



# **Market Trends Report**

Used Equipment & Trucks
(North America)

December 2021

## **Table of contents**

Summary		1-2
Loader Backho	oes: Units Sold in the U.S. & Canada	3-8
Rouse: Retail L	Jsed Equipment Market	9-10
Price Indexes S	Summary	11
Price Indexes		
•	Truck Tractors & Vocational Trucks – U.S.	12
<b>•</b>	Large Earthmoving & Medium Earthmoving – U.S	13
<b>•</b>	Aerial Equipment – U.S	14
<b>•</b>	Truck Tractors & Vocational Trucks – Canada	15
<b>&gt;</b>	Large Earthmoving & Medium Earthmoving – Canada	16
<b>&gt;</b>	Aerial Equipment – Canada	17
Seller & Buyer I	Maps	18
About Ritchie E	Bros	19

#### **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**

Thank you for subscribing to the Ritchie Bros. monthly Market Trends Report! With our December 2021 report we dig deep into **loader backhoe** sales in the United States and Canada.

Continuing supply chain issues and a tight market has resulted volume declines in 2021 and older assets with higher usage coming to market as contractors hold on to equipment longer while waiting for new production to catch up. And yet, despite loader backhoe units sold this year being older than last, we are seeing stronger pricing.

In fact, for the three months ending November 30, 2021, loader backhoe prices have increased 15% in the United States year over year, despite units being three years older. In Canada, the median age of loader backhoes is 15 years old and bringing a median price of CA\$32,500 (US\$25,700).

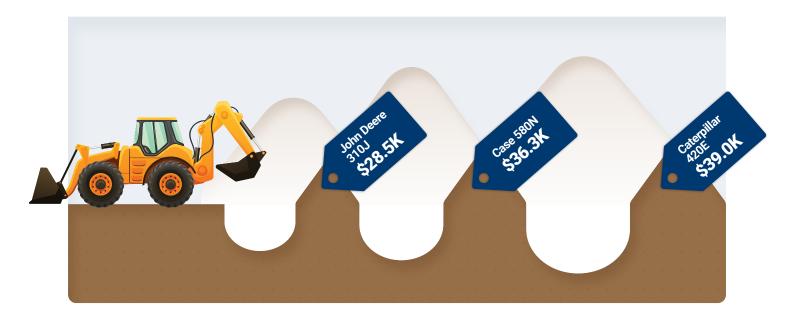
#### Access past selling results for free

On pages 6-8 of this month's report we have also highlighted three of our most popular backhoes, using our Ritchie Bros. Asset Valuator tool. This free online tool helps customers access pricing results for assets sold through Ritchie Bros. sales channels.

According to Ritchie Bros. Market Trends, the **John Deere 310J**, **Case 580N**, and **Caterpillar 420E** have all seen big price increases year over year. In November 2020 the Cat 420E was bringing a median price of \$26,000 in the United States. A year later, the 420E is bringing \$39,000 —a 50% price increase year over year, for units that are two years older!

Con't on page 2 ►

### Median Prices of Top Selling Loader Backhoes (Sep-Nov 2021)



#### Pricing indexes continue to climb

After our loader backhoe spotlight, we turn to our individual industry indexes. In the United States our truck tractor index continues to lead the way, up 55% year over year, while medium earthmoving and vocational trucks are up 43% and 41% respectively. We are also seeing strong pricing in Canada right now, with truck tractor prices up approximately 27%, while medium earthmoving and vocational trucks are both up 32%.

#### But what about the retail market?

Like last month, we have included interesting retail commentary and charts from Rouse Services on pages 9-10 of this report. Rouse continues to see strengthening retail pricing across most used equipment categories in 2021.

For more trends and timely insights, we encourage you to sign up for the full Ritchie Bros. Market Trends module where you can dive deep into almost any equipment type or model you want. Contact <a href="mailto:dataproducts@ritchiebros.com">dataproducts@ritchiebros.com</a> for more info.



Doug Olive, SVP, Pricing

#### On the Ritchie Bros. auction market...

"Loader backhoe volumes have declined while demand has strengthened, resulting in strong pricing for the incredibly versatile machine. In 2016 we sold close to 3,000 backhoes in the United States. Through 11 months in 2021 we've only sold 1,815, but the median price has increased 15%."



**Doug Rusch**, Managing Director, Rouse Sales

#### On the retail used equipment market...

"Retail values continue to climb, having increased more than 16% since the beginning of 2021, reflecting a strong pricing environment for sellers. Transaction volumes in the retail space are also healthy and auction values have increased 3.2% in November. All signs point to strong end-market demand for machines right now."

Ritchie Bros. Mixed Adjusted Price Indexes Used Commercial Assets - Pricing Highlights						
Price change (±1	Price change (±1.5%) year-over-year for the 3 months ending November 30, 2021					
Categories	Categories USA Canada					
Large Earthmoving		Increased ~	14%		Increased ~	11%
Medium Earthmoving	▲ Increased ~ 43% ▲ Increased ~ 32%					32%
Aerial	▲ Increased ~ 37% ▲ Increased ~ 25%					
Truck Tractors	ors Increased ~ 55% Increased ~ 27%					
Vocational Trucks	<b>A</b>	Increased ~	41%	<b>A</b>	Increased ~	32%

Source: Ritchie Bros. transactional data

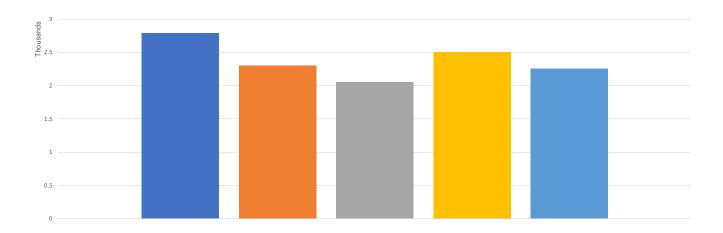
## Loader Backhoes Units Sold in the U.S. & Canada

Over the past five years, Ritchie Bros. has sold significantly more loader backhoes in the U.S. than in Canada, ranging from 4-7 times more annually.

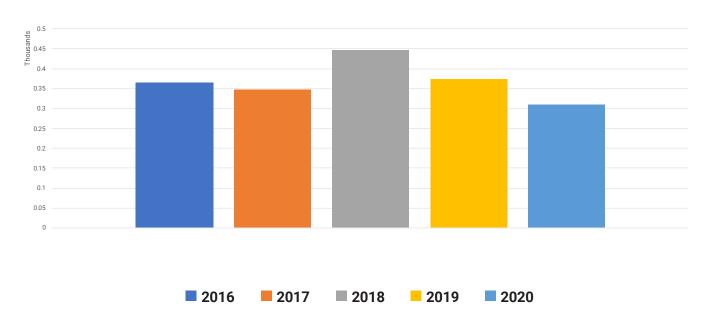
In the U.S., unit sales of loader backhoes peaked in 2016, with nearly 2,800 units. The lowest number of backhoes sold during the same period was pre-pandemic in 2018 with over 2,040.

In Canada, loader backhoe sales peaked in 2018 with more than 440 units over the past five years. The lowest number sold happened in 2020 with just over 300 units.

#### U.S.



#### Canada



## Loader backhoes sold in the U.S.



Despite significant increases in the age and usage of loader backhoes sold in 2021 over 2020, median prices are up by double digits each quarter and over the past three months.

The number of loader backhoes sold in 2021 is down by double-digits each quarter.

	2021	2020	
Median Price (USD)			Change
Past 3 months (Sep-Nov)	\$30.0 K	\$26.0 K	15.4%
Q3	\$29.0 K	\$26.0 K	11.5%
Q2	\$29.0 K	\$25.0 K	16.0%
Q1	\$29.0 K	\$26.0 K	11.5%
Year		\$26.0 K	
Median Age (Years)			
Past 3 months (Sep-Nov)	10	7	3 yrs older
Q3	10	8	2 yrs older
Q2	10	7	3 yrs older
Q1	8	8	-
Median Usage (Hours)			
Past 3 months (Sep-Nov)	4.2 K	3.2 K	-33.8%
Q3	4.2 K	3.3 K	-28.8%
Q2	4.1 K	3.3 K	-22.6%
Q1	3.3 K	3.5 K	6.4%
<b>Gross Transaction Value (GTV)</b>			
Past 3 months (Sep-Nov)	\$13.5 M	\$14.8 M	-8.6%
Q3	\$13.9 M	\$14.6 M	-5.0%
Q2	\$13.1 M	\$15.9 M	-17.5%
Q1	\$16.2 M	\$16.5 M	-1.7%
Year		\$62.0 M	
Volume (Units)			
Past 3 months (Sep-Nov)	430+	530+	-18.9%
Q3	430+	530+	-18.9%
Q2	440+	590+	-25.4%
Q1	515+	615+	-16.3%
Year		2,250+	

## **Loader backhoes sold in Canada**



The loader backhoes sold in 2021 are much older than those sold in 2020, by four to five years. Despite this, prices were up in Q1 through Q3.

Aside from Q2 2021, volumes sold have been down.

	20	21	20	20	
Median Price	CAD	USD	CAD	USD	Change
Past 3 months (Sep-Nov)	\$32.5 K	\$25.7 K	\$37.3 K	\$28.1 K	-12.8%
Q3	\$36.8 K	\$29.2 K	\$33.0 K	\$24.9 K	11.4%
Q2	\$37.0 K	\$30.5 K	\$34.0 K	\$24.4 K	8.8%
Q1	\$35.8 K	\$28.3 K	\$32.5 K	\$23.9 K	10.0%
Year			\$32.0 K	\$24.2 K	
Median Age (Years)					
Past 3 months (Sep-Nov)	1	5	1	0	5 yrs older
Q3	1	4	1	0	4 yrs older
Q2	1	4	1	0	4 yrs older
Q1	1	4	1	0	4 yrs older
Median Usage (Hours)					
Past 3 months (Sep-Nov)	5.9	ΡK	5.9 K		0.4%
Q3	6.3	3 K	5.3 K		-17.8%
Q2	6.9	K	5.7 K		-21.0%
Q1	6.1	l K	4.8	3 K	-26.4%
Gross Transaction Value (GTV)					
Past 3 months (Sep-Nov)	\$2.6 M	\$2.1 M	\$2.7 M	\$2.0 M	-2.4%
Q3	\$3.5 M	\$2.8 M	\$3.9 M	\$2.9 M	-10.3%
Q2	\$4.3 M	\$3.5 M	\$3.6 M	\$2.6 M	18.0%
Q1	\$2.2 M	\$1.8 M	\$2.2 M	\$1.6 M	2.5%
Year			\$11.3 M	\$8.3 M	
Volume (Units)					
Past 3 months (Sep-Nov)	65	5+	70	)+	-7.1%
Q3	85	5+	10	0+	-15.0%
Q2	10	5+	95+		10.5%
Q1	55	5+	60+		-8.3%
Year			30	5+	

## John Deere 310J sold in the U.S.



John Deere's 310J has been one most sold models through the Ritchie Bros. network over the last two years. The units sold in 2021 are older and, for the most part, have higher usage than 2020.

Median Price (USD)					
<b>2021 2020</b> Change					
(Sep-Nov)	\$28.5 K	\$23.0 K	23.9%		
Q3	\$27.5 K	\$22.5 K	22.2%		
Q2	\$26.0 K	\$21.0 K	23.8%		
Q1	\$25.0 K	\$24.0 K	4.2%		

Unit Sold						
<b>2021 2020</b> Change						
(Sep-Nov)	29	26	11.5%			
Q3	31	32	-3.1%			
Q2	24	35	-31.4%			
Q1	17	35	-51.4%			

Median Age					
<b>2021 2020</b> Change					
(Sep-Nov)	11	9	2 yrs older		
Q3	11	9	2 yrs older		
Q2	11	9	2 yrs older		
Q1	9	8	1 yr older		

Median Usage						
<b>2021 2020</b> Change						
(Sep-Nov)	4.4 K	3.3 K	-31.4%			
Q3	4.7 K	4.1 K	-14.9%			
Q2	4.6 K	3.2 K	-43.1%			
Q1	3.1 K	3.3 K	8.1%			



 Ritchie Bros. Asset Valuator provides past selling prices for assets sold through Ritchie Bros. sales channels. This backhoe was sold in September at our Fort Worth live auction.

100	2010	310J	bkt, A/C cab, extendahoe, Q/C hoe bkt, rear aux hyd	\$41,000	4,386 hr	Texas, United States	11/11/2021 Ritchie Bros.	Ь
	2011	310J	bkt, canopy	\$22,500	6,323 hr	Ohio, United States	09/29/2021 Ritchie Bros.	Ь
76	2010	310J	bkt, A/C cab, extendahoe w/bkt	\$25,670	5,819 hr	Ontario, Canada	09/24/2021 Ritchie Bros.	Ь
	2011	310J	bkt, A/C cab, extendahoe w/bkt	\$35,000	5,707 hr	Texas, United States	09/22/2021 Ritchie Bros.	Ь

## Case 580N sold in the U.S.



The Case 580N is one of the most popular Case models sold at Ritchie Bros. over the past two years. The units sold in 2021 are of similar vintage to those sold in 2021, but with greater hours.

Median Price (USD)					
<b>2021 2020</b> Change					
(Sep-Nov)	\$36.3 K	\$30.0 K	20.8%		
Q3	\$35.5 K	\$27.0 K	31.5%		
Q2	\$33.0 K	\$25.5 K	29.4%		
Q1	\$32.0 K	\$28.0 K	14.3%		

Unit Sold					
<b>2021 2020</b> Change					
(Sep-Nov)	12	26	-53.8%		
Q3	11	21	-47.6%		
Q2	15	44	-65.9%		
Q1	19	56	-66.1%		

Median Age					
<b>2021 2020</b> Change					
(Sep-Nov)	7	7	-		
Q3	8	6	2 yrs older		
Q2	7	8	1 yr newer		
Q1	8	8	-		

Median Usage						
<b>2021 2020</b> Change						
(Sep-Nov)	4.3 K	2.8 K	-51.1%			
Q3	2.9 K	2.0 K	-45.3%			
Q2	2.8 K	2.5 K	-14.1%			
Q1	3.0 K	2.8 K	-8.1%			



Ritchie Bros. Asset Valuator is a free online tool for searching selling prices. This backhoe was sold on IronPlanet in October.

The state of the s	2014	580N	bkt, cab, ride ctrl, extendahoe w/bkt, rear aux hyd	\$33,585	6,663 hr	Ontario, Canada	12/08/2021 Ritchie Bros.	гЬ
	2014	580N	Open Operator Station, 81 in Loader Bucket, 24 in Backhoe Bucket	\$36,000	6,048 hr	Texas, United States	10/14/2021 IronPlanet	IRON
	2014	580N	Open Operator Station, 81 in Loader Bucket, 24 in Backhoe Bucket	\$36,500	4,407 hr	Texas, United States	10/14/2021 IronPlanet	IRON
Jan Jan	2014	580N	Open Operator Station, 81.5 in Loader Bucket, 24 in Backhoe Bucket	\$36,500	5,887 hr	Texas, United States	10/14/2021 IronPlanet	IRON

## Caterpillar 420E sold in the U.S.



One of the most frequently sold Caterpillar backhoes through Ritchie Bros. sales channels is the 420E. For the most part, the machines sold in 2021 are older than those sold in 2020, and over the past three months, had more hours.

Median Price (USD)						
<b>2021 2020</b> Change						
(Sep-Nov)	\$39.0 K	\$26.0 K	50.0%			
Q3	\$38.0 K	\$29.0 K	31.0%			
Q2	\$33.0 K	\$28.0 K	17.9%			
Q1	\$31.5 K	\$31.0 K	1.6%			

Unit Sold						
<b>2021 2020</b> Change						
(Sep-Nov)	13	25	-48.0%			
Q3	10	19	-47.4%			
Q2	15	15	-			
Q1	18	16	12.5%			

Median Age						
<b>2021 2020</b> Change						
(Sep-Nov)	13	11	2 yrs older			
Q3	13	12	1 yr older			
Q2	11	11	-			
Q1	10	9	1 yr older			

Median Usage						
<b>2021 2020</b> Change						
(Sep-Nov)	5.2 K	4.0 K	-30.0%			
Q3	5.2 K	6.5 K	20.2%			
Q2	4.2 K	3.9 K	-6.6%			
Q1	3.7 K	4.6 K	18.4%			



This Caterpillar 420E was sold early December 2021 for \$40,000. Within a day or two after assets are sold, the selling prices are available to view through the Ritchie Bros. Asset Valuator tool.

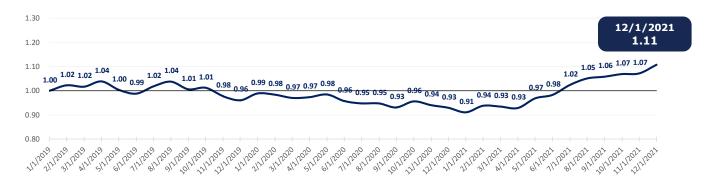
	2008	420E	Open Operator Station, Air Ride Seat, Ride Control, Control Pattern Changer, Powershift Transmission, 95 in Multi-Purpose Loader Bucke	\$39,000	5,276 hr	California, United States	12/10/2021 Ritchie Bros.
	2008	420E	bkt, A/C cab, extendahoe w/bkt	\$47,500	5,426 hr	Texas, United States	12/09/2021 Ritchie Bros.
	2008	420E IT	bkt, frt aux hyd, A/C, ride ctrl, extendahoe, hoe bkt, rear aux hyd	\$35,560	9,996 hr	Ontario, Canada	12/08/2021 Ritchie Bros.
- Sed	2008	420E	bkt, canopy, extendahoe w/bkt, rear aux hyd	\$40,000	6,820 hr	Arizona, United States	12/08/2021 Ritchie Bros.

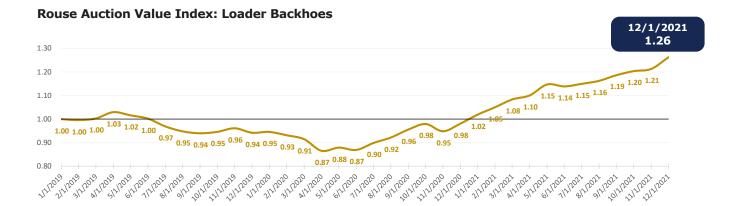
### **Retail Used Equipment Market**



So far we have looked at Ritchie Bros. transactional data for loader backhoes. The Rouse indexes for backhoes show an acceleration in both retail and auction pricing in November.

#### **Rouse Retail Value Index: Loader Backhoes**





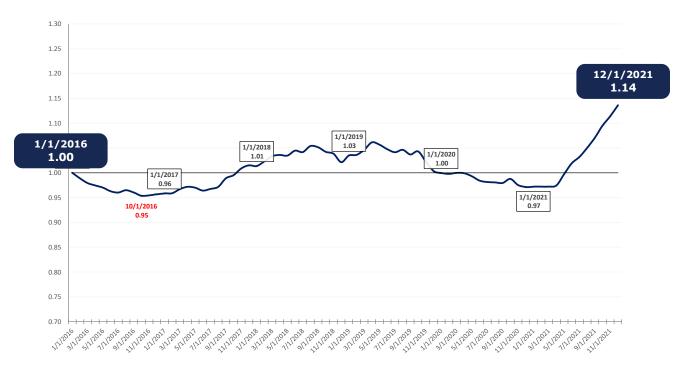
The Rouse construction equipment indexes show similar trends (next page). Retail values continued to climb in November, rising 2.2% for the month. Through 11 months of the year, retail values have increased more than 16%, reflecting a strong pricing environment for retail sellers. Transaction volumes also remain healthy, indicating strong end market demand for machines.

Auction values also continue to rise, increasing 3.2% in November alone. Auction values now stand more than 17% higher than January price levels.

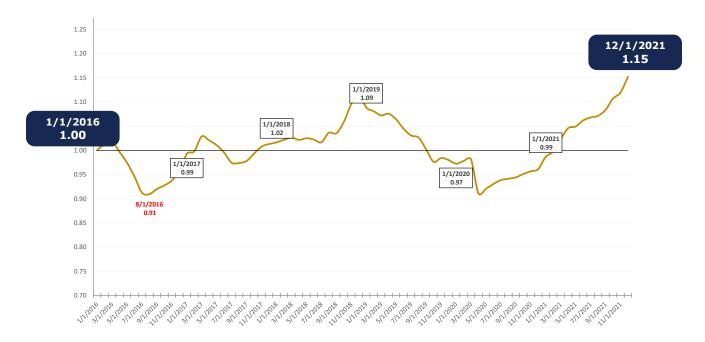
## **Retail Used Equipment Market**



#### **Rouse Retail Value Index: All Construction Equipment**



#### **Rouse Auction Value Index: All Construction Equipment**



<sup>\*</sup>General Construction Equipment: Aerial, Telehandlers, Small/Medium Earthmoving, Support

## **Ritchie Bros. Mixed Adjusted Price Indexes**

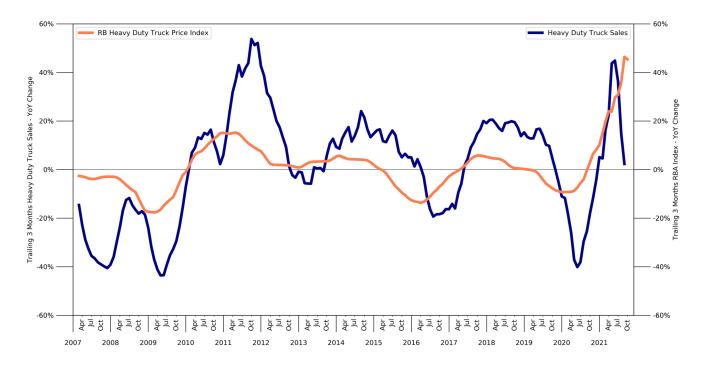
We are again seeing the trend of increasing price inflation this month particularly in the U.S. driven by truck tractors, medium earthmoving equipment and vocational trucks. In Canada, we still see increasing price inflation in truck tractors and vocational trucks with the percentage jump similar to last month.

Medium earthmoving equipment continues to show higher pricing compared to large earthmoving in the U.S. and Canada. The delta between the two increased to 28 percentage points in the U.S. and 21 percentage points in Canada.

The increasing price inflation observed in U.S. is maximum in the truck tractors category compared to last month (this month: 55%, last month: 45%). This increasing trend has been observed in several other categories like vocational trucks (this month: 41%, last month: 34%), medium earthmoving equipment (this month: 43%, last month: 36%) and aerial equipment (this month: 37%, last month: 33%). Rising pricing trends are also observed in Canada, but to a lesser extent than in the U.S.

#### Indexes are validated by correlating with key industry metrics:

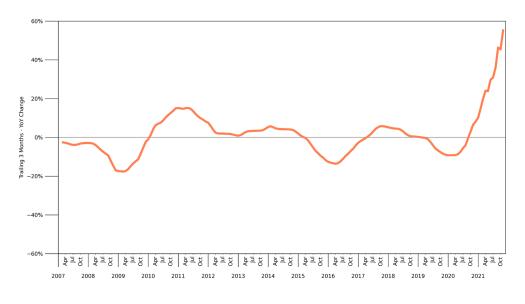
We validate our used pricing indexes by correlating them against well-followed industry metrics such as sales or orders. In this example, the U.S. Ritchie Bros. Heavy Duty Truck price index is plotted vs the U.S. Heavy Duty Truck Sales index. The correlation between the two is clear, with the price index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



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

## Truck Tractors & Vocational Trucks - U.S.





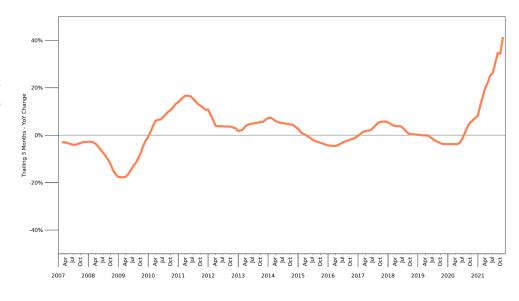
#### Prices show strengthening for used truck tractors

In our estimation, for the 3 months ending November, prices for used truck tractors increased 55% (± 1.5%) compared to the same time frame last year.

Truck tractors (S/A, T/A, Tri/A)

#### Prices show strengthening for used vocational trucks

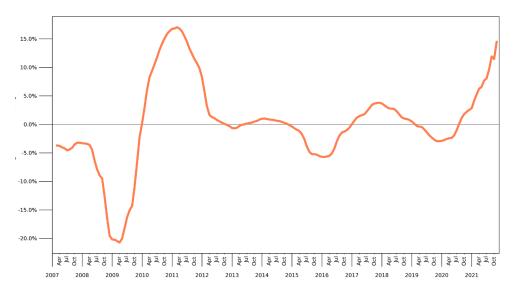
In our estimation, for the 3 months ending November, prices for used vocational trucks increased 41% (± 1.5%) compared to the same time frame last year.



Flatbed Trucks, Dump Trucks (S/A, T/A, Tri/A, Quad/A), Mixer Trucks (S/A, T/A, Tri/A, Quad/A), Van & Reefer Trucks, Mechanics Trucks, Utility Trucks

## **Large Earthmoving & Medium Earthmoving** – U.S.





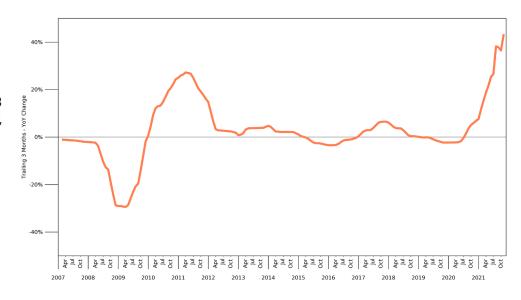
### Prices show strengthening for used large earthmoving equipment

In our estimation, for the 3 months ending November, prices for used large earthmoving equipment increased 14% (± 1.5%) compared to the same time frame last year.

Excavators, Dozers, Wheel Loaders, Backhoe Loaders, Articulated Dump Trucks, Motor Graders, Scrapers, Wheel Excavators, Wheel Dozers, Track Loaders, Soil Compactors

### Prices show strengthening for used medium earthmoving equipment

In our estimation, for the 3 months ending November, prices for used medium earthmoving equipment increased 43% (± 1.5%) compared to the same time frame last year.



Skid Steer Loaders, Compact Track Loaders, Micro Excavators, Mini Excavators, Midi Excavators

# **Aerial Equipment** – U.S.





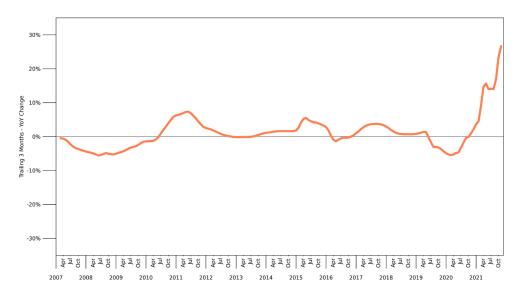
### Prices show strengthening for used aerial equipment

In our estimation, for the 3 months ending November, prices for used aerial equipment increased 37% (± 1.5%) compared to the same time frame last year.

Scissor Lifts, Boom Lifts, Telehandlers

## Truck Tractors & Vocational Trucks - Canada





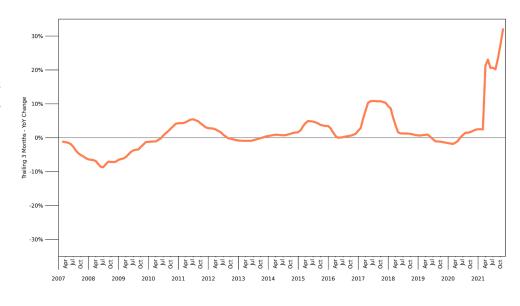
#### Prices show strengthening for used truck tractors

In our estimation, for the 3 months ending November, prices for used truck tractors increased 27% (± 1.5%) compared to the same time frame last year.

Truck tractors (S/A, T/A, Tri/A)

#### Prices show strengthening for used vocational trucks

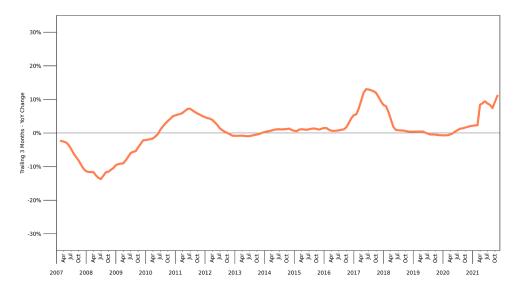
In our estimation, for the 3 months ending November, prices for used vocational trucks increased 32% (± 1.5%) compared to the same time frame last year.



Flatbed Trucks, Dump Trucks (S/A, T/A, Tri/A, Quad/A), Mixer Trucks (S/A, T/A, Tri/A, Quad/A), Van & Reefer Trucks, Mechanics Trucks, Utility Trucks

## Large Earthmoving & Medium Earthmoving - Canada





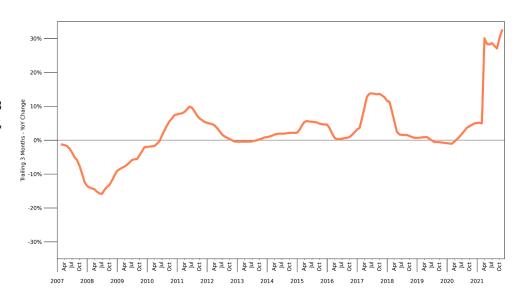
### Prices show strengthening for used large earthmoving equipment

In our estimation, for the 3 months ending November, prices for used large earthmoving equipment increased 11% (± 1.5%) compared to the same time frame last year.

Excavators, Dozers, Wheel Loaders, Backhoe Loaders, Articulated Dump Trucks, Motor Graders, Scrapers, Wheel Excavators, Wheel Dozers, Track Loaders, Soil Compactors

### Prices show strengthening for used medium earthmoving equipment

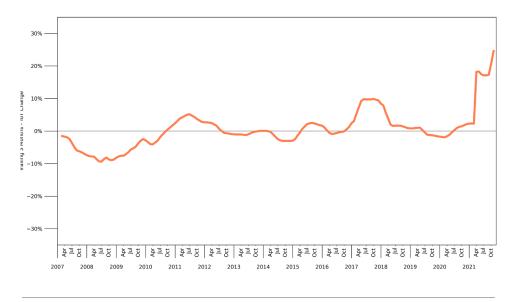
In our estimation, for the 3 months ending November, prices for used medium earthmoving equipment increased 32% (± 1.5%) compared to the same time frame last year.



Skid Steer Loaders, Compact Track Loaders, Micro Excavators, Mini Excavators, Midi Excavators

## Aerial Equipment - Canada





### Prices show strengthening for used aerial equipment

In our estimation, for the 3 months ending November, prices for used aerial equipment increased 25% (± 1.5%) compared to the same time frame last year.

Scissor Lifts. Boom Lifts. Telehandlers

#### Methodology: 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.

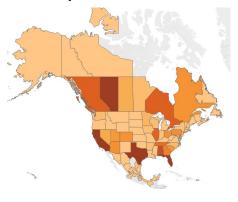
- 1.8 million transactions
- ► Data from 2005 onwards
- Adjusting for 100+ features
- Includes data from the U.S. and Canada

#### Ritchie Bros. Market Trends module:

- ► Articulated dump trucks
- ► Composite
- ▶ Dozers
- ► Forklifts
- ► Loaders
- ► Skid Steers

## Seller & buyer maps for the 3 months ending November 30, 2021

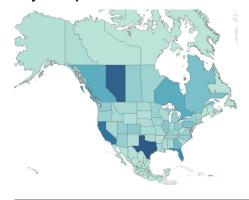
#### Seller Map - North America



#### **Top 5 selling regions:**

- ► Texas, USA
- ► Alberta, Canada
- ► California, USA
- ► Florida, USA
- ► Alabama, USA

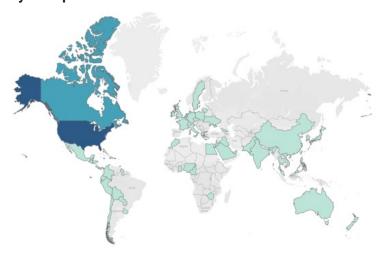
## **Buyer Map - North America**



### **Top 5 buying regions:**

- ► Texas, USA
- ► Alberta, Canada
- ► California, USA
- ► Florida, USA
- ► British Columbia, Canada

#### **Buyer Map - World Wide**



<sup>1</sup>Based on value of transactions (USD) <sup>11</sup>Outside United States and Canada

#### Top 5 buying countries::

- ► Mexico
- ► Australia
- ► Dominican Republic
- ► Peru
- ► New Zealand

### **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.



#### **Unreserved live auctions**

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

## **IRON PLANET**®

#### Weekly online auctions

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

# Marketplace (2)

#### Reserved online marketplace

- Control over your selling price & timing of sale
- ► Convenience of selling where it sits
- Buyer confidence from IronClad Assurance<sup>®</sup> equipment condition certification



#### Self-serve equipment and truck listings

- Easy-to-use interface, multiple ways to upload, secure transaction option
- ► Access to powerful pricing tools & market data
- ► No paid ad obligations, affordable monthly subscription



#### Inventory, data insights & disposition platform

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



# Data intelligence & performance benchmarking solutions

- ► Rental analytics
- ► Equipment sales support
- Fleet appraisals



For more information contact: dataproducts@ritchiebros.com

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