



**Ritchie Bros. Used Equipment
Market Trends Summary**
(North America Edition)

December 2020

Table of contents

Summary	1
Main Feature: Excavators – U.S.	2, 3, 4
Industry Highlights: Small Construction and Lifting & Material Handling Equipment – U.S.	5, 6, 7, 8, 9, 10
Ritchie Bros. Mix Adjusted Used Price Indices	11
a. Heavy Equipment & Truck Tractors – U.S.	12
b. Vocational Trucks and Lifting & Material Handling – U.S.	13
c. Heavy Equipment & Truck Tractors – Canada	14
d. Vocational Trucks and Lifting & Material Handling – Canada	15
Ritchie Bros. Snapshot of Demand – Top 6 Asset Categories	16
Seller / buyer maps for the 3 months ending November 30, 2020	17
About Ritchie Bros.	18

About this Research

This research includes summary information taken from Ritchie Bros. Market Trends, a premium data product that allows users like you to access 10 years of Ritchie Bros. transaction level data providing:

- **Real time insights** - See results from our most recent auctions
- **Equipment flows** - Draw insights into asset flows across state and national boundaries
- **Make-model details** - Determine residual pricing of assets at make-model level of detail for auction
- **Like-for-like comparisons** - Compare residual value for like-for-like assets

Subscribe to Ritchie Bros. Market Trends and access this data and more in-depth detail by country, date range, asset category, brand, model, as well as median asset age, usage and other key data points.

All data and charts are from Ritchie Bros. Market Trends.
To learn more about Market Trends, visit rbassetsolutions.com.

Summary

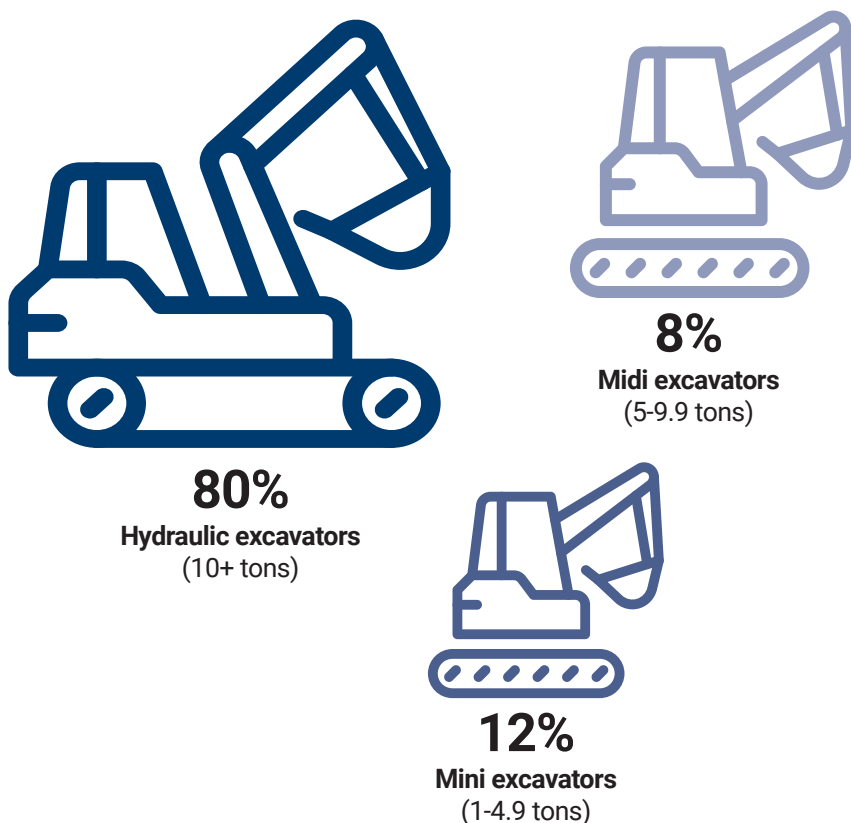
When COVID-19 lockdowns started in North America in mid-March, most construction work kept going. With less people on the road, communities increased civil projects, especially road work. Simultaneously, with offices closed and millions of people working from home, we've seen more people moving to suburbs from city centers, resulting in new residential construction. All of these factors have impacted the number of and the demand for excavators at Ritchie Bros. auctions in 2020.

In this month's Ritchie Bros. Used Equipment Market Trends summary report, we discuss important trends related to excavators of all sizes, skid steers, telehandlers, and aerial work platforms.

We've also updated the U.S. Ritchie Bros. Heavy Truck Price Index and U.S. Heavy Duty Truck shipment comparison chart in this report, on page 11.

All data and charts are from Ritchie Bros. Market Trends. To learn more about Market Trends, visit rbassetsolutions.com.

Breakdown of crawler excavator sales sold globally at Ritchie Bros.: Jan 2017 – Sep 2020



Doug Olive,
SVP, Pricing

Excavators are used in construction, mining, forestry, and other projects that require digging holes, foundations, and trenches. In a year of volatility, excavator pricing has remained relatively stable. Its cross-industry applications help mitigate massive price fluctuations. We also believe that the uptick in housing starts throughout the United States has had a positive impact on excavator pricing in 2020.

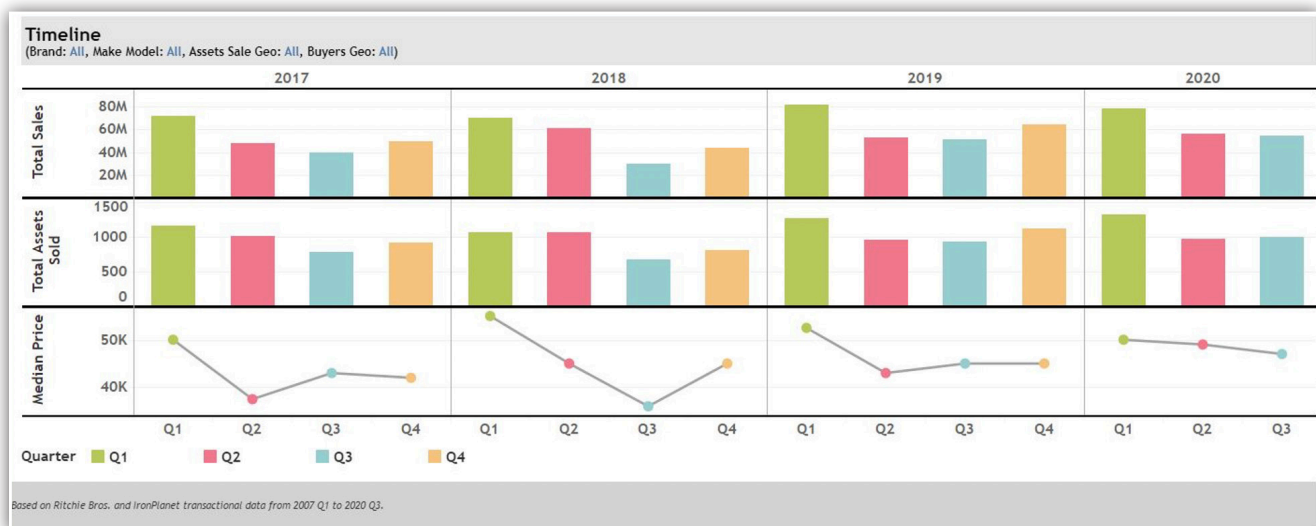
Main Feature: Excavators (10+ ton models) – U.S.

As one of the commonly used pieces of equipment, you will see an excavator on almost every major construction project in the world. If dirt needs to be dug, the excavator is often the right tool for the job.

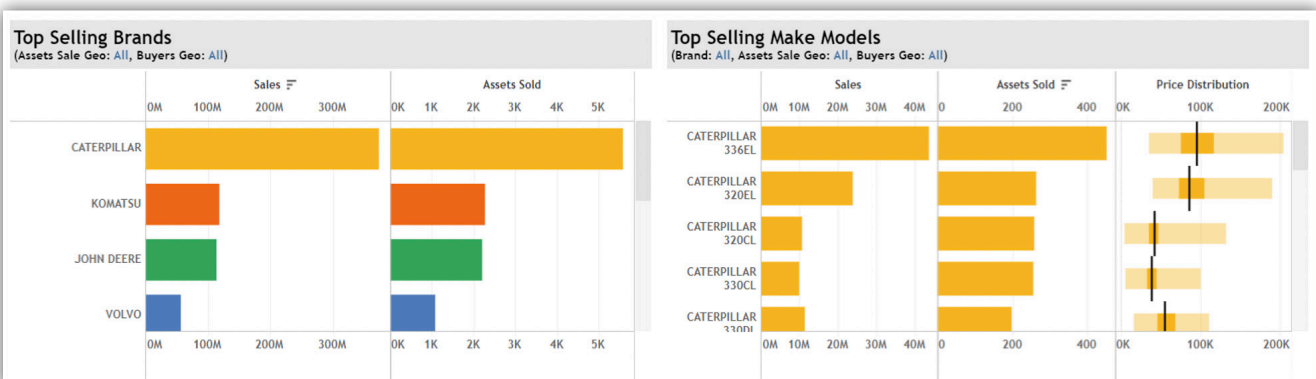
In the last three years (Jan 2017 – Sep 2020) Ritchie Bros. has sold more than 15,000 excavators in the United States alone for more than \$850 million. In 2020, a year of high volatility, pricing for excavators has held fairly steady. In the first three quarters of the year, Ritchie Bros. sold 3,300+ excavators in the United States—up 4% year over year—with median prices ranging from \$50,000 in Q1 and \$47,000 in Q3.

The top selling brands by volume are Caterpillar, Komatsu, and John Deere with the top make models sold all being Caterpillar: 336EL, 320EL and 320CL.

Excavators sold in the U.S.: 2017 – Q3 2020



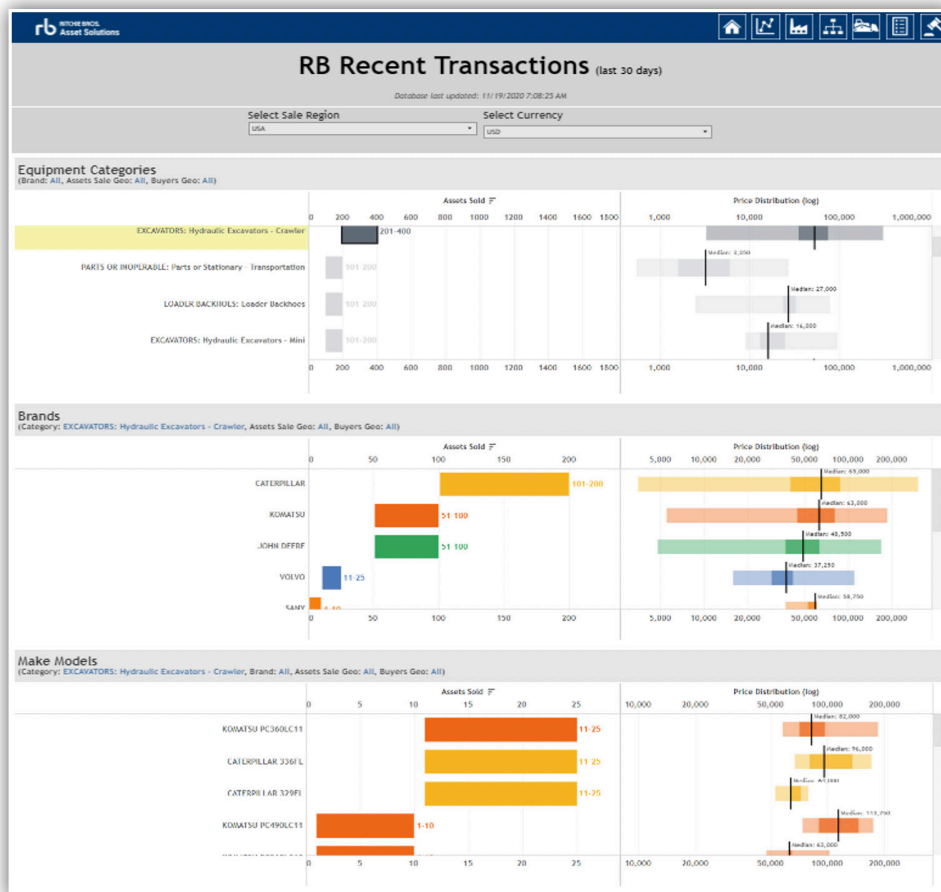
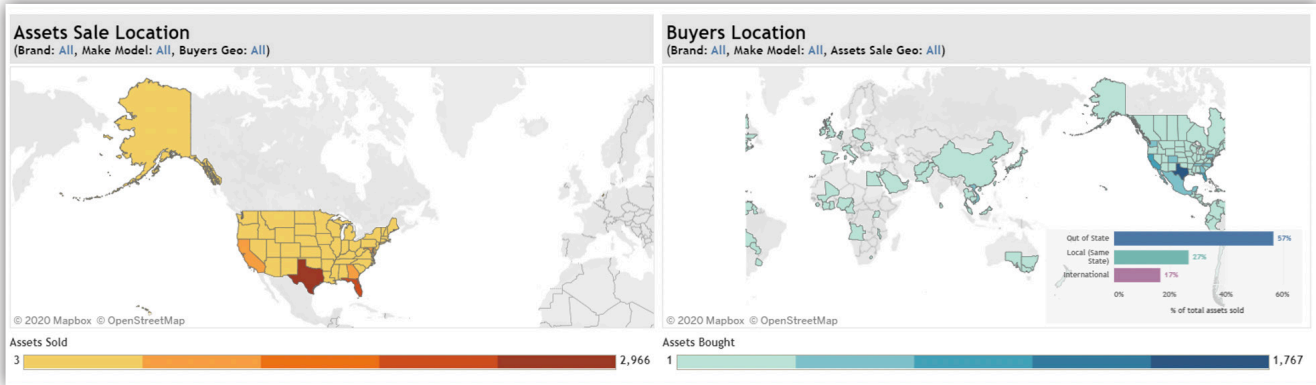
Top selling excavator brands and top selling makes & models sold in the U.S.: 2017 – Q3 2020



Main Feature: Excavators (10+ ton models) – U.S. Continued

On average, approximately 27% of all excavators sold in the United States during this time frame were sold to local state buyers, while 57% was sold to out of state U.S. buyers and 16% sold to international buyers.

Asset and buyer locations of excavators sold in the U.S.: 2017 – Q3 2020



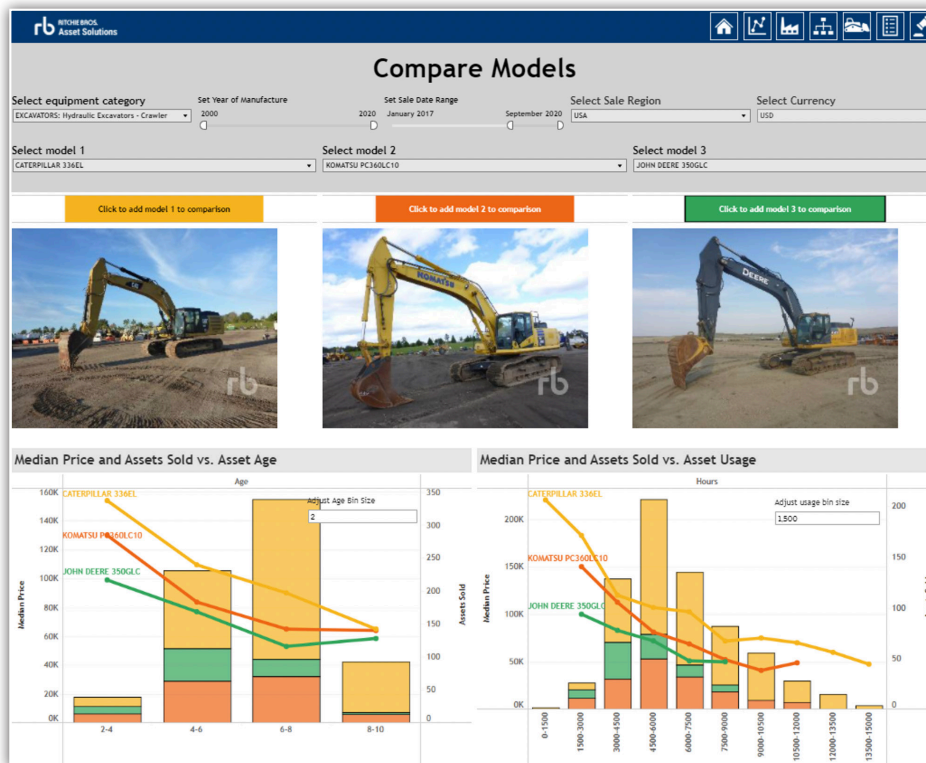
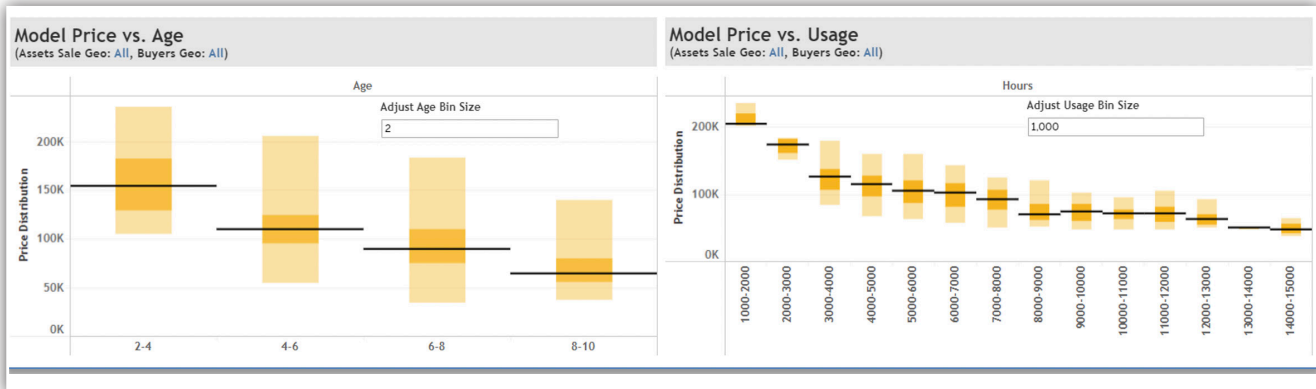
Excavators sold in the U.S. over the 30-day period ending Nov 19, 2020

According to early Q4 results, available in *RB Now!* in Market Trends, pricing has recently increased slightly to over \$50,000.

Main Feature: Excavators (10+ ton models) – U.S. Continued

As we dive into the pricing trends of the always popular Cat 336EL we notice that the sharpest price decline is for 4 to 6-year-old machines or machines that have 3,000 – 4,000 hours used. The median price for Cat 336EL sold over the past three years is \$95,000.

Sales & depreciation curves for Cat 336EL sold in the U.S.: Jan 2017 – Sep 2020



◀ Comparison of median price by age when sold and usage of Cat 336EL, Komatsu PC360LC10 and John Deere 350GLC sold in the U.S.: Jan 2017 – Sep 2020

When we compare similar-sized machines across the top three manufacturers sold over the past three years, the Cat 336EL has the highest median pricing depreciation curve by age when sold and usage. Komatsu PC360LC10 and John Deere 350GLC depreciation curves, respectively, come in beneath the Cat 336EL curve. The specifications of these makes and models can be compared on RitchieSpecs.com.

Industry Highlights: Small Construction Equipment – U.S.

Every edition we will highlight select industries. In this edition we look at small construction equipment as well as lifting & material handling equipment. The parameters used to look at the data include:

- ▶ Three-year trends – Jan 2017 – Sep 2020
- ▶ Assets sold in the U.S.
- ▶ Model years of 2010 and newer
- ▶ Includes mini & midi excavators and skid steer loaders

Mini excavators: Approx. \$115MM; approx. 6,300 units

▶ Quarterly trends:

Median pricing: Q1 and Q2 median price of \$17,500 was the highest since Q2 2017, also at \$17,500. While median pricing in Q3 slightly declined (by 3%) to \$17,000 from the previous quarter, it was the highest Q3 pricing since 2016 when it reached \$18,000

Volume sold: Q3 saw 420+ units sold, slightly above last year same time, with 400+ units sold. Q1 2020 posted a Q1 record of 500+ machines sold, while Q2 was the second highest, with 580+ machines sold (vs. the previous record of 700+ in Q2 2018)

- ▶ **Top selling brands by volume:** Bobcat, John Deere & Caterpillar
- ▶ **Top makes & models sold by volume:** John Deere 27D, John Deere 35D & Kubota K0083



Industry Highlights: Small Construction Equipment – U.S. Continued

Midi excavators: Approx. \$66MM; approx. 1,700 units

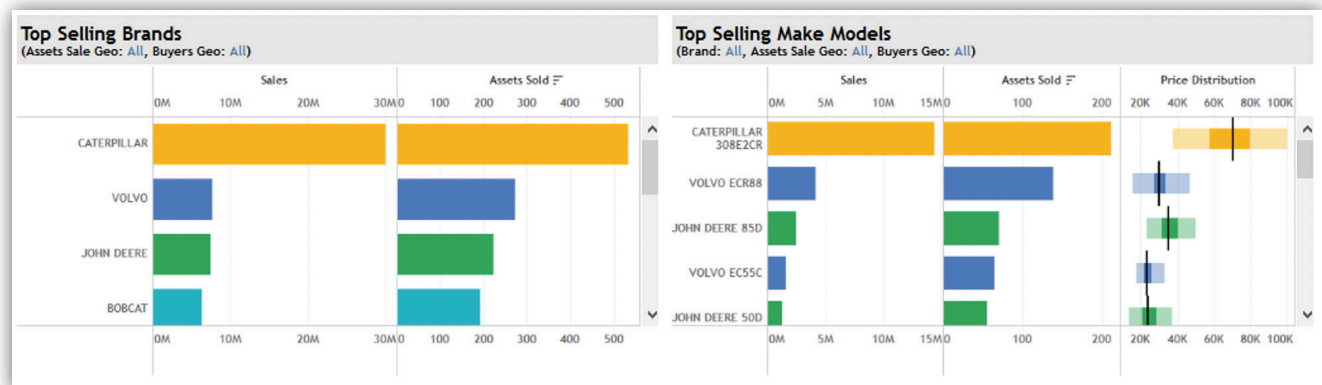
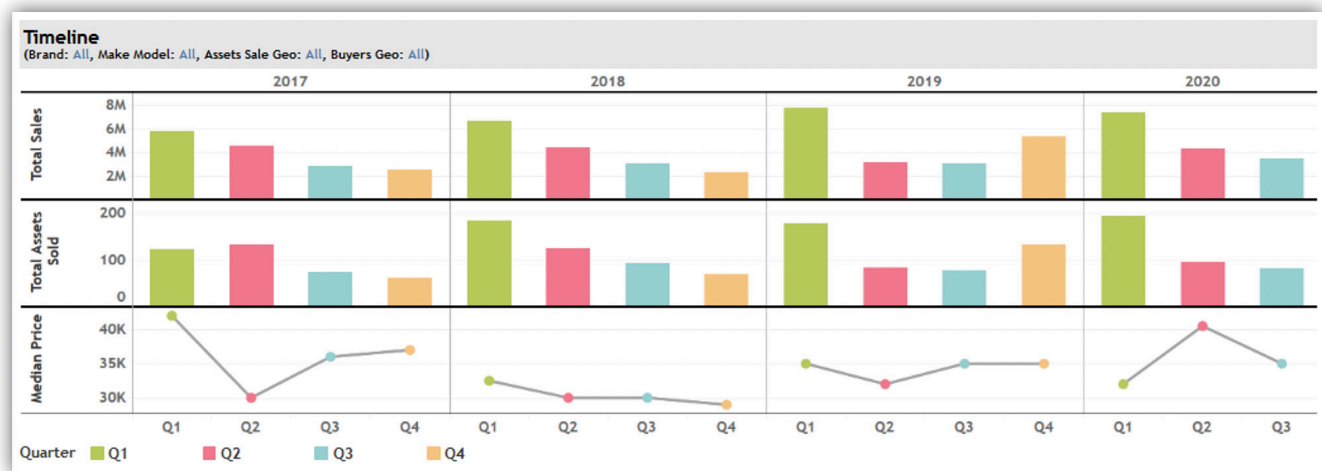
► **Quarterly trends:**

Median pricing: Q2 median price of \$40,500 was highest median pricing since Q1 2017, at \$42,000. Median pricing in Q3 declined by 14% to \$35,000, matching last year, same quarter

Volume sold: Q1 saw its highest volume to date, while Q2 and Q3 volumes increased over last year same time

► **Top selling brands by volume:** Caterpillar, Volvo & John Deere

► **Top makes & models sold by volume:** Cat 308E2CR, Volvo ECR88 & John Deere 85D



Industry Highlights: Small Construction Equipment – U.S. Continued

Skid steer loaders: Approx. \$58MM; approx. 3,490 units

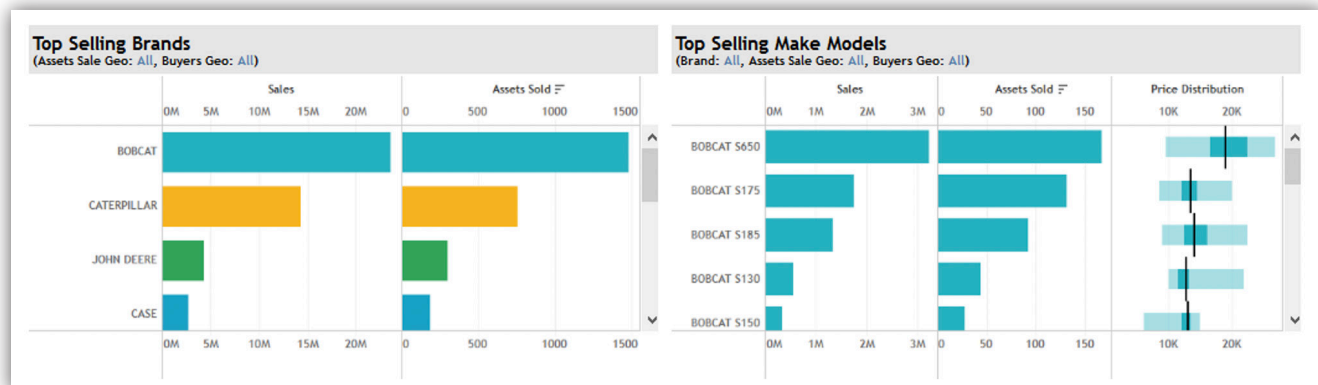
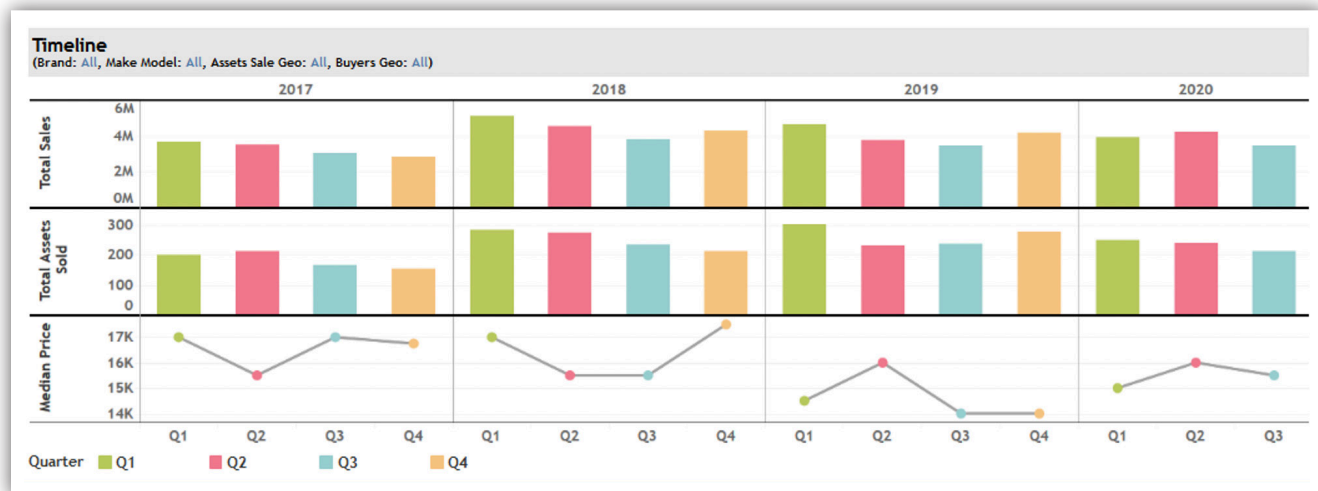
► **Quarterly trends:**

Median pricing: Q3 median price of \$15,500, declined slightly (by 3%) from Q2 median price of \$16,000

Volume sold: Volume has shown stability through Q1 to Q3, with small quarterly changes, ranging from 250+ (Q1), 240+ (Q2) to 210+ (Q3)

► **Top selling brands by volume:** Bobcat, Caterpillar, John Deere

► **Top makes & models sold by volume:** All Bobcat models: S650, S175 & S185



Industry Highlights: Lifting & Material Handling Equipment – U.S.

► Includes telescopic forklifts, boom lifts and scissor lifts

Telescopic forklifts: Approx. \$169MM; approx. 4,580 units

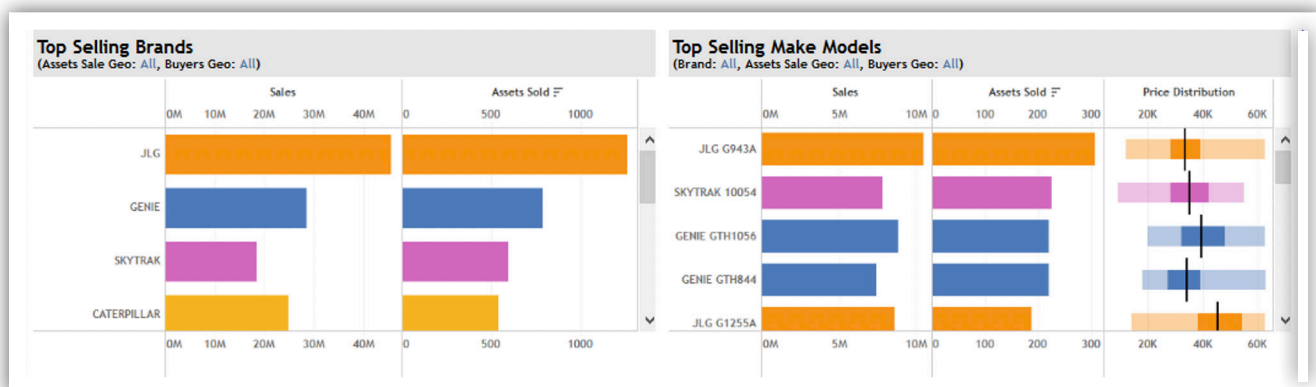
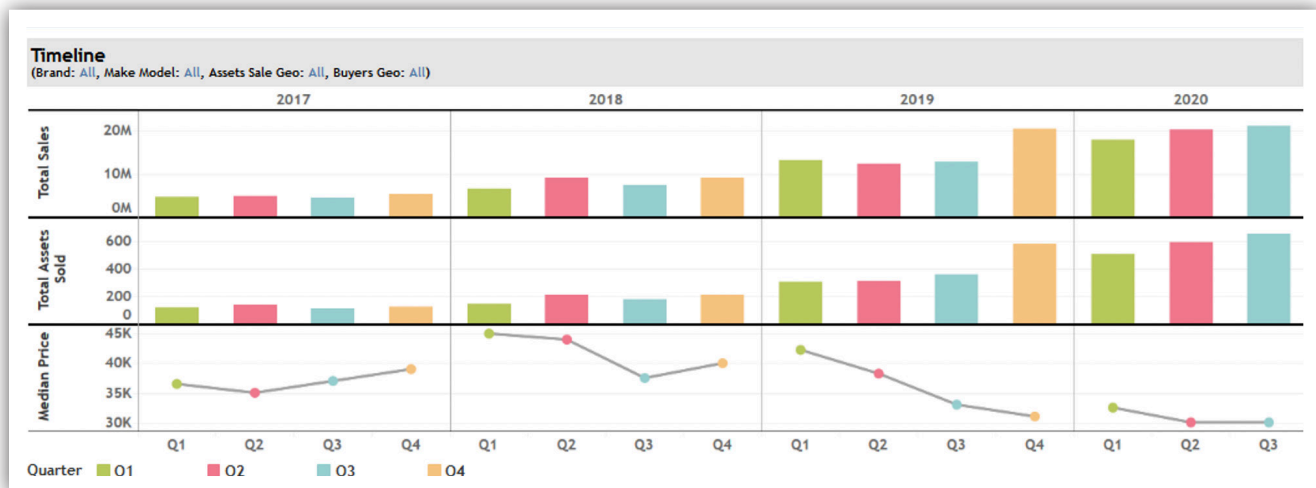
► Quarterly trends:

Median pricing: Quarterly median pricing has been stable, but relatively low in 2020 compared to previous years. Q2 and Q3 median pricing was \$30,000

Volume sold: 2020 has seen some of the highest quarterly volumes sold over the past decade

► **Top selling brands by volume:** JLG, Genie & Skytrak

► **Top makes & models sold by volume:** JLG G943A, Skytrak 10054 & Genie GTH1056



Industry Highlights: Lifting & Material Handling Equipment – U.S. Continued

Boom lifts: Approx. \$108MM; approx. 8,190 units

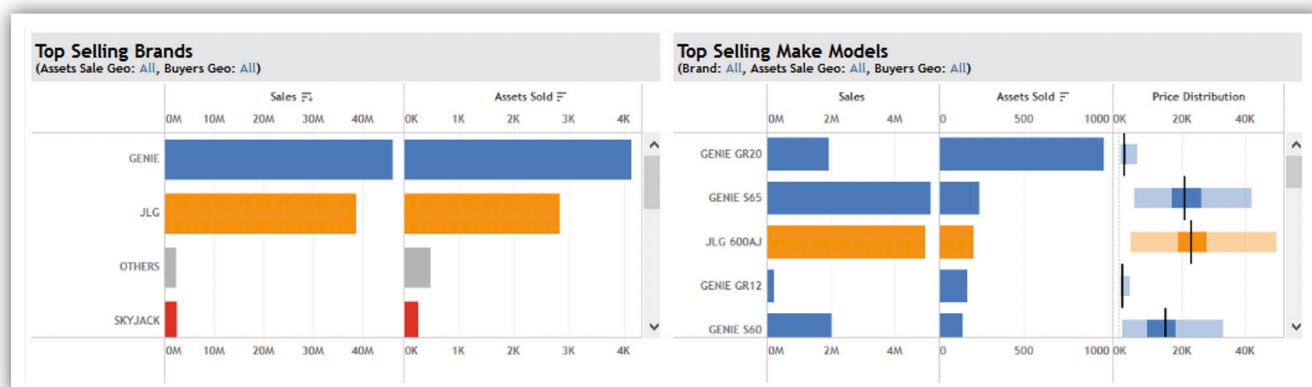
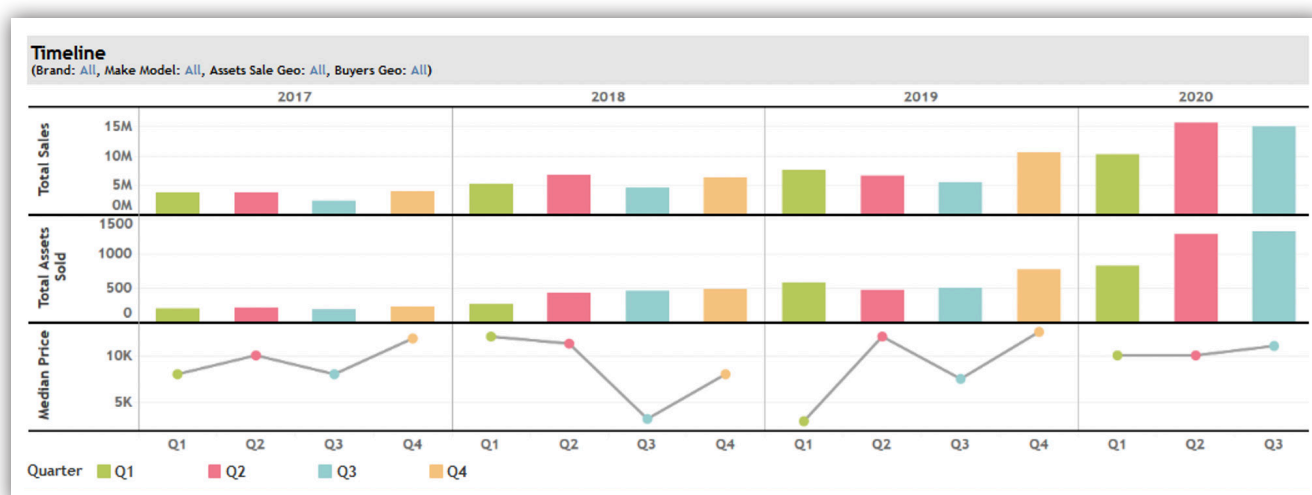
► **Quarterly trends:**

Median pricing: Compared to previous years, quarterly median pricing has remained steady, ranging from \$10,000 (Q1 & Q2) to \$11,000 (Q3)

Volume sold: Q3 saw the highest volume of assets (1,310+) sold from any quarter to date

► **Top selling brands by volume:** Genie, JLG & Skyjack

► **Top makes & models sold by volume:** Genie GR20, Genie S65 & JLG 600AJ



Industry Highlights: Lifting & Material Handling Equipment – U.S. Continued

Scissor lifts: Approx. \$44.5MM; approx. 10,790 units

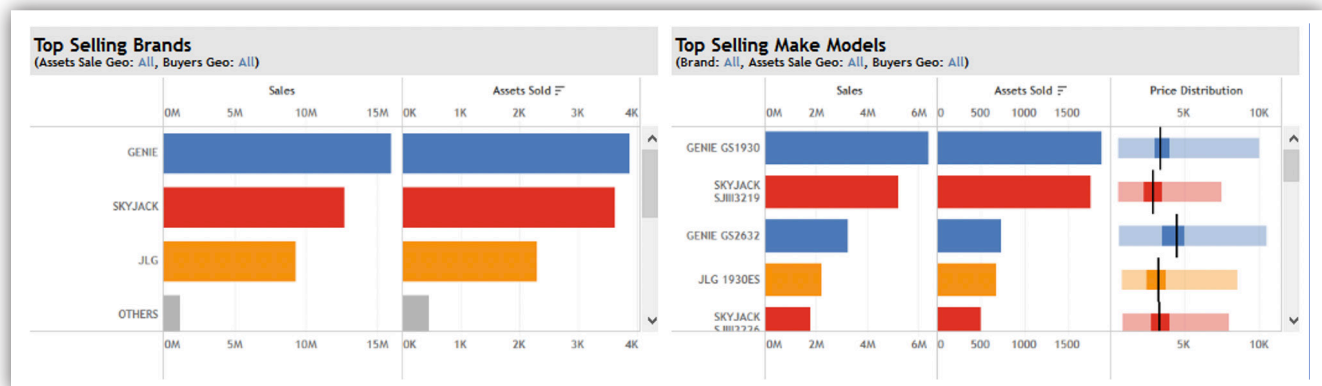
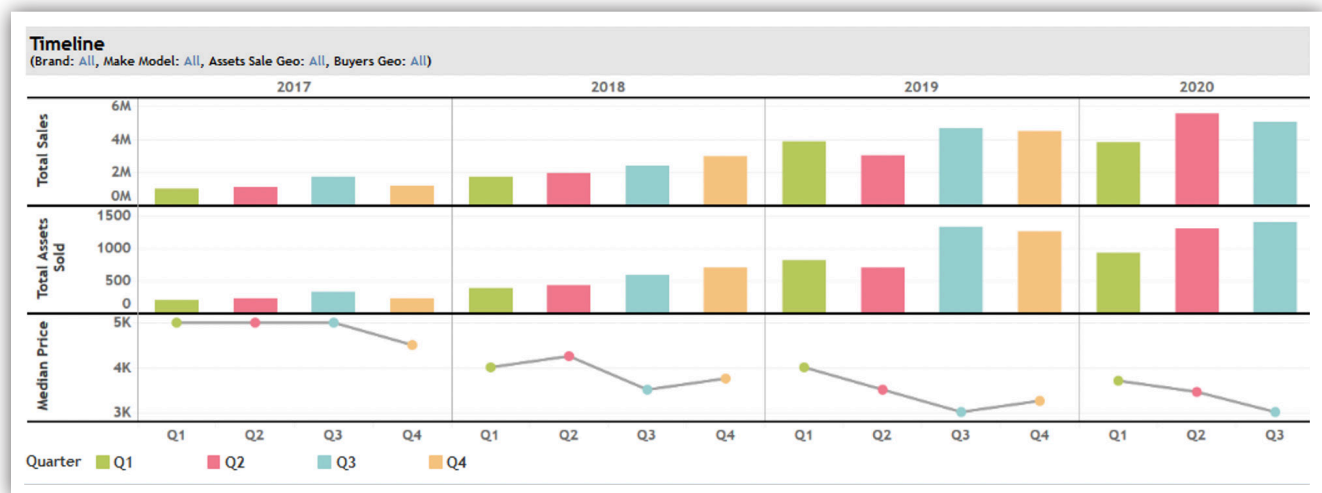
► **Quarterly trends:**

Median pricing: Quarterly median pricing has been steadier and lower than previous years, ranging from \$3,700 in Q1 to \$3,000 in Q3

Volume sold: Quarterly volume has increased throughout 2020, from 930+ units in Q1 to 1,390+ in Q3

► **Top selling brands by volume:** Genie, Skyjack & JLG

► **Top makes & models sold by volume:** Genie GS1930, Skyjack SJIII3219 & Genie GS2632



Ritchie Bros. Mix Adjusted Used Price Indices

Ritchie Bros. uses a machine learning-based method to calculate a used price index:

To isolate and measure the change in supply / demand dynamics on prices over time, we use various machine learning techniques to correct for equipment mix such as make, model, age, as well as 100+ features.

- ▶ **1.8 million transactions**
- ▶ **Data from 2005 onwards**
- ▶ **Adjusting for 100+ features**
- ▶ **Includes data from the U.S. and Canada**

Indices are validated by correlating with key industry metrics:

We validate our used pricing indices by correlating them against well followed industry metrics such as sales or orders. In this example, the US Ritchie Bros. Heavy Duty Truck price index is plotted vs the US Heavy Duty Truck Sales index. The correlation between the two is clear, with the price index leading the sales index.



Sources: Ritchie Bros. Mix-Adjusted Price Index; Heavy Weight Truck Sales U.S. Bureau of Economic Analysis

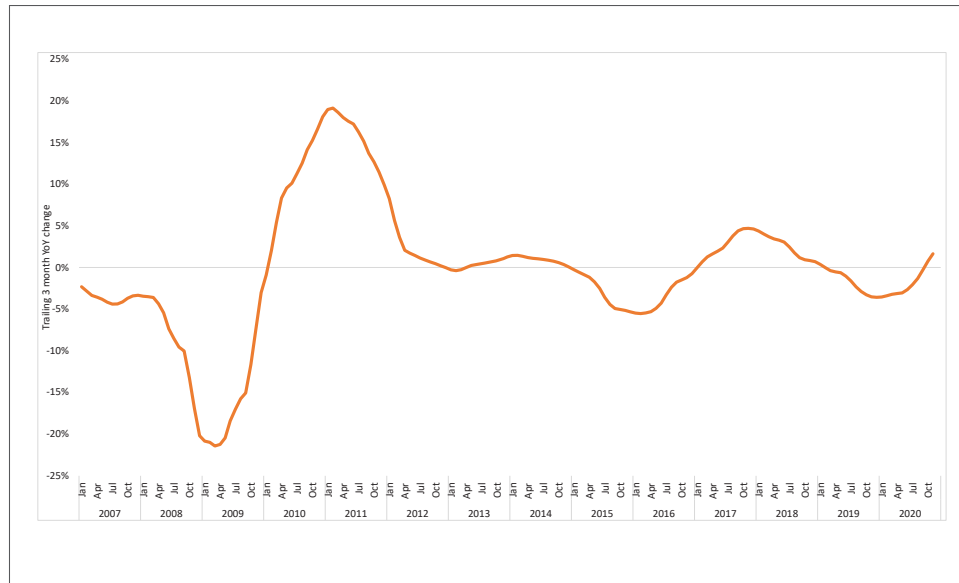
Price Indices Summary

All categories in this report are now showing price inflation vs the same 2019 trailing three-month period. U.S. truck tractors, in particular, have rebounded sharply from 10% deflation a year ago to 10% inflation now.

The comparison between the U.S. Ritchie Bros. Heavy Duty Truck Price Index and U.S. Heavy Duty Truck shipments has also been updated in this report, on page 11. The correlation between the indicators continues to be clear and the recent turnaround in prices preceded the change in truck shipments as it has for other inflection points.



Heavy Equipment & Truck Tractors – U.S.



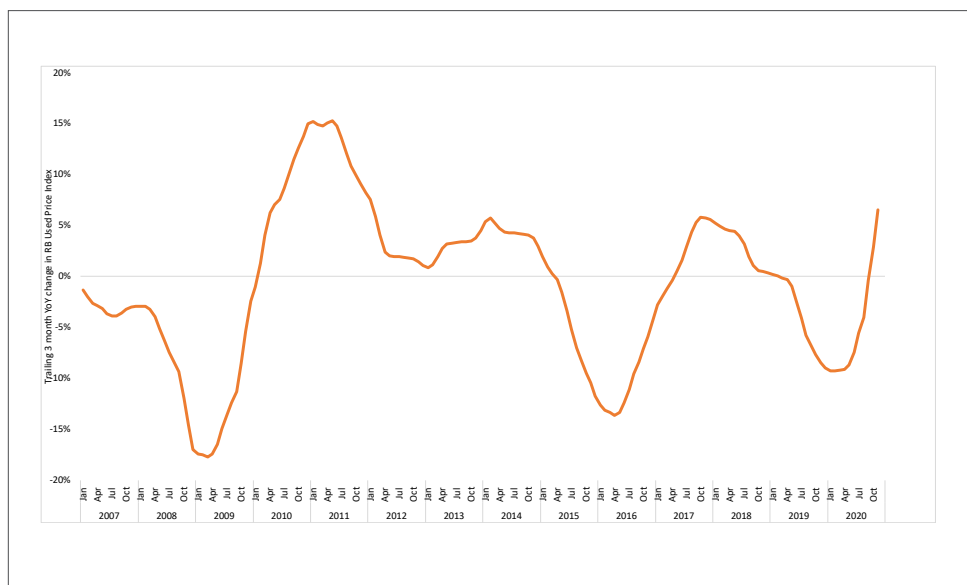
Prices stable for used heavy equipment

In our estimation, for the 3 months ending November, prices for used heavy equipment were steady ($\pm 1.5\%$) compared to the same time frame last year

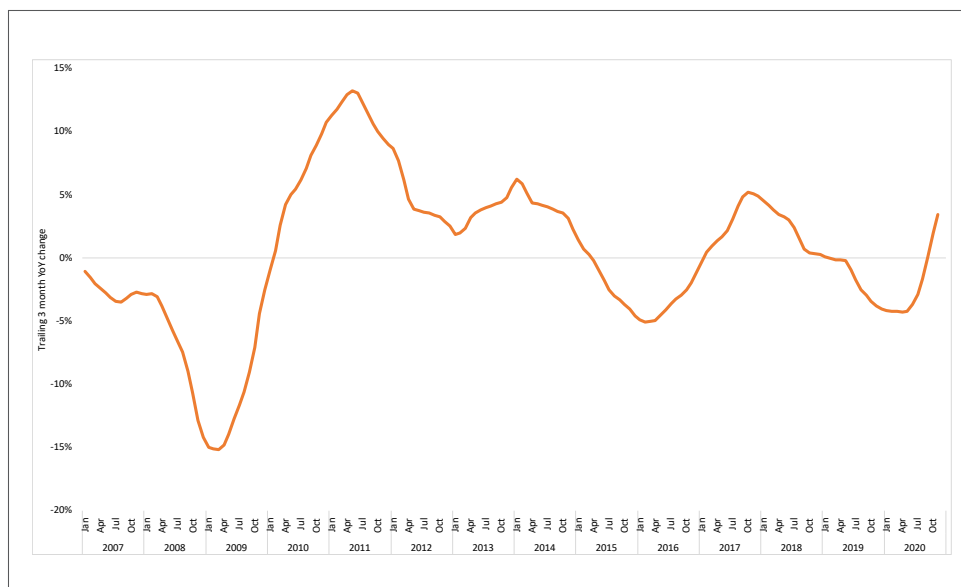
Top equipment types in Heavy Equipment include: excavators, dozers, loaders, articulated dump trucks, compactors, motor graders & loader backhoes

Prices show strengthening for used truck tractors

In our estimation, for the 3 months ending November, prices for used truck tractors increased 7% ($\pm 1.5\%$) compared to the same time frame last year



Vocational Trucks and Lifting & Material Handling – U.S.



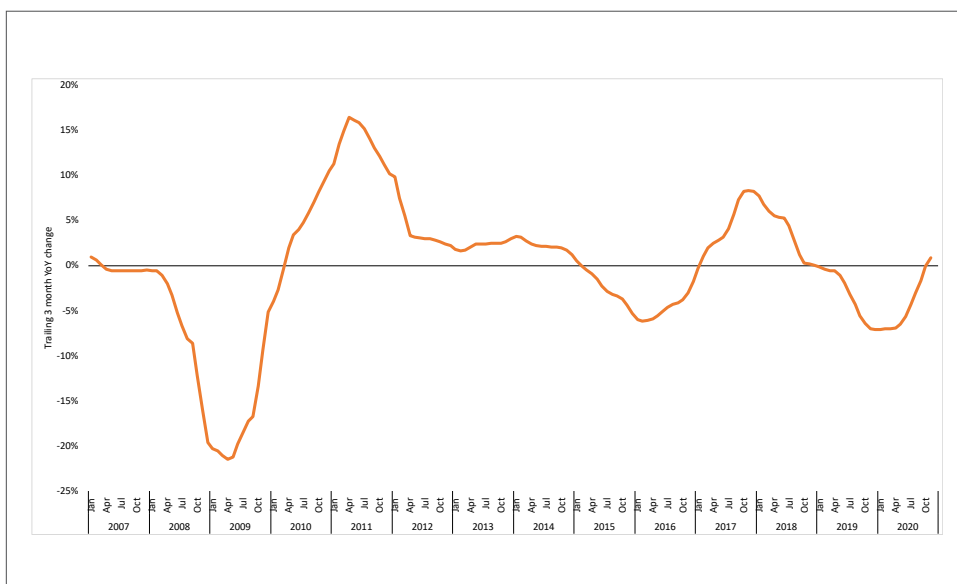
Prices show strengthening for used vocational trucks

In our estimation, for the 3 months ending November, prices for used vocational trucks increased 3% ($\pm 1.5\%$) compared to the same time frame last year

Top equipment types included in Vocational Trucks: dump trucks, flatbed trucks, boom trucks, water & tank trucks, van & reefer trucks, mechanical trucks & concrete mix trucks

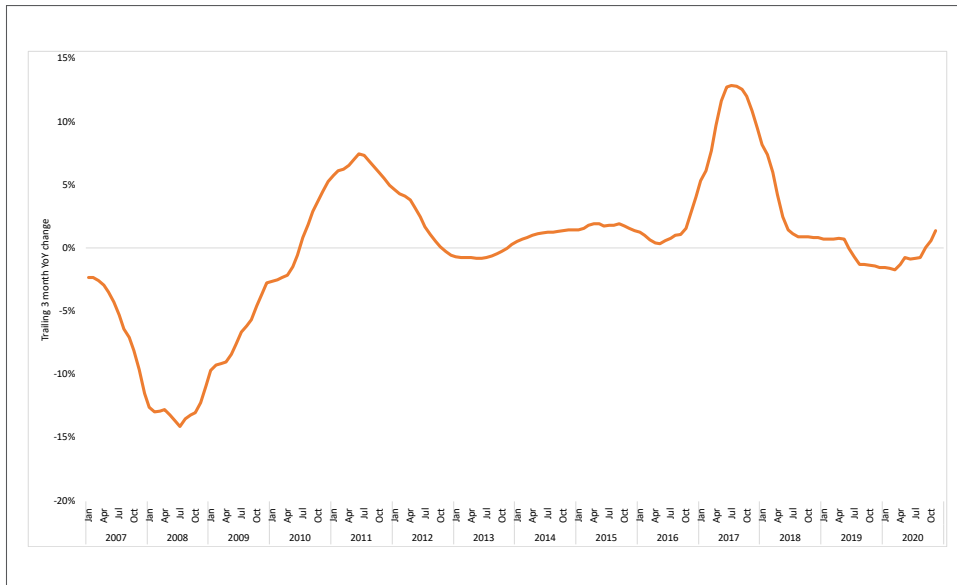
Prices stable for used lifting & material handling equipment

In our estimation, for the 3 months ending November, prices for used lifting & material handling equipment were steady ($\pm 1.5\%$) compared to the same time frame last year



Top equipment types included in Lifting & Material Handling: cranes, booms, scissors, telescopic handlers & forklifts

Heavy Equipment & Truck Tractors – Canada



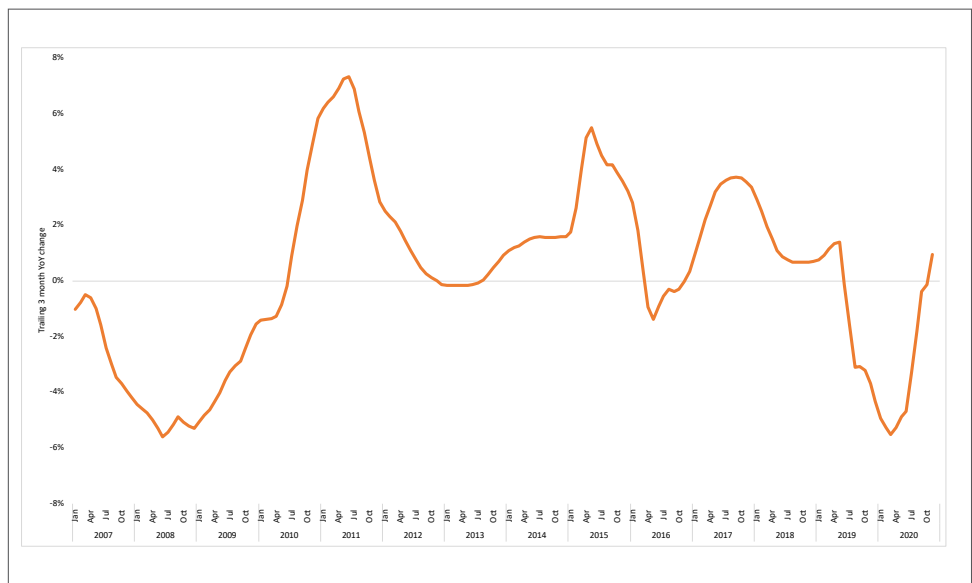
Prices show strengthening for used heavy equipment

In our estimation, for the 3 months ending November, prices for used heavy equipment increased 1% ($\pm 1.5\%$) compared to the same time frame last year

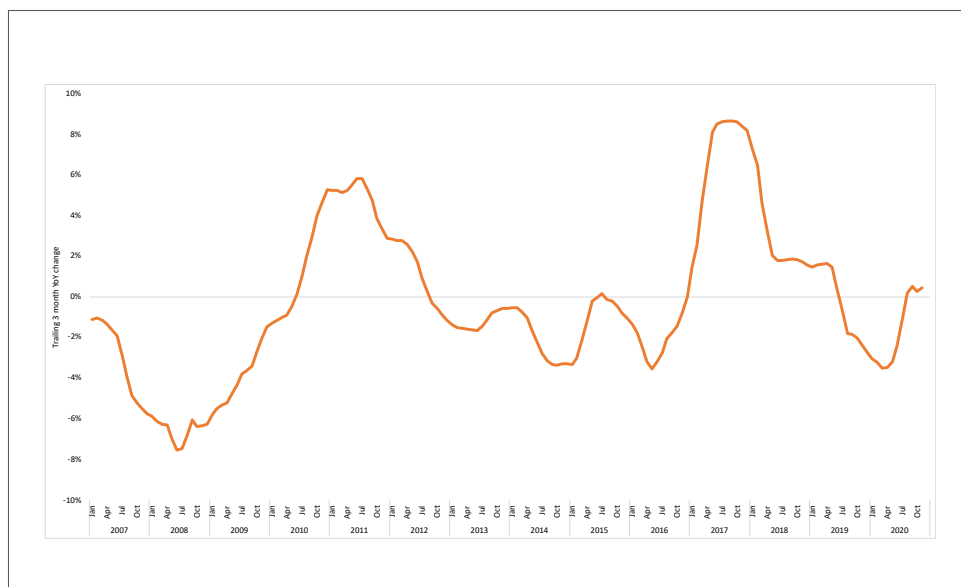
Top equipment types in Heavy Equipment include: excavators, dozers, loaders, articulated dump trucks, compactors, motor graders & loader backhoes

Prices stable for used truck tractors

In our estimation, for the 3 months ending November, prices for used truck tractors were steady ($\pm 1.5\%$) compared to the same time frame last year



Vocational Trucks and Lifting & Material Handling – Canada



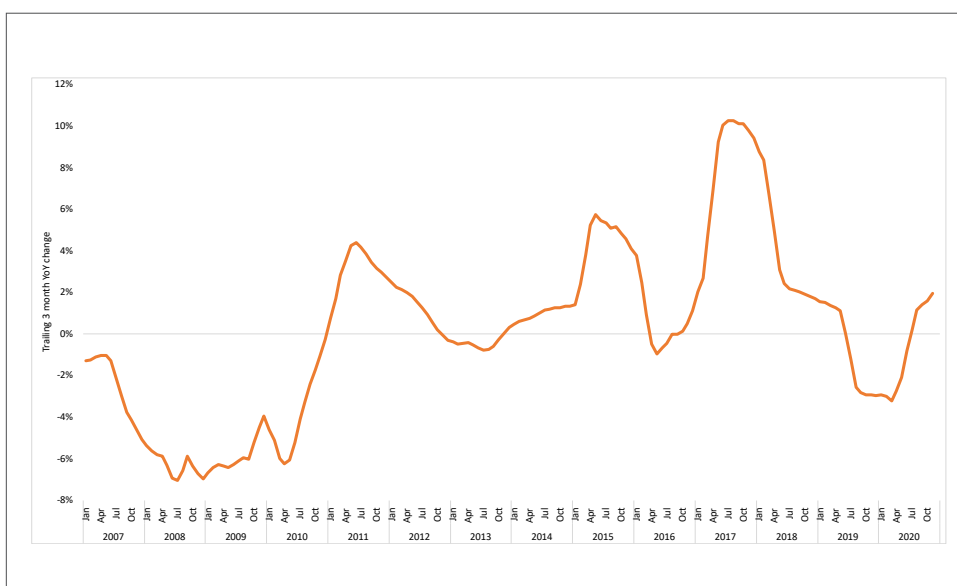
Prices steady for used vocational trucks

In our estimation, for the 3 months ending November, prices for used vocational trucks were stable ($\pm 1.5\%$) compared to the same time frame last year

Top equipment types included in Vocational Trucks: dump trucks, flatbed trucks, boom trucks, water & tank trucks, van & reefer trucks, mechanical trucks & concrete mix trucks

Prices show strengthening for used lifting & material handling equipment

In our estimation, for the 3 months ending November, prices for used lifting & material handling equipment increased 2% ($\pm 1.5\%$) compared to the same time frame last year



Top equipment types included in Lifting & Material Handling: cranes, booms, scissors, telescopic handlers & forklifts

Ritchie Bros. Snapshot of Demand

Top 6 Asset Categories

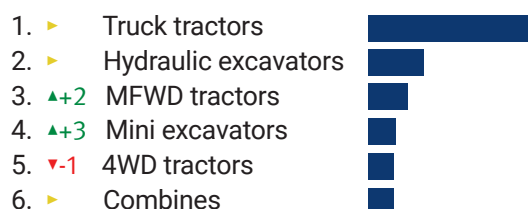
In 2020, Ritchie Bros. has seen record online demand for equipment. This brief snapshot highlights the top equipment searches across Ritchie Bros. Auctioneers, Ritchie Bros. Asset Valuator pricing tool, and RitchieSpecs, as well as finance approvals from Ritchie Bros. Financial Services. As you can see, truck tractors are very popular right now, as are wheel loaders, excavators, dozers, and pickup trucks. Also, with recent on-the-farm auctions in western Canada, some agricultural equipment categories round out the top six on rbauction.

We've introduced new data: the change in rank from the previous month. For instance, MFWD tractors moved up 2 spots, from #5 to the #3 position in November.

As of Nov 30, 2020

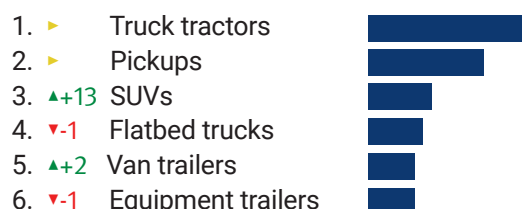
Ritchie Bros. Auctioneers

Current inventory searches (past 4 weeks)
Scope: rbauction, global



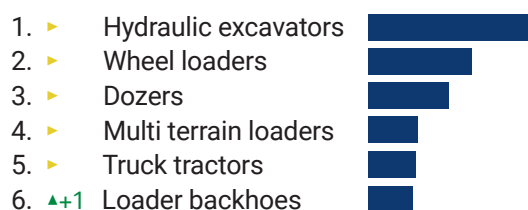
Ritchie Bros. Auctioneers

Unique watchlisters (past 4 weeks)
Scope: rbauction, U.S.



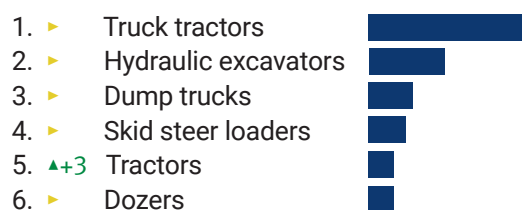
Ritchie Bros. Asset Valuator ^(Beta)

Pricing results searches (last month)
Scope: Ritchie Bros Auctioneers, IronPlanet, Marketplace-E; global



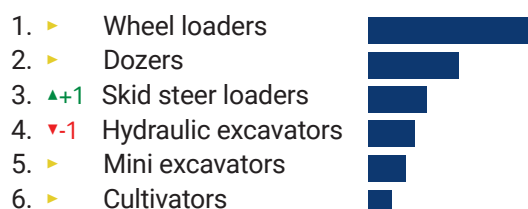
Ritchie Bros. Financial Services

Finance pre-approvals (Nov 30, 2020)
Scope: Primarily U.S. & Canada



RitchieSpecs

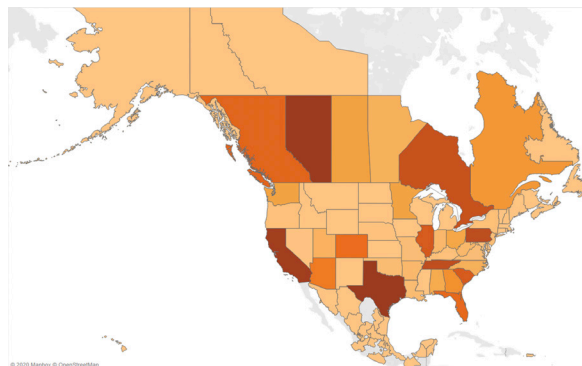
Page views of category landing pages (last month)
Scope: Ritchie Bros Auctioneers, IronPlanet, Marketplace-E; global



▲ moved up from previous month
▼ moved down
▶ remained the same

Seller / buyer maps for the 3 months ending November 30, 2020ⁱ

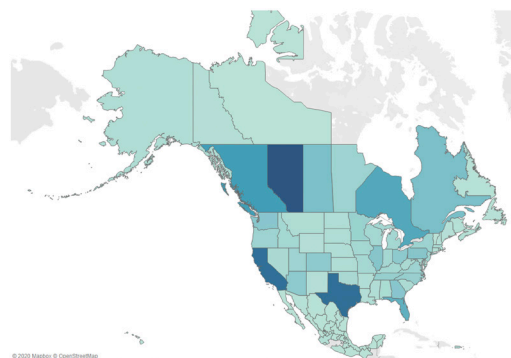
Seller Map – North America



Top 5 selling regions:

- ▶ Alberta, Canada
- ▶ Texas, USA
- ▶ California, USA
- ▶ Pennsylvania, USA
- ▶ Tennessee, USA

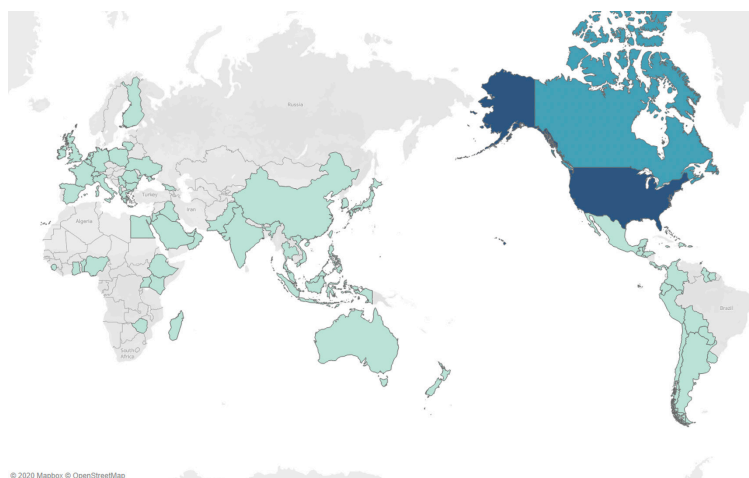
Buyer Map - North America



Top 5 buying regions:

- ▶ Alberta, Canada
- ▶ California, USA
- ▶ Texas, USA
- ▶ British Columbia, Canada
- ▶ Ontario, Canada

Buyer Map - World Wide



Top 5 buying Countriesⁱⁱ:

- ▶ Mexico
- ▶ United Arab Emirates
- ▶ Australia
- ▶ Peru
- ▶ United Kingdom

ⁱBased on value of transactions (USD) ⁱⁱOutside United States and Canada

About Ritchie Bros.

Ritchie Bros. connects equipment buyers and sellers through a global network of auction facilities and online sales channels. Ritchie Bros. Auctioneers and IronPlanet bring you multi-channel, trusted solutions that are transparent, fair and convenient.

Ritchie Bros. is MORE THAN AUCTIONS:



Unreserved live auctions

- ▶ 40 auction sites globally with secured storage & buyer inspection
- ▶ 350+ live unreserved auctions a year
- ▶ Certainty of sale



Weekly online auctions

- ▶ Regular weekly auctions
- ▶ Convenience of selling where it sits
- ▶ Buyer confidence from IronClad Assurance® equipment condition certification



Reserved online marketplace

- ▶ Control over your selling price & timing of sale
- ▶ Convenience of selling where it sits
- ▶ Buyer confidence from IronClad Assurance® equipment condition certification



Online classified ad service

- ▶ Fastest growing online equipment listing service with over 400,000 listings



Inventory, data insights & disposition platform

- ▶ Inventory management system
- ▶ Market trends and pricing tools
- ▶ Maximize value of equipment through choice of disposition



For more information contact:
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