results of the acquired business and other guidelines used by companies within comparable industries. We involved our valuation specialists to assist in evaluating the valuation techniques used by the Company and certain significant assumptions, including the discount rates, customer attrition rates and royalty rates. Our valuation specialists compared the selected discount rates to the acquired business' weighted average cost of capital, performed an evaluation of the relationship between the weighted average cost of capital, internal rate of return and weighted-average return on assets and compared the intangible asset allocation as a percentage of purchase price to similar transactions in the industry. Our valuation specialists also compared the royalty rates to benchmark transactions within the industry and evaluated the attrition rate for each customer relationship by comparing to historical customer churn rates of the acquired business.

/s/Ernst & Young LLP
Chartered Professional Accountants
We have served as the Company's auditor since 2013.
Vancouver, Canada
February 17, 2022

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

Year ended December 31,	2021	2020	2019
Revenue:			
Service revenue	$ 917,759	$ 871,596	$ 804,024
Inventory sales revenue	499,212	505,664	514,617
Total revenue	1,416,971	1,377,260	1,318,641
Operating expenses:			
Costs of services	146,862	157,296	164,977
Cost of inventory sold	447,921	458,293	480,839
Selling, general and administrative expenses	464,599	417,523	382,389
Acquisition-related costs	30,197	6,014	777
Depreciation and amortization expenses	87,889	74,921	70,501
Gain on disposition of property, plant and equipment	(1,436)	(1,559)	(1,107)
Foreign exchange loss (gain)	792	1,612	(2,937)
Total operating expenses	1,176,824	1,114,100	1,095,439
Operating income	240,147	263,160	223,202
Interest expense	(36,993)	(35,568)	(41,277)
Change in fair value of derivatives, net	(1,248)	—	—
Other income, net	3,326	8,296	8,838
Income before income taxes	205,232	235,888	190,763
Income tax expense	53,378	65,530	41,623
Net income	$ 151,854	$ 170,358	$ 149,140
Net income (loss) attributable to:			
Stockholders	$ 151,868	$ 170,095	$ 149,039
Non-controlling interests	(14)	263	101
Net income	$ 151,854	$ 170,358	$ 149,140
Earnings per share attributable to stockholders:			
Basic	$ 1.38	$ 1.56	$ 1.37
Diluted	$ 1.36	$ 1.54	$ 1.36
Weighted average number of shares outstanding:			
Basic	110,315,782	109,054,493	108,519,739
Diluted	111,406,830	110,310,984	109,759,123

See accompanying notes to the consolidated financial statements.

Consolidated Statements of Comprehensive Income
(Expressed in thousands of United States dollars)

Year ended December 31,	2021	2020	2019
Net income	$ 151,854	$ 170,358	$ 149,140
Other comprehensive income (loss), net of income tax:			
Foreign currency translation adjustment	(21,712)	24,861	(2,836)
Total comprehensive income	$ 130,142	$ 195,219	$ 146,304
Total comprehensive income (loss) attributable to:			
Stockholders	$ 130,190	$ 194,899	$ 146,217
Non-controlling interests	(48)	320	87
	$ 130,142	$ 195,219	$ 146,304

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,	2021	2020
Assets		
Cash and cash equivalents	$ 326,113	$ 278,766
Restricted cash	102,875	28,129
Trade and other receivables	150,895	135,001
Less: allowance for credit losses	(4,396)	(5,467)
Inventory	102,494	86,278
Other current assets	64,346	27,274
Income taxes receivable	19,895	6,797
Total current assets	762,222	556,778
Restricted cash	933,464	—
Property, plant and equipment	449,087	492,127
Other non-current assets	142,504	147,608
Intangible assets	350,516	300,948
Goodwill	947,715	840,610
Deferred tax assets	7,406	13,458
Total assets	$ 3,592,914	$ 2,351,529
Liabilities and Equity		
Auction proceeds payable	$ 292,789	$ 214,254
Trade and other liabilities	280,308	243,786
Income taxes payable	5,677	17,032
Short-term debt	6,147	29,145
Current portion of long-term debt	3,498	10,360
Total current liabilities	588,419	514,577
Long-term debt	1,733,940	626,288
Other non-current liabilities	147,260	153,000
Deferred tax liabilities	52,232	45,265
Total liabilities	2,521,851	1,339,130
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: 110,618,049 (December 31, 2020: 109,876,428)	227,504	200,451
Additional paid-in capital	59,535	49,171
Retained earnings	839,609	791,918
Accumulated other comprehensive loss	(55,973)	(34,295)
Stockholders' equity	1,070,675	1,007,245
Non-controlling interest	388	5,154
Total stockholders' equity	1,071,063	1,012,399
Total liabilities and equity	$ 3,592,914	$ 2,351,529

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							Contingently redeemable performance share units ("PSUs")
	Common stock		Additional paid-In capital ("APIC")	Retained earnings	Accumulated other comprehensive income (loss)	Non-controlling interest ("NCI")	Total equity	
	Number of shares	Amount						
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
Shares repurchased	(1,223,674)	(42,012)	—	—	—	—	(42,012)	—
Cash dividends paid	—	—	—	(82,535)	—	—	(82,535)	—
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 combinations	312,193		1,459	—	—	—	1,459	—
Share-based continuing employment costs related to business combinations	—	—	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	$ —
Net income	—	—	—	151,868	—	(14)	151,854	—
Other comprehensive loss	—	—	—	—	(21,678)	(34)	(21,712)	—
	—	—	—	151,868	(21,678)	(48)	130,142	—
Stock option exercises	495,021	20,013	(3,763)	—	—	—	16,250	—
Issuance of common stock related to vesting of share units	238,139	2,276	(11,724)	—	—	—	(9,448)	—
Acquisition of remaining interest in NCI	—	—	(1,170)	70	—	(4,614)	(5,714)	—
Issuance of common stock related to business combinations	63,971	—	—	—	—	—	—	—
Forfeiture of common stock related to business combinations	(55,510)	—	(98)	—	—	—	(98)	—
Share-based continuing employment costs related to business combinations	—	4,764	6,105	—	—	—	10,869	—
Stock option compensation expense	—	—	8,365	—	—	—	8,365	—
Equity-classified share units expense	—	—	12,199	—	—	—	12,199	—
Equity-classified share units dividend equivalents	—	—	450	(450)	—	—	—	—
Cash dividends paid	—	—	—	(103,797)	—	(104)	(103,901)	—
Balance, December 31, 2021	110,618,049	$ 227,504	$ 59,535	$ 839,609	$ (55,973)	$ 388	$ 1,071,063	$ —

See accompanying notes to the consolidated financial statements.

Consolidated Statements of Cash Flows
(Expressed in thousands of United States dollars)

Year ended December 31,	**2021**	**2020**	**2019**
Cash provided by (used in):			
Operating activities:			
Net income	$ 151,854	$ 170,358	$ 149,140
Adjustments for items not affecting cash:			
Depreciation and amortization expenses	87,889	74,921	70,501
Share-based payments expense	31,335	16,552	12,744
Deferred income tax expense	3,859	9,152	8,826
Unrealized foreign exchange (gain) loss	(107)	2,453	(3,058)
Gain on disposition of property, plant and equipment	(1,436)	(1,559)	(1,107)
Amortization of debt issuance costs	2,926	3,123	4,086
Amortization of right-of-use assets	12,832	12,240	12,280
Gain on contingent consideration from equity investment	—	(1,700)	—
Change in fair value of derivatives	1,248	—	—
Other, net	2,752	1,466	2,779
Net changes in operating assets and liabilities	24,434	(29,134)	76,602
Net cash provided by operating activities	317,586	257,872	332,793
Investing activities:			
Acquisitions, net of cash acquired	(170,976)	(250,039)	—
Property, plant and equipment additions	(9,816)	(14,263)	(13,589)
Proceeds on disposition of property, plant and equipment	1,911	16,385	5,929
Intangible asset additions	(33,671)	(28,873)	(27,415)
Issuance of loans receivable	(2,622)	(9,071)	—
Repayment of loans receivable	1,108	3,227	—
Distribution from equity investment	—	4,212	—
Proceeds on contingent consideration from equity investment	—	1,700	—
Other, net	—	—	(982)
Net cash used in investing activities	(214,066)	(276,722)	(36,057)
Financing activities:			
Share repurchase	—	(53,170)	(42,012)
Dividends paid to stockholders	(103,797)	(91,737)	(82,535)
Acquisition of remaining interest in NCI	(5,556)	—	—
Dividends paid to NCI	(104)	(320)	—
Proceeds from exercise of options and share option plans	16,250	44,128	41,094
Payment of withholding taxes on issuance of shares	(9,283)	(6,656)	(5,260)
Net increase (decrease) in short-term debt	(21,608)	21,431	(15,515)
Proceeds from long-term debt	1,106,957	—	—
Repayment of long-term debt	(5,328)	(13,711)	(76,282)
Debt issue costs	(5,655)	(2,038)	—
Repayment of finance lease obligations	(10,968)	(9,388)	(6,708)
Net cash used in financing activities	960,908	(111,461)	(187,218)
Effect of changes in foreign currency rates on cash, cash equivalents, and restricted cash	(8,871)	16,950	5,171
Increase	1,055,557	(113,361)	114,689
Beginning of period	306,895	420,256	305,567
Cash, cash equivalents, and restricted cash, end of period	$ 1,362,452	$ 306,895	$ 420,256

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 a marketplace for insights, services and transaction solutions for commercial assets. The Company offers its customers end-to-end transaction solutions for used commercial and other durable assets through its omnichannel platform, which includes auctions, online marketplaces, listing services, and private brokerage services. The Company also offers a wide array of value-added services connected to commercial assets as well as asset management software and data as a service solutions to help customers make more accurate and reliable business decisions. 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 November 2, 2021, the Company acquired all the issued and outstanding common shares of SmartEquip Inc. ("SmartEquip"), which has been consolidated from the date of acquisition. SmartEquip is an innovative technology platform that supports customers' management of the equipment lifecycle and integrates parts procurement with both original equipment manufacturers and dealers. SmartEquip generates its revenues by delivering to its customers a real-time service and diagnostic support for the assets in their fleets and enables the electronic procurement of parts from original equipment manufacturers and their dealers. 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 SmartEquip.

In March 2020, the World Health Organization declared the outbreak of COVID-19 as a pandemic, which quickly spread throughout the world. The extent of the ongoing impact of COVID-19 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 in light of new variants and any related restrictions implemented by governments in various jurisdictions, as well as supply and demand impacts driven by the Company's consignor and buyer base, 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 and software subscriptions and other ancillary and transactional 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. The transaction price is reduced by estimates of variable consideration such as volume rebates and discounts. All estimates, which are evaluated at each reporting period, are based on the Company’s historical experience, anticipated volumes, and best judgment. For 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 and stimulates buyer interest through professional marketing techniques by matching 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 winning bid 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.

With the final acceptance of the winning bid, the highest bidder becomes legally obligated to pay the full purchase price, which is the winning bid of the property purchased and the seller is legally obligated to relinquish the property in exchange for the winning bid less any seller’s commissions. Commission and fee revenue are recognized on the date of the auction sale upon the final acceptance of the winning bid.

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 is 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 and software subscriptions, and other ancillary and transactional 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.

With the final acceptance of the winning bid, the highest bidder becomes legally obligated to pay the full purchase price, which is the winning bid of the property purchased. Title to the property is transferred in exchange for the winning bid price, and if applicable, the buyer transaction fee plus applicable taxes. In a private treaty transaction where inventory is sold in a private process or inventory contracts are sold on our online marketplaces, commission and fee revenue is recognized on the date the buyer has obtained control of the asset.

(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, and 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. If the PSU includes a market condition, the Company assesses the probability of satisfying the market condition in its estimate of fair value. PSUs vest based on the passage of time and achievement of performance criteria or market conditions. Share-based compensation expense for PSUs with a market condition is recognized regardless of whether the market condition is satisfied subject to continuing service over the requisite service period.

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.

The 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. 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 liabilities 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 liabilities, 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 is 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 liabilities, 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) Derivative financial instruments

Derivative instruments are recorded on the consolidated balance sheet at fair value. Unrealized gains and losses on derivatives not designated in a hedging relationship are recorded as part of operating income (expense) or non-operating income (expense) within change in fair value of derivatives in the consolidated income statement depending on the nature of the derivative. Fair values for derivative instruments are determined using inputs based on market conditions existing at the balance sheet date as well as the settlement date of the derivative, if applicable. Derivatives embedded in non-derivative contracts are recognized separately unless they are closely related to the host contract.

(i) 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.

2. Significant accounting policies (continued)

(j) 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.

(k) 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.

(l) 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. Non-current restricted cash consists of funds that are restricted as to withdrawal or use for other than current operations and are designated for expenditure in the acquisition of non-current assets and in business combinations.

(m) 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.

2. Significant accounting policies (continued)

(n) Inventory

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.

(o) 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.

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.

2. Significant accounting policies (continued)

(p) 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.

(q) 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.

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
Backlog	Straight-line	2 years

Customer relationships includes relationships with buyers and sellers.

(r) 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 fair value of the indefinite-lived intangible asset is less than its carrying value. If the qualitative assessment indicates it is not more likely than not that the fair value is less than its carrying 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.

2. Significant accounting policies (continued)

(s) 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 fair value of the reporting unit to which goodwill belongs is less than its carrying value. If the qualitative assessment indicates it is not more likely than not that the reporting unit's fair value is less than its carrying 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. 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, derivative financial instruments and other contingencies.

As of December 31, 2021, the Company performed a qualitative assessment of the A&M and SmartEquip reporting units, and concluded that there were no indicators of impairment. The Company performed a quantitative assessment of the Mascus and Rouse reporting units and concluded that the fair value of both reporting units exceeded their carrying amounts.

(t) 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.

(u) 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.

(v) 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.

(w) 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.

(x) 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.

2. Significant accounting policies (continued)

(y) 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 at their estimated fair values on 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.

(z) New and amended accounting standards

a. In March 2020, the FASB issued an update to ASU 2020-04, Reference Rate Reform (Topic 848), *Facilitation of the Effects of Reference Rate Reform on Financial Reporting*, which addresses the effects of reference rate reform on financial reporting. ASU 2020-04 is effective for all entities as of March 12, 2020 through to December 31, 2022. If elected, and if certain criteria are met, this ASU requires less accounting analysis and recognition for modifications related to reference rate reform. The update issued provides optional expedients and exceptions for applying US GAAP to contract modifications, hedging relationships, derivatives and other transactions affected by the reference rate reform that reference LIBOR or another reference rate expected to be discontinued. It was announced in March 2021 that LIBOR rates are expected to cease to be published as early as December 31, 2021 and as late as June 30, 2023 depending on the jurisdiction and the term of the rate. Our Credit Agreement (Note 21), which references LIBOR, was modified on September 21, 2021. The modification included an amendment to include customary provisions to provide for the eventual replacement of LIBOR that have been established as the secured overnight financing rate (SOFR), the Sterling Overnight Interbank Average Rate (SONIA), the euro short-term rate (€STR), Euro Interbank Offered rate (EURIBOR) and the Tokyo Interbank Offered Rate (TIBOR). The Company did not apply the optional expedient permitted under the standards as, in addition to the provisions to provide for the eventual replacement of LIBOR, other terms and conditions in the Credit Agreement were also modified and amended. As a result, the adoption of the ASU and the recent updates have not and are not expected to have a material impact on our consolidated financial statements

b. In October 2021, the FASB issued ASU 2021-08, Business Combinations (Topic 805): *Accounting for Contract Assets and Contract Liabilities from Contracts with Customers*. The update primarily addresses the accounting for contract assets and contract liabilities from revenue contracts with customers acquired in a business combination. The update requires that an acquirer recognize and measure contract assets and contract liabilities acquired in a business combination in accordance with ASC 606 - Revenue from Contracts with Customers, whereas prior to the adoption of the update, contract assets acquired and contract liabilities assumed in a business combination were recognized at fair value on the acquisition date. The amendments in this update are effective for fiscal years beginning after December 15, 2022, including interim periods within those fiscal years. Early adoption of the amendments is permitted, including adoption in an interim period. An entity that early adopts in an interim period should apply the amendments (1) retrospectively to all business combinations for which the acquisition date occurs on or after the beginning of the fiscal year that includes the interim period of early application and (2) prospectively to all business combinations that occur on or after the date of initial application. The Company has early adopted the update as of October 1, 2021 and therefore has applied the amendments to all acquisitions completed since January 1, 2021, which includes only the acquisition of SmartEquip, which was completed on November 2, 2021.

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. 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 SmartEquip and Rouse, we estimated the fair value of the intangible assets acquired, using valuation methods, 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.

(Tabular amounts expressed in thousands of United States dollars, except where noted)

4. Business combinations

SmartEquip acquisition

On November 2, 2021, the Company acquired all of the issued and outstanding common shares of SmartEquip for a total cash purchase price of $173,743,000.

SmartEquip is an innovative technology platform that supports customers' management of the equipment lifecycle and integrates parts procurement with both original equipment manufacturers and dealers.

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

SmartEquip purchase price allocation

Purchase price	$	173,743
Assets acquired:		
Cash and cash equivalents	$	2,039
Trade and other receivables		2,926
Other current assets		486
Property, plant and equipment		120
Other non-current assets		75
Deferred tax assets		8,932
Intangible assets		71,700
Liabilities assumed:		
Trade and other liabilities		1,239
Deferred revenue		3,565
Other non-current liabilities		119
Deferred tax liabilities		18,192
Fair value of identifiable net assets acquired		63,163
Goodwill acquired on acquisition	$	110,580

The deferred tax assets are presented net of a $1,486,000 valuation allowance.

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

Asset		Fair value at acquisition	Weighted average amortization period
Customer relationships	$	50,700	4 - 15 years
Software and technology assets		18,900	7 years
Trade names and trademarks		1,000	3 years
Backlog		1,100	2 years
Total	$	71,700	11.3 years

The amounts included in the SmartEquip 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. The purchase price 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.

4. Business combinations (continued)

SmartEquip acquisition (continued)

Goodwill

Goodwill has been 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 SmartEquip’s business, its assembled workforce and associated technical expertise, as well as anticipated synergies from applying the Company’s auction expertise and transactional capabilities to SmartEquip’s existing customer base. The transaction is considered a non-taxable business combination and the goodwill is not deductible for tax purposes.

Contributed revenue and net income

The results of SmartEquip’s operations are included in these consolidated financial statements from the date of acquisition. SmartEquip contributed revenue of $2,855,000 and net loss of $910,000 which includes $1,280,000 amortization of intangible assets for the period from November 2, 2021 to December 31, 2021. 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 63,971 common shares to certain previous shareholders of SmartEquip in return for their continuing employment service. The common shares are expected to vest one third on each anniversary date of the acquisition over a three-year period 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 $4,375,000 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.

As part of the acquisition, the Company incurred $4,965,000 of acquisition-related costs for legal, advisory, integration and other professional fees, which included $439,000 of share-based continuing employment costs. These costs are included in the consolidated income statement for the period ended December 31, 2021 (Note 7).

4. Business combinations (continued)

Euro Auctions acquisition

On August 9, 2021, the Company entered into a Sale and Purchase Agreement ("SPA") pursuant to which it has agreed to purchase Euro Auctions Limited, William Keys & Sons Holdings Limited, Equipment & Plant Services Ltd, and Equipment Sales Ltd. (collectively, "Euro Auctions"), each being a private limited company incorporated in Northern Ireland (the "Euro Auctions Acquisition").

Under the terms of the SPA, the Company will acquire all of the outstanding shares of Euro Auctions from their existing shareholders for approximately £775,000,000 (approximately $1.05 billion) cash consideration, to be paid on closing. The Euro Auctions acquisition is subject to regulatory clearances and the satisfaction of other customary closing conditions, including obtaining of antitrust clearance in the United Kingdom. Euro Auctions are providers of unreserved auction services in the commercial assets space with operations in the United Kingdom, Australia and the United States.

In connection with the execution of the SPA, the Company obtained a commitment from Goldman Sachs Bank USA and certain other financial institutions to provide funding through both bank and bridge facilities. On September 21, 2021, the Company amended its existing Credit Agreement (Note 21) and thereby cancelled the bank commitments and reduced the bridge commitment. On December 21, 2021, the Company completed its offering of two series of senior unsecured notes and thereby cancelled the remaining bridge commitment.

On December 23, 2021, the Company entered into two deal contingent foreign exchange forward currency contracts, with no upfront cash cost, to manage its exposure to foreign currency exchange rate fluctuations against the U.S. and Canadian dollar on £343,000,000 of the £775,000,000 purchase consideration for the proposed Euro Auctions Acquisition. The notional amounts of the derivative instruments are £216,000,000 (U.S dollar forward) and £127,000,000 (Canadian dollar forward) as of December 31, 2021. These forward contracts expire if the Euro Auctions Acquisition terminates or does not close by September 29, 2022. These forward contracts are accounted for as derivatives under ASC 815, *Derivatives and Hedging*, and are classified in other current assets and other current liabilities on the consolidated balance sheet, with changes in fair value recognized in the consolidated income statement.

(Tabular amounts expressed in thousands of United States dollars, except where noted)

4. Business combinations (continued)

Rouse acquisition

On December 8, 2020, the Company acquired all of the issued and outstanding units of Rouse Services LLC ("Rouse") for a total purchase price of $250,996,000. In the second quarter of 2021, the Company received a post-closing release from escrow of $728,000 related to the finalization of the net working capital adjustment, resulting in a decrease in total purchase price to $250,996,000 and a corresponding decrease in goodwill. Additionally, during the first and second quarter of 2021, the Company recorded adjustments to decrease the amount of liabilities assumed by $1,074,000, with a corresponding decrease in goodwill. The purchase price allocation was finalized on June 30, 2021.

The following table summarizes the fair value of consideration transferred at the date of acquisition, as well as the final purchase price allocation of the fair value of assets acquired and liabilities assumed.

	December 8, 2020
Total cash consideration paid	$ 249,537
Equity consideration paid for pre-combination services	1,459
Final purchase price	$ 250,996

Rouse purchase price allocation

	December 8, 2020
Purchase price	$ 250,996
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 liabilities	5,630
Other non-current liabilities	3,188
Deferred tax liabilities	936
Fair value of identifiable net assets acquired	87,028
Goodwill acquired on acquisition	$ 163,968

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

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 was considered a taxable business combination and all of the goodwill is deductible for tax purposes.

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 Ritchie Bros. Financial Services ("RBFS"), Rouse, Mascus online services, SmartEquip, 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.

Notes to the Consolidated Financial Statements
(Tabular amounts expressed in thousands of United States dollars, except where noted)

5. Segmented information (continued)

	Year ended December 31, 2021		
	A&M	Other	Consolidated
Service revenue	$ 759,303	$ 158,456	$ 917,759
Inventory sales revenue	499,212	—	499,212
Total revenue	$ 1,258,515	$ 158,456	$ 1,416,971
Costs of services	85,415	61,447	146,862
Cost of inventory sold	447,921	—	447,921
Selling, general and administrative expenses ("SG&A")	414,287	50,312	464,599
Segment profit	$ 310,892	$ 46,697	$ 357,589
Acquisition-related costs			30,197
Depreciation and amortization expenses ("D&A")			87,889
Gain on disposition of property, plant and equipment ("PPE")			(1,436)
Foreign exchange loss			792
Operating income			$ 240,147
Interest expense			(36,993)
Change in fair value of derivatives			(1,248)
Other income, net			3,326
Income tax expense			(53,378)
Net income			$ 151,854

	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
SG&A expenses	388,442	29,081	417,523
Segment profit	$ 306,777	$ 37,371	$ 344,148
Acquisition-related costs			6,014
D&A expenses			74,921
Gain on disposition of 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

(Tabular amounts expressed in thousands of United States dollars, except where noted)

5. Segmented information (continued)

	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

The Chief Operating Decision Maker "CODM" does not evaluate the performance of the Company's 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 values of goodwill are allocated as follows to A&M and Other:

As at December 31,	2021	2020
A&M	$ 653,183	$ 653,183
Other		
Mascus	19,984	21,657
Rouse	163,968	165,770
SmartEquip	110,580	—
Total Goodwill	$ 947,715	$ 840,610

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	Australia	Other	Consolidated
Total revenue for the year ended:						
December 31, 2021	$ 748,730	$ 281,105	$ 183,004	$ 149,551	$ 54,581	$ 1,416,971
December 31, 2020	754,815	305,236	158,999	119,490	38,720	1,377,260
December 31, 2019	743,793	247,737	173,054	98,365	55,692	1,318,641

	United States	Canada	Europe	Australia	Other	Consolidated
Property, plant and equipment:						
December 31, 2021	$ 232,351	$ 93,826	$ 75,538	$ 21,478	$ 25,894	$ 449,087
December 31, 2020	252,335	106,973	83,014	21,681	28,124	492,127

Notes to the Consolidated Financial Statements
(Tabular amounts expressed in thousands of United States dollars, except where noted)

6. Revenues

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

Year ended December 31,	2021	2020	2019
Service revenue:			
Commissions	$ 469,718	$ 452,882	$ 431,781
Fees	448,041	418,714	372,243
	917,759	871,596	804,024
Inventory sales revenue	499,212	505,664	514,617
	$ 1,416,971	$ 1,377,260	$ 1,318,641

7. Operating expenses

Costs of services

Year ended December 31,	2021	2020	2019
Ancillary and logistical service expenses	$ 52,301	$ 59,982	$ 59,252
Employee compensation expenses	50,412	47,745	50,093
Buildings, facilities and technology expenses	10,187	9,886	7,865
Travel, advertising and promotion expenses	18,536	22,636	31,652
Other costs of services	15,426	17,047	16,115
	$ 146,862	$ 157,296	$ 164,977

SG&A expenses

Year ended December 31,	2021	2020	2019
Wages, salaries and benefits	$ 293,931	$ 265,029	$ 229,624
Share-based compensation expense	23,106	21,879	16,404
Buildings, facilities and technology expenses	73,490	62,755	61,177
Travel, advertising and promotion expenses	25,940	25,780	38,248
Professional fees	25,969	18,220	15,572
Other SG&A expenses	22,163	23,860	21,364
	$ 464,599	$ 417,523	$ 382,389

(Tabular amounts expressed in thousands of United States dollars, except where noted)

7. Operating expenses (continued)

Acquisition-related costs

Acquisition-related costs consist of operating expenses directly incurred as part of our business combinations such as due diligence, legal 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,	2021	2020	2019
SmartEquip:			
Share-based continuing employment costs	$ 439	$ —	$ —
Other acquisition-related costs	4,526	—	—
	4,965	—	—
Euro Auctions:			
Other acquisition-related costs	13,596	—	—
	13,596	—	—
Rouse:			
Share-based continuing employment costs	10,332	802	—
Other acquisition-related costs	1,304	5,212	—
	11,636	6,014	—
IronPlanet:			
Other acquisition-related costs	—	—	82
Other acquisitions:			
Continuing employment costs	—	—	128
Other acquisition-related costs	—	—	567
	—	—	777
	$ 30,197	$ 6,014	$ 777

Depreciation and amortization expenses

Year ended December 31,	2021	2020	2019
Depreciation expense	$ 32,401	$ 31,330	$ 29,112
Amortization expense	55,488	43,591	41,389
	$ 87,889	$ 74,921	$ 70,501

During the year ended December 31, 2021, depreciation expense of nil (2020: $199,000; 2019: $410,000) and amortization expense of $36,726,000 (2020: $29,779,000; 2019: $27,944,000) were recorded relating to software.

8. Other income

Other income primarily includes interest income, rental and storage income as well as costs relating to settlement of legal disputes. In 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.

(Tabular amounts expressed in thousands of United States dollars, except where noted)

9. Income taxes

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

Year ended December 31,	2021	2020	2019
Earnings before income tax	$ 205,232	$ 235,888	$ 190,763
Statutory federal and provincial tax rate in British Columbia, Canada	27.00 %	27.00 %	27.00 %
Expected income tax expense	$ 55,413	$ 63,690	$ 51,506
Non-deductible expenses	7,854	4,732	3,705
Adjustment to prior year provision to statutory tax returns	(1,826)	(865)	4
Changes in the valuation of deferred tax assets	(355)	(2,027)	(550)
Different tax rates of subsidiaries operating in foreign jurisdictions	(6,257)	(12,016)	(11,818)
U.S. tax reform impacts	3,584	17,105	6,949
Change in enacted tax rates	121	391	(1,016)
Derecognition of deferred tax asset from purchase price adjustment	947	—	—
Unrecognized tax benefits	(474)	817	(2,347)
Benefits of deductible stock options vested and exercised	(2,121)	(4,070)	(1,780)
Deductions for tax purposes in excess of accounting expenses	(2,709)	(1,831)	(287)
Other	(799)	(396)	(2,743)
	$ 53,378	$ 65,530	$ 41,623

The income tax expense (recovery) consists of:

Year ended December 31,	2021	2020	2019
Canadian:			
Current tax expense	$ 21,664	$ 27,766	$ 19,752
Deferred tax expense	5,639	3,970	3,346
Foreign:			
Current tax expense before application of operating loss carryforwards	30,093	30,280	24,815
Tax benefit of operating loss carryforwards	(2,238)	(1,668)	(11,770)
Total current tax expense	27,855	28,612	13,045
Deferred tax expense before adjustment to opening valuation allowance	(1,781)	6,127	5,727
Adjustment to opening valuation allowance	1	(945)	(247)
Total deferred tax (recovery) expense	(1,780)	5,182	5,480
	$ 53,378	$ 65,530	$ 41,623

The foreign provision for income taxes is based on foreign pre-tax earnings of $100,161,000, $117,212,000, and $108,714,000, in 2021, 2020, and 2019 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, 2021, income taxes have not been provided on a cumulative total of $685,650,000 of such earnings. The amount of unrecognized deferred tax liability related to these temporary differences is estimated to be approximately $13,700,000. Earnings retained by subsidiaries and equity-accounted investments amount to approximately $702,650,000 (2020: $645,828,000; 2019: $500,430,000). 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.

(Tabular amounts expressed in thousands of United States dollars, except where noted)

9. Income taxes (continued)

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,	2021	2020
Deferred tax assets:		
Working capital	$ 16,622	$ 13,185
Property, plant and equipment	6,098	6,467
Share-based compensation	5,661	5,606
Tax losses and tax credit carryforwards	31,001	25,943
Lease liabilities	28,769	29,393
Other	7,336	8,848
	95,487	89,442
Deferred tax liabilities:		
Property, plant and equipment	$ (18,305)	$ (16,838)
Goodwill	(7,382)	(2,255)
Intangible assets	(66,320)	(52,218)
Right-of-use assets	(25,606)	(26,206)
Long-term debt	(3,605)	(3,571)
Other	(5,932)	(7,165)
	(127,150)	(108,253)
Net deferred tax liabilities	$ (31,663)	$ (18,811)
Valuation allowance	(13,162)	(12,995)
	$ (44,825)	$ (31,806)

At December 31, 2021, 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:

2022	$ 3,330
2023	4,304
2024	189
2025	122
2026 and thereafter	73,009
	$ 80,954

The Company has capital loss carryforwards of approximately $82,211,000 (2020: $43,476,000) available to reduce future capital gains and interest deduction carryforwards of $2,454,000 (2020: $3,374,000), 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.

(Tabular amounts expressed in thousands of United States dollars, except where noted)

9. Income taxes (continued)

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, 2021, the Company had gross unrecognized tax benefits of $18,859,000 (2020: $20,298,000). Of this total, $8,570,000 (2020: $9,248,000) 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,	2021	2020
Unrecognized tax benefits, beginning of year	$ 20,298	$ 20,232
Increases - tax positions taken in prior period	452	1,487
Increases - tax positions taken in current period	1,077	558
Settlement and lapse of statute of limitations	(3,303)	(2,591)
Currency translation adjustment	335	612
Unrecognized tax benefits, end of year	$ 18,859	$ 20,298

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, 2021, the Company had accrued $3,896,000 (2020: $4,003,000) 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 2021 remain subject to examination in Canada, the United States, Luxembourg, and the Netherlands.

The Canada Revenue Agency ("CRA") is currently conducting an audit of the Company's 2014, 2015, 2017, and 2018 taxation years. Management believes that the Company is in full compliance with Canadian tax laws. However, the CRA could challenge the manner in which the Company has filed its income tax returns and reported its income. In the event that the CRA challenges the manner in which the Company has filed its tax returns and reported its income, the Company will have the option to appeal any such decision. If the Company is not successful, however, the CRA audit could potentially result in additional income taxes, penalties and interest, which could have a material adverse effect on the Company.

(Tabular amounts expressed in thousands of United States dollars, except where noted)

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, 2021	Net income attributable to stockholders	WA number of shares	Per share amount
Basic	$ 151,868	110,315,782	$ 1.38
Effect of dilutive securities:			
Share units	—	388,083	(0.01)
Stock options	—	702,965	(0.01)
Diluted	$ 151,868	111,406,830	$ 1.36

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

(Tabular amounts expressed in thousands of United States dollars, except where noted)

11. Supplemental cash flow information

Year ended December 31,	2021	2020	2019
Trade and other receivables	$ (11,607)	$ 22,079	$ (8,611)
Inventory	(21,884)	(18,149)	44,633
Advances against auction contracts	2,073	6,705	2,766
Prepaid expenses and deposits	(17,739)	2,196	(3,403)
Income taxes receivable	(13,457)	13	(445)
Auction proceeds payable	82,484	(74,114)	69,382
Trade and other payables	27,995	38,078	(21,296)
Income taxes payable	(11,484)	9,671	5,812
Operating lease obligation	(11,844)	(11,162)	(13,404)
Other	(103)	(4,451)	1,168
Net changes in operating assets and liabilities	$ 24,434	$ (29,134)	$ 76,602

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 $41,576,000 for the year ended December 31, 2021 (2020: $26,751,000; 2019: $35,075,000).

Year ended December 31,	2021	2020	2019
Interest paid, net of interest capitalized	$ 45,048	$ 32,521	$ 37,046
Interest received	1,402	2,338	3,802
Net income taxes paid	71,229	43,398	26,699
Non-cash purchase of property, plant and equipment under finance lease	7,720	11,326	15,282
Non-cash right of use assets obtained (reassessed) in exchange for new lease obligations	13,917	10,588	29,117
Non-cash equity consideration in connection with Rouse acquisition	—	1,459	—

	2021	2020	2019
Cash and cash equivalents	$ 326,113	$ 278,766	$ 359,671
Restricted cash			
Current	102,875	28,129	60,585
Non-current	933,464	—	—
Cash, cash equivalents, and restricted cash	$ 1,362,452	$ 306,895	$ 420,256

(Tabular amounts expressed in thousands of United States dollars, except where noted)

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.

		December 31, 2021		December 31, 2020	
	Category	Carrying amount	Fair value	Carrying amount	Fair value
Fair values disclosed:					
Cash and cash equivalents	Level 1	$ 326,113	$ 326,113	$ 278,766	$ 278,766
Restricted cash	Level 1	1,036,339	1,036,339	28,129	28,129
Loans receivable	Level 2	7,267	7,267	5,798	6,438
Derivative financial asset	Level 3	751	751	—	—
Derivative financial liability	Level 3	2,005	2,005	—	—
Short-term debt	Level 2	6,147	6,147	29,145	29,145
Long-term debt					
Senior unsecured notes (as defined in Note 21)					
2016 Notes	Level 1	494,531	508,125	492,734	514,219
2021 USD Notes	Level 2	598,052	625,125	—	—
2021 CAD Notes	Level 2	332,337	339,100	—	—
Term loan	Level 2	92,821	93,226	97,812	98,420
Long-term revolver loans	Level 2	219,699	219,772	46,102	46,184

The carrying values of the Company's cash and cash equivalents, restricted cash, trade and other receivables, advances against auction contracts, loans receivable maturing within a year, auction proceeds payable, trade and other liabilities, and short-term debt approximate their fair values due to their short terms to maturity. The fair values of the loan receivables with a maturity date greater than one year are determined by estimating discounted cash flows using market rates. The carrying values of the term loan and long-term revolver loans, before deduction of deferred debt issue costs, approximates their fair values as the interest rates on the loans is short-term in nature. The fair values of the senior unsecured notes are determined by reference to a quoted market price of the notes traded in an over-the-counter broker market.

The Company holds derivative financial assets and liabilities that are required to be measured at fair value on a recurring basis. The fair values of the derivative financial assets and liabilities are determined using a probability weighted mark to market valuation and observable Level 2 inputs, including foreign currency spot exchange rates, forward pricing curves, and an unobservable Level 3 input, the expected date of settlement. The change in the valuation of the derivatives due to the range of possible expected settlement dates is not significant to the financial statements.

(Tabular amounts expressed in thousands of United States dollars, except where noted)

13. Trade and other receivables

As at December 31,	2021	2020
Trade receivables	$ 123,246	$ 111,545
Consumption taxes receivable	20,359	20,789
Loans receivable	7,267	927
Other receivables	23	1,740
	$ 150,895	$ 135,001

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.

Loans receivable

As at December 31, 2021, the Company held two non-recourse financing lending arrangements which are fully collateralized and secured by certain equipment. These financing lending arrangements have a term of one to two years. In the event of default under these agreements, the Company will take possession of the equipment as collateral to recover its loans receivable balance.

The loans receivable balance as at December 31, 2021 was $7,267,000 and was recorded in trade and other receivables. The loans receivable balance as at December 31, 2020 was $5,797,000, of which $927,000 was recorded in other non-current assets. The expected credit loss allowance is not significant.

The following table presents the activity in the allowance for expected credit losses on trade receivables for the period ended December 31, 2021:

Balance, December 31, 2020	$ (5,467)
Current period provision	(1,564)
Write-offs charged against the allowance	2,635
Balance, December 31, 2021	$ (4,396)

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, 2021, the Company recorded an inventory write-down of $2,684,000 (2020: $1,691,000; 2019: $4,215,000).

15. Other current assets

	December 31, 2021	December 31, 2020
Advances against auction contracts	$ 4,102	$ 6,487
Assets held for sale	17,538	—
Prepaid expenses and deposits	41,955	20,787
Derivative financial asset	751	—
	$ 64,346	$ 27,274

(Tabular amounts expressed in thousands of United States dollars, except where noted)

15. Other current assets (continued)

On December 21, 2021, we completed the offering of two series of senior notes, as described in Note 21. The gross proceeds from the offering together with certain additional amounts including $11,150,000 of prepaid interest were placed into escrow accounts and will be held in escrow until the completion of the Euro Auctions Acquisition. The prepaid interest covers the period from January 1, 2022 to March 31, 2022.

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, 2019	$	15,051
Reclassified from property, plant and equipment		(6,888)
Disposal		(8,163)
Balance, December 31, 2020	$	—
Reclassified from property, plant and equipment		17,779
Disposal		(241)
Balance, December 31, 2021	$	17,538

On August 13, 2021, the Company entered into an agreement to sell a parcel of land including all buildings, in Bolton, Ontario, which was subsequently amended on January 27, 2022. The selling price for the Bolton property is approximately $170,000,000 ($210,000,000 Canadian dollars) and is subject to certain closing adjustments. The Company also anticipates that it will incur approximately $1,500,000 in selling costs. The Company intends to relocate its auction operation from the Bolton property to a replacement property located in Amaranth, Ontario. The closing of the sale of the Bolton property is conditioned upon, among other customary closing conditions, the Company receiving: (i) zoning and other governmental approvals necessary for the construction and development of the replacement property and (ii) confirmation from the vendor of the replacement property that it has satisfied its conditions under a separate agreement of purchase and sale with respect to the replacement property. These conditions must be satisfied or waived by the Company by May 31, 2022 and are subject to an extension that shall not extend past October 1, 2022. In addition, upon closing of the sale of the Bolton property, the Company intends to lease the Bolton property for a period of two years and has an option to renew the lease for two additional one-year periods, until such time as the replacement property is available for relocation of the Company's operations. During such lease period, the Company will continue to conduct normal auction operations at the Bolton property. The Company has classified the Bolton property, with a net book value of $7,067,000 as an asset held for sale on the consolidated balance sheet.

On January 14, 2022, the Company also entered into an agreement to sell vacant land in Casa Grande, Arizona and accordingly has classified the property with a net book value of $10,500,000 as an asset held for sale as at December 31, 2021.

In 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).

(Tabular amounts expressed in thousands of United States dollars, except where noted)

16. Property, plant and equipment

As at December 31, 2021	Cost	Accumulated depreciation	Net book value
Land and improvements	$ 347,980	$ (83,709)	$ 264,271
Buildings	250,692	(129,237)	121,455
Yard and automotive equipment	79,536	(53,945)	25,591
Computer software and equipment	84,371	(73,330)	11,041
Office equipment	37,187	(26,957)	10,230
Leasehold improvements	23,471	(15,995)	7,476
Assets under development	9,023	—	9,023
	$ 832,260	$ (383,173)	$ 449,087

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

During the year ended December 31, 2021, interest of $138,000 (2020: $150,000; 2019: $85,000) was capitalized to the cost of assets under development. These interest costs relating to qualifying assets are capitalized at a weighted average rate of 2.54% (2020: 3.02%; 2019: 4.07%).

Additions during the year include $7,452,000 (2020: $11,392,000; 2019: $15,282,000) of property, plant and equipment under finance leases.

17. Other non-current assets

	December 31, 2021	December 31, 2020
Right-of-use assets	$ 114,414	$ 116,503
Tax receivable	10,289	11,050
Loans receivable	—	4,870
Deferred debt issue costs	5,236	2,263
Other	12,565	12,922
	$ 142,504	$ 147,608

(Tabular amounts expressed in thousands of United States dollars, except where noted)

18. Intangible assets

As at December 31, 2021	Cost	Accumulated amortization	Net book value
Trade names and trademarks	$ 54,400	$ (2,147)	$ 52,253
Customer relationships	245,984	(65,480)	180,504
Software and technology assets	255,636	(144,309)	111,327
Software under development	5,424	—	5,424
Backlog	1,100	(92)	1,008
	$ 562,544	$ (212,028)	$ 350,516

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
Backlog	—	—	—
	$ 458,422	$ (157,474)	$ 300,948

At December 31, 2021, a net carrying amount of $55,613,000 (December 31, 2020: $51,864,000) included in intangible assets was not subject to amortization. During the year ended December 31, 2021, the cost of additions was reduced by $2,224,000 for recognition of tax credits (2020: $2,639,000; 2019: $1,022,000).

During the year ended December 31, 2021, interest of $291,000 (2020: $299,000; 2019: $402,000) was capitalized to the cost of software under development. These interest costs relating to qualifying assets are capitalized at a weighted average rate of 2.48% (2020: 3.04%; 2019: 4.01%).

During the year ended December 31, 2021, the weighted average amortization period for all classes of intangible assets was 9.0 years (2020: 9.1; 2019: 7.8).

As at December 31, 2021, estimated annual amortization expense for the next five years ended December 31 are as follows:

2022	$ 56,583
2023	44,659
2024	29,222
2025	19,505
2026	16,481
	$ 166,450

(Tabular amounts expressed in thousands of United States dollars, except where noted)

19. Goodwill

Balance, December 31, 2019	$	672,310
Additions		165,770
Foreign exchange movement		2,530
Balance, December 31, 2020	$	840,610
Additions		108,778
Foreign exchange movement		(1,673)
Balance, December 31, 2021	$	947,715

In 2021, the Company recognized $110,580,000 of goodwill from the acquisition of SmartEquip as well as a reduction in goodwill of $1,802,000 as a result of finalizing the Rouse acquisition purchase price allocation. In 2020, goodwill increased by $165,770,062 from the acquisition of Rouse.

20. Trade and other liabilities

As at December 31,		2021		2020
Trade payables	$	85,743	$	75,503
Accrued liabilities		116,647		99,559
Social security and sales taxes payable		41,608		39,909
Net consumption taxes payable		11,360		10,434
Share unit liabilities		10,056		9,602
Other payables		12,889		8,779
Derivative financial liability		2,005		—
	$	280,308	$	243,786

(Tabular amounts expressed in thousands of United States dollars, except where noted)

21. Debt

	Carrying amount	
	December 31, 2021	December 31, 2020
Short-term debt	$ 6,147	$ 29,145
Long-term debt:		
Term loan and long-term revolver loans:		
Term loan denominated in Canadian dollars, secured, bearing interest at a weighted average rate of 2.61%, due in monthly installments of interest only, maturing in September 2026	93,283	98,420
Long-term revolver loan denominated in Canadian dollars, secured, bearing interest at a weighted average rate of 2.61%, due in monthly installments of interest only, maturing in September 2026	46,206	46,184
Long-term revolver loan denominated in Canadian dollars, secured, bearing interest at a weighted average rate of 2.25%, due in monthly installments of interest only, maturing in September 2026	56,492	—
Long-term revolver loan denominated in U.S. dollars, secured, bearing interest at a weighted average rate of 1.82%, due in monthly installments of interest only, maturing in September 2026	117,000	—
Less: unamortized debt issue costs	(463)	(690)
Senior unsecured notes:		
Bearing interest at 5.375% due in semi-annual installments, with the full amount of principal due in January 2025 (the "2016 Notes")	500,000	500,000
Less: unamortized debt issue costs	(5,469)	(7,266)
Bearing interest at 4.75% due in semi-annual installments, with the full amount of principal due in December 2031 (the "2021 USD Notes")	600,000	—
Less: unamortized debt issue costs	(1,948)	—
Bearing interest at 4.95% due in semi-annual installments, with the full amount of principal due in December 2029 (the "2021 CAD Notes")	333,464	—
Less: unamortized debt issue costs	(1,127)	—
Total long-term debt	1,737,438	636,648
Total debt	$ 1,743,585	$ 665,793
Long-term debt:		
Current portion	$ 3,498	$ 10,360
Non-current portion	1,733,940	626,288
Total long-term debt	$ 1,737,438	$ 636,648

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 1.8% (December 31, 2020: 2.3%).

Long-term debt

a) Term loan and long-term revolver loans

On August 14, 2020, the Company entered into an amendment of the Credit Agreement dated October 27, 2016 ("Credit Agreement"), with a syndicate of lenders, totaling $630,000,000 comprised of:

(1) Multicurrency revolving facilities of up to $530,000,000 (the "Revolving Facilities"); and

(2) A delayed-draw term loan facility of up to $100,000,000 (the "DDTL Facility" and together with the Revolving Facilities, the "Facilities").

21. Debt (continued)

a) Term loan and long-term revolver loans (continued)

On September 21, 2021, the Company entered into another amendment of its Credit Agreement (“September 2021 Amendment”). The September 2021 Amendment, among other things, (i) extended the maturity date of the Facilities from October 27, 2023 to September 21, 2026, (ii) increased the total size of the Facilities provided under the Credit Agreement to up to $1,045,000,000, including $295,000,000 of commitments under the DDTL Facility, (iii) reduced the applicable margin for base rate loans and LIBOR loans at each pricing tier level, (iv) reduced the applicable percentage per annum used to calculate the commitment fee in respect of the unused commitments under the Revolving Facilities at each pricing tier level, and (v) included customary provisions to provide for the eventual replacement of LIBOR as a benchmark interest rate.

Immediately prior to the September 2021 Amendment, the aggregate principal amount outstanding under the DDTL Facility was $90,000,000 ($118,889,995 Canadian dollars). In connection with the September 2021 Amendment, the Company refinanced that amount with the proceeds from a borrowing under the DDTL Facility. There are no mandatory principal repayments of borrowings under the DDTL Facility until the earlier of when the remaining $205,000,000 is drawn or Q3 2022. Once principal payments become mandatory, they are subject to an annual amortization rate of 5%, payable in quarterly installments, with the balance payable at maturity.

The Company incurred total debt issuance costs of $4,262,000 in connection with the September 2021 Amendment. At December 31, 2021, the Company had unamortized deferred debt issue costs relating to the Credit Agreement of $5,699,000.

For the year ended December 31, 2021, the Company made scheduled term loan repayments of $5,328,000 (2020: $13,711,000). The Company did not make any voluntary term loan prepayments during the year ended December 31, 2021 (2020: $nil).

b) Senior unsecured notes

2016 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 “2016 Notes”). Interest on the 2016 Notes is payable semi-annually. The 2016 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.

2021 Notes

On December 21, 2021, the Company completed the offering of two series of senior notes: (i) $600,000,000 aggregate principal amount of 4.750% senior notes due December 15, 2031 (the “2021 USD Notes”) and (ii) $425,000,000 Canadian dollar aggregate principal amount of 4.950% due December 15, 2029 (the “2021 CAD Notes”, and together with the 2021 USD Notes, the “2021 Notes”).

The gross proceeds from the offering together with certain additional amounts including prepaid interest were placed into escrow accounts and will be held in escrow until the completion of the Euro Auctions Acquisition. The 2021 Notes are recorded on the consolidated balance sheet in non-current restricted cash and included in long term debt. If the Euro Auctions Acquisition is not consummated on or before September 30, 2022 or the SPA is terminated prior to such date, the Company will redeem all of the outstanding 2021 Notes at a redemption price equal to 100% of the original offering price of the 2021 Notes, plus accrued and unpaid interest. Once out of escrow, interest on the 2021 Notes is payable semi-annually.

(Tabular amounts expressed in thousands of United States dollars, except where noted)

21. Debt (continued)

b) Senior unsecured notes (continued)

The Company intends to use the net proceeds from the offering of the 2021 Notes, together with proceeds from its DDTL Facility, to fund the consideration payable of the Euro Auctions Acquisition and any related fees and expenses. Until completion of the Euro Auctions Acquisition, the 2021 Notes are secured only by the amounts deposited into certain escrow accounts established in connection with the issuance of the 2021 Notes. Upon consummation of the proposed Euro Auctions Acquisition, the 2021 Notes will be, jointly and severally, fully and unconditionally guaranteed, on a senior unsecured basis, by the Company and each of the Company's subsidiaries that is a borrower, or guarantees indebtedness, under the Company's Credit Agreement and its 2016 Notes. Euro Auctions, and its respective subsidiaries that become a borrower or guarantor under the Credit Agreement are expected to become guarantors following the consummation of the Euro Auctions Acquisition.

The Company has incurred total debt issue costs of $1,954,000 in connection with the offering of the 2021 USD Notes, and $1,129,000 in connection with the offering of the 2021 CAD Notes. Additionally, fees of approximately $10,000,000 will be paid to Goldman Sachs Bank USA Bank and certain other financial institutions when the proceeds are released from escrow to finance the Euro Auctions Acquisition. These fees will be capitalized as debt issuance costs and amortized over the term of the respective senior notes.

As at December 31, 2021, principal repayments for the remaining period to the contractual maturity for our long term debt are as follows:

	Face value
2022	$ 3,498
2023	4,664
2024	4,664
2025	504,664
2026	295,492
Thereafter	933,464
	$ 1,746,446

As at December 31, 2021, the Company had unused committed revolving credit facilities aggregating $515,581,000 that are available until September 2026 subject to certain covenant restrictions, unused uncommitted revolving credit facilities aggregating $5,000,000 that are available until October 2023, and unused uncommitted revolving credit facilities aggregating $5,000,000 with no maturity date. The Company was in compliance with all financial and other covenants applicable to the credit facilities at December 31, 2021.

22. Other non-current liabilities

	December 31, 2021	December 31, 2020
Operating lease liability	$ 109,882	$ 112,818
Tax payable	18,859	19,706
Finance lease liability	13,983	17,109
Other	4,536	3,367
	$ 147,260	$ 153,000

(Tabular amounts expressed in thousands of United States dollars, except where noted)

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 combinations

The Company has issued the following common shares in connection with the acquisitions of Rouse and SmartEquip. These shares were issued to certain previous unitholders and shareholders of Rouse and SmartEquip, based on the fair market value of the Company's common shares at the acquisition date. The Company records share-based continuing employment costs in acquisition-related costs over the vesting period, with an increase to additional paid-in capital. The vesting of shares issued for business combinations is subject to continuing employment with the Company over various dates over a three year period from their respective acquisition dates. 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.

Shares issuance for business combination activity is presented below:

	Rouse		SmartEquip		Total	
	Common shares issued	Fair value per common shares	Common shares issued	Fair value per common shares	Common shares issued	Weighted average fair value per common shares
Outstanding, December 31, 2018	—	$ —	—	$ —	—	$ —
Granted	—	—	—	—	—	—
Forfeited	—	—	—	—	—	—
Outstanding, December 31, 2019	—	$ —	—	$ —	—	$ —
Granted	312,193	71.09	—	—	312,193	71.09
Forfeited	—	—	—	—	—	—
Outstanding, December 31, 2020	312,193	$ 71.09	—	$ —	312,193	$ 71.09
Granted	—	—	63,971	68.39	63,971	68.39
Vested	(67,018)	71.09			(67,018)	71.09
Forfeited	(55,510)	71.09	—	—	(55,510)	71.09
Outstanding, December 31, 2021	189,665	$ 71.09	63,971	$ 68.39	253,636	$ 70.41

In 2021, the Company recognized $4,764,000 of share capital from additional paid-in capital for the portion of common shares previously issued in connection with the acquisition of Rouse that have vested as of December 31, 2021.

As at December 31, 2021, the unrecognized share-based continuing employment costs was $10,733,000 (2020: $19,933,000), which is expected to be recognized over a weighted average period of 1.6 years.

(Tabular amounts expressed in thousands of United States dollars, except where noted)

23. Equity and dividends (continued)

Share repurchase

There were no common shares repurchased during the year ended December 31, 2021. There were 1,525,312 common shares repurchased for $53,170,000 in the year ended December 2020 and 1,223,674 common shares repurchased for $42,012,000 in the year ended December 2019.

Change in non-controlling interest

On September 13, 2021, the Company purchased the remaining 25% membership interest in of Xcira, LLC, a Delaware limited liability Company, for a purchase price of $5,555,555. The transaction increased the Company's ownership interest in Xcira, LLC to 100%.

Dividends

Declared and paid

The Company declared and paid the following dividends during the years ended December 31, 2021, 2020, and 2019:

	Declaration date	Dividend per share	Record date	Total dividends	Payment date
Year ended December 31, 2021:					
Fourth quarter 2020	January 22, 2021	$ 0.2200	February 12, 2021	$ 24,181	March 5, 2021
First quarter 2021	May 7, 2021	0.2200	May 26, 2021	24,279	June 16, 2021
Second quarter 2021	August 4, 2021	0.2500	August 25, 2021	27,607	September 15, 2021
Third quarter 2021	November 3, 2021	0.2500	November 24, 2021	27,652	December 15, 2021
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

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 $0.25 per common share, accumulating to a total dividend of $27,658,000. The aggregate amount of the proposed final dividend is expected to be paid out of retained earnings on March 4, 2022 to stockholders of record on February 11, 2022. 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 loss of $8,763,000 for 2021 (2020: net gain of $10,826,000; 2019: net loss of $1,082,000).

(Tabular amounts expressed in thousands of United States dollars, except where noted)

24. Share-based payments

Share-based payments consist of the following compensation costs:

Year ended December 31,	2021	2020	2019
SG&A expenses:			
Stock option compensation expense	$ 8,365	$ 5,853	$ 4,697
Equity-classified share units	12,574	9,897	8,047
Liability-classified share units	(580)	3,635	1,380
Employee share purchase plan - employer contributions	2,747	2,497	2,281
	23,106	21,882	16,405
Acquisition-related costs:			
Share-based continuing employment costs	10,771	802	—
	10,771	802	—
	$ 33,877	$ 22,684	$ 16,405

Stock option plans

The Company has the following three stock option plans that provide for the award of stock options and premium-priced 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 is presented below:

	Stock options				Premium-priced stock options			
	Common shares under option	WA exercise price	WA remaining contractual life (in years)	Aggregate intrinsic value	Common shares under option	WA exercise price	WA remaining contractual life (in years)	Aggregate intrinsic value
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	—	—	—	—
Granted	758,256	56.29	—	—	1,017,064	91.24	—	—
Exercised	(495,021)	32.83	—	14,147	—	—	—	—
Forfeited	(40,932)	45.86	—	—	—	—	—	—
Outstanding, December 31, 2021	2,208,057	42.55	7.7	41,884	1,017,064	91.24	5.7	—
Exercisable, December 31, 2021	858,928	32.51	6.2	24,667	—	$ —	—	$ —

(Tabular amounts expressed in thousands of United States dollars, except where noted)

24. Share-based payments (continued)

Stock option plans (continued)

Stock options

The Company uses the Black Scholes option pricing model to fair value stock options. 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 year vesting period and terms not exceeding 10 years. At December 31, 2021, there were 4,705,117 (December 31, 2020: 6,442,360) shares authorized and available for grants of options under the stock option plans. The options outstanding at December 31, 2021 expire on dates ranging to November 10, 2030. The weighted average grant date fair value of options granted during the year ended December 31, 2021 was $12.72 per option (2020: $8.69; 2019: $7.52). The weighted average share price of options exercised during the year ended December 31, 2021 was $61.40 (2020: $51.92; 2019: $40.32).

The significant assumptions used to estimate the fair value of stock options granted are presented in the following table on a weighted average basis:

Year ended December 31,	2021	2020	2019
Risk free interest rate	0.5 %	0.7 %	2.5 %
Expected dividend yield	1.64 %	1.96 %	2.06 %
Expected lives of the stock options	4 years	5 years	5 years
Expected volatility	32.3 %	28.0 %	26.8 %

At December 31, 2021, the unrecognized stock-based compensation cost related to non-vested stock options was $6,206,000, which is expected to be recognized over a weighted average period of 2.1 years. Cash received from stock-based award exercises for the year ended December 31, 2021 was $16,250,000 (2020: $44,128,000; 2019: $41,094,000). The actual tax benefit realized for the tax deductions from option exercise of the share-based payment arrangements totaled $1,817,000 for the year ended December 31, 2021 (2020: $4,594,000; 2019: $1,679,000).

Premium-priced stock options

In 2021, the Company granted premium-priced stock options to the senior executives with exercise prices above the fair market value of the Company's common shares on grant date. The premium-priced stock options vest and become exercisable upon the third anniversary of the grant date and expire on the sixth anniversary of the grant date. The fair values of the premium-priced stock options were calculated on the grant date using a Monte Carlo simulation model. The weighted average estimated grant date fair value of premium-priced options as at December 31, 2021 was $8.59 per option.

The significant assumptions used to estimate the fair values were as follows:

Year ended December 31,	2021
Risk free interest rate	1.1 %
Expected dividend yield	1.59 %
Expected lives of the stock options	5 years
Expected volatility	30.6 %

In addition, the estimated fair value of a premium priced stock option is a function of the expected stock option exercise behaviour assumption. The Company estimated that vested premium priced stock options will be exercised at the midpoint between (i) the later of the date that the premium priced stock options are expected to vest and the date that the exercise price is achieved, and (ii) the end of the premium priced options contractual term.

At December 31, 2021, the unrecognized stock-based compensation cost related to the premium-priced stock options was $7,891,000, which is expected to be recognized over a weighted average period of 2.8 years.

(Tabular amounts expressed in thousands of United States dollars, except where noted)

24. Share-based payments (continued)

Share unit plans

In 2021, the Company granted PSUs with market conditions to senior executives.

Share unit activity is presented below:

	Equity-classified awards						Liability-classified awards	
	PSUs		PSUs with Market Conditions		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
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
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
Granted	160,713	57.67	88,305	65.45	46,675	60.98	19,075	58.48
Vested and settled	(161,248)	31.14	—	—	(93,426)	35.04	—	—
Forfeited	(18,523)	47.58	—	—	(9,074)	55.81	—	—
Outstanding, December 31, 2021	523,618	$ 45.90	88,305	$ 65.45	79,112	$ 54.96	156,589	$ 35.28

The total market value of liability-classified share units vested and released during the year ended December 31, 2021 was nil (2020: nil; 2019: $774,000).

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.

The fair value of the equity-classified PSUs awarded in 2021, 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.

As at December 31, 2021, the unrecognized share unit expense related to equity-classified PSU's was $11,206,000, which is expected to be recognized over a weighted average period of 1.7 years.

(Tabular amounts expressed in thousands of United States dollars, except where noted)

24. Share-based payments (continued)

Share unit plans (continued)

PSUs with market conditions

On August 12, 2021, the Company granted PSUs to senior executives with a market condition where vesting is conditional upon the total stockholder return performance of the Company's stock relative to the performance of a peer group over a three year performance period from the date of grant. The fair value of $65.45 per PSU was calculated on the grant date using the Monte Carlo simulation model which takes into consideration a required post-vesting holding period of one year with a discount value of $5.90 per PSU. The discount was calculated using the Chaffe Protective Put Method and an effective tax rate of 35%.

The significant assumptions used to estimate the fair value are presented in the following table:

Year ended December 31,	2021
Risk free interest rate	0.5 %
Expected dividend yield	1.63 %
Expected lives of the PSUs	3 years
Expected volatility	31.0 %
Average expected volatility of comparable companies	38.6 %

As at December 31, 2021, the unrecognized share unit expense related to equity-classified PSUs with market conditions was $5,030,000, which is expected to be recognized over a weighted average period of 2.6 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, 2021, the unrecognized share unit expense related to equity-classified RSUs was $2,316,000, 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.

As at December 31, 2021, the Company had a total share unit liability of $10,056,000 (2020: $9,597,000) in respect of share units under the DSU plans presented in other payable within current liabilities.

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.

(Tabular amounts expressed in thousands of United States dollars, except where noted)

25. Leases

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

Year ended December 31,	2021	2020
Operating lease cost	$ 17,932	$ 16,927
Finance lease cost		
Amortization of leased assets	10,804	9,268
Interest on lease liabilities	814	915
Short-term lease cost	10,046	9,799
Sublease income	(76)	(429)
	$ 39,520	$ 36,480

The lease expenditure charged to earnings during the year ended December 31, 2021 was $27,978,000 (2020: $26,726,000; 2019: $26,968,000).

Operating leases

The Company has entered into commercial leases for various auction sites and offices located in North America, Europe, the Middle East, Australia 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 18 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:

2022	16,493
2023	14,425
2024	10,742
2025	10,613
2026	10,264
Thereafter	97,460
Total future minimum lease payments	$ 159,997
less: imputed interest	(37,941)
Total operating lease liability	$ 122,056
less: operating lease liability - current	(12,174)
Total operating lease liability - non-current	$ 109,882

At December 31, 2021, the weighted average remaining lease term for operating leases is 14.0 years and the weighted average discount rate is 3.7%. In addition to the total operating lease liability, additional undiscounted commitments for leases not yet commenced totaled $2.5 million at December 31, 2021.

(Tabular amounts expressed in thousands of United States dollars, except where noted)

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, 2021, the net carrying amount of computer and yard equipment and other assets under finance leases is $22,238,000 (December 31, 2020: $25,649,000), 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, 2021	Cost	Accumulated depreciation	Net book value
Auto equipment	$ 16,380	$ (6,279)	$ 10,101
Computer equipment	13,920	(7,728)	6,192
Yard and others	16,628	(10,683)	5,945
	$ 46,928	$ (24,690)	$ 22,238

As at December 31, 2020	Cost	Accumulated depreciation	Net book value
Auto equipment	$ 13,207	$ (3,439)	9,768
Computer equipment	16,597	(8,317)	$ 8,280
Yard and others	15,027	(7,426)	7,601
	$ 44,831	$ (19,182)	$ 25,649

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

2022	$ 9,541
2023	7,276
2024	4,710
2025	1,682
2026	449
Thereafter	—
Total future minimum lease payments	$ 23,658
less: imputed interest	(773)
Total finance lease liability	$ 22,885
less: finance lease liability - current	(8,902)
Total finance lease liability - non-current	$ 13,983

At December 31, 2021, the weighted average remaining lease term for finance leases is 2.9 years and the weighted average discount rate is 3.5%.

Subleases

As at December 31, 2021, the total future minimum sublease payments expected to be received under non-cancellable subleases is $nil (2020: $69,000; 2019: $616,000).

26. Commitments

Commitments for expenditures

As at December 31, 2021, the Company had committed to, but not yet incurred, $1,138,000 in capital expenditures for property, plant and equipment and intangible assets (December 31, 2020: $751,000).

Commitment for inventory purchase

The Company was awarded two new contracts with the U.S. Government Defense Logistics Agency (the "DLA") on April 1, 2021. The new contracts (one for the Eastern portion of the United States and one for the Western portion of the United States) cover both surplus non-rolling and rolling stock. Both contracts commenced on June 1, 2021 and have a base term of two years with three one-year renewal options.

During the first two years of the contracts, the Company is committed to purchase on a combined basis up to either: (i) 600,000 assets, or (ii) assets with an expected minimum value of up to $77,000,000; whichever is less. As at December 31, 2021, the Company has purchased 142,396 assets with a total value of $25,548,000 pursuant to the two year period of this contract, which commenced on June 1, 2021.

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, 2021, there were $43,450,000 of assets guaranteed under contract, of which 61% is expected to be sold prior to March 31, 2022 with the remainder to be sold by December 31, 2022 (December 31, 2020: $22,773,000 of which 23% was expected to be sold prior to the end of March 31, 2021 with the remainder to be sold by December 31, 2021).

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

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, 2021, the CEO and the CFO concluded that the disclosure controls are effective 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 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 SmartEquip on November 2, 2021 and SmartEquip's total assets and revenues constituted 5.47% and 0.20%, 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, 2021. As the acquisition occurred in the fourth quarter of 2021, we excluded SmartEquip 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, 2021. 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 internal control over financial reporting was effective as of December 31, 2021.

Remediation of Previously Reported Material Weaknesses in Internal Control over Financial Reporting
As disclosed in the Company's Annual Report on Form 10-K filed with the SEC for the year ended December 31, 2020, 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.

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.

In order to address the material weaknesses in internal control over financial reporting, management with oversight and direction from the Audit Committee and the Board of Directors, implemented remediation steps and initiatives in 2021 to remediate the material weaknesses. These efforts have included the following actions:

- created a Sarbanes Oxley (SOX) Program Steering Committee to oversee the investment in implementing a remediation plan which included engaging a third-party advisor;

- provided training and a series of learning sessions throughout the year to all geographies to enhance SOX capabilities, particularly over the execution and review of manual journal entry controls and controls within revenue recognition, as well as enhanced the understanding of our revenue recognition business processes to drive the design and implementation of improved processes and controls; and

- increased capacity and resources, including hiring of additional experienced accounting personnel, and implemented new tools and monitoring procedures, improved our controls documentation and design of certain controls, and made changes to certain control owners to enhance accountability and execution of controls.

The Company completed its design, testing and evaluation of the controls impacted by the material weaknesses and found them to be operating effectively, as a result of the remediation steps described above for a sufficient period of time during the year ended December 31, 2021, and concluded that the material weaknesses have been remediated as of December 31, 2021.

The Company completed the acquisition of SmartEquip on November 2, 2021 and SmartEquip's total assets and revenues constituted 5.47% and 0.20 %, 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, 2021. As the acquisition occurred in the fourth quarter of 2021, the Company excluded SmartEquip 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, 2021.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, 2021 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting, other than the remediation of 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, 2021, 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, Ritchie Bros. Auctioneers Incorporated (the "Company") maintained, in all material respects, effective internal control over financial reporting as of December 31, 2021, 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 SmartEquip, Inc. ("SmartEquip") which is included in the 2021 consolidated financial statements of the Company and constituted 5.5% and 18.3% of total and net assets, respectively, as of December 31, 2021 and 0.2% and 0.9% 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 SmartEquip acquired on November 2, 2021.

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, 2021 and 2020, 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, 2021, and the related notes, and our report dated February 17, 2022, 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 17, 2022

ITEM 9B: OTHER INFORMATION

None.

ITEM 9C: DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

None.

PART III

ITEM 10: DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information responsive to this Item is incorporated by reference to our definitive Proxy Statement for our 2022 Annual and Special Meeting of Shareholders, to be filed within 120 days of December 31, 2021, pursuant to Regulation 14A under the Securities Exchange Act of 1934, as amended (the 2022 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://investor.ritchiebros.com/governance/governance-documents/default.aspx, 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 2022 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 2022 Proxy Statement.

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

The information responsive to this Item is incorporated by reference to our 2022 Proxy Statement.

ITEM 14: PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information responsive to this Item is incorporated by reference to our 2022 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)
2.2	Share Purchase Agreement, dated August 9, 2021, by and among the Purchaser and the Vendors (incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed on August 10, 2021)
2.3	Agreement and Plan of Merger dated September 24, 2021 among Ritchie Bros. Auctioneers Incorporated, Ritchie Bros. Holdings Inc., Lego Merger Sub, Inc., SmartEquip, Inc., the Key Securityholders, the Rollover Members and Fortis Advisors LLC (incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed on September 28, 2021)
2.4	First Amendment to Agreement and Plan of Merger dated October 30, 2021, by and among Ritchie Bros. Holdings Inc., SmartEquip, Inc. and Fortis Advisors LLC (incorporated by reference to Exhibit 2.2 to the Company's Current Report on Form 8-K filed on November 2, 2021)
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)
4.4	Indenture, dated as of December 21, 2021, between Ritchie Bros. Holdings Inc. and US Bank National Association, as trustee, relating to Ritchie Bros. Holdings Inc.'s 4.750% Senior Notes due 2031 (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, 2021) Indenture, dated as of December 21, 2021, among Ritchie Bros. Holdings Ltd. and US Bank National Association, as trustee, and TSX Trust Company as Canadian co-trustee, relating to Ritchie Bros. Holdings Ltd.'s 4.950% Senior Notes due 2029 (includes form

	of note) (incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed on December 21, 2021)
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	Fourth Amended and Restated Commitment Letter, dated August 8, 2021, from Goldman Sachs Bank USA (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed on November 4, 2021)
10.42	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)
10.43	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)

10.44	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)
10.45	Fourth Amendment to Credit Agreement, dated as of September 21, 2021, among the Company, certain of its subsidiaries, each as a borrower and/or a guarantor, the lenders party thereto, Bank of America, N.A., as administrative agent, U.S. swing line lender and letter of credit issuer and Royal Bank of Canada, as Canadian 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 September 21, 2021)
10.46#	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)
10.47#	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)
10.48#	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)
10.49#	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)
10.50#	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)
10.51#	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)
10.52#	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)
10.53#	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)
10.54#	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)
10.55#	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)
10.56#	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)
10.57#	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)
10.58	Agreement of Purchase and Sale, dated August 13, 2021, between Ritchie Bros. Properties Ltd. and 3 Manchester Court Holdings Inc. (incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q filed on November 4, 2021)
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	Inline XBRL Instance Document
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE	Inline 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, 2021, 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 17, 2022	By: *<u>/s/ Ann Fandozzi</u>*
	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 17, 2022
By:	/s/ *Sharon R. Driscoll* Sharon R. Driscoll	Chief Financial Officer (principal financial officer and principal accounting officer)	February 17, 2022
By:	*/s/ Erik Olsson* Erik Olsson	Chair of the Board	February 17, 2022
By:	*/s/ Beverley A. Briscoe* Beverley A. Briscoe	Director	February 17, 2022
By:	*/s/ Robert G. Elton* Robert G. Elton	Director	February 17, 2022
By:	*/s/ Adam DeWitt* Adam DeWitt	Director	February 17, 2022
By:	*/s/ Sarah Raiss* Sarah E. Raiss	Director	February 17, 2022
By:	*/s/ Christopher Zimmerman* Christopher Zimmerman	Director	February 17, 2022
By:	*/s/ Amy Guggenheim Skenkan* Amy Guggenheim Skenkan	Director	February 17, 2022
By:	*/s/ Kim Fennell* Kim Fennell	Director	February 17, 2022
By:	*/s/ Lisa Hook* Lisa Hook	Director	February 17, 2022

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 (Nevada)	100%	Brokerage services
AssetNation, Inc.	USA (Delaware)	100%	E-commerce marketplace
SalvageSale Mexico Holding LLC	USA (Delaware)	100%	Holding Company
Ritchie Bros. Asset Solutions Inc.	USA (Florida)	100%	E-commerce marketplace
Xcira, LLC	USA (Delaware)	100%	Auction services
IronPlanet, Inc	USA (Delaware)	100%	E-commerce marketplace
IronPlanet Motors, LLC	USA (Delaware)	100%	E-commerce marketplace
Kruse Energy & Equipment Auctioneers, LLC	USA (Texas)	100%	Auction Services
Rouse Services LLC	USA (California)	100%	Auction Services
Rouse Appraisals LLC	USA (California)	100%	Appraisal Services
Rouse Sales LLC	USA (California)	100%	Auction Services
Rouse Analytics LLC	USA (California)	100%	Auction Services
SmartEquip, Inc.	USA (Delaware)	100%	E-commerce marketplace
IronPlanet Mexico, S. de R.L. de C.V.	Mexico	100%	E-commerce marketplace
Leake Auction Company	USA (Oklahoma)	100%	Auction services
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
IronPlanet Canada Ltd.	Canada	100%	E-commerce marketplace
Rouse Services Canada Ltd.	Canada	100%	E-commerce marketplace
Ritchie Bros. Finance Ltd.	Canada	100%	Holding company
Ritchie Bros. Investment Holdings (Luxembourg) SARL	Cyprus	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%	Auction services
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%	Auction services
Ritchie Bros. UK Holdings PLC	United Kingdom	100%	Holding Company
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

Ritchie Bros. Holdings SARL	France	100%	Holding company
Ritchie Bros. 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. (NZ) Limited	New Zealand	100%	Auction services
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

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 17, 2022, 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, 2021.

Vancouver, Canada	/s/Ernst & Young LLP
February 17, 2022	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 17, 2022

/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 17, 2022

/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, 2021, 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 17, 2022

/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, 2021, 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 17, 2022

/s/ Sharon R. Driscoll

Sharon R. Driscoll
Chief Financial Officer