

SUMMARY

CONSTRUCTION

LIFT/ACCESS

AGRICULTURE

COMMERCIAL TRUCK

MARKET DATA: FEBRUARY 2018

EquipmentWatch remains the largest sales database on the planet with 20x the sales data of any other source.

\$31,337,951,449

RESALE

\$31,033,831,420

412,277 Assets

AUCTION

\$304,120,029

8,673 Assets

The EquipmentWatch Market Report™ is a monthly resource for the construction, lift/access, agriculture and commercial truck industries to make better-informed decisions by leveraging key equipment values, market activity, age and usage metrics.

How is the Price Stability INDEX calculated?

MARKET SUMMARY	For more detailed articles, visit <i>EquipmentWatch</i> Intelligence online.					
MARKET ACTIVITY	YEAR OVER YEAR	MONTH OVER MONTH				
CONSTRUCTION \$14,732,260,159 168,204 MARKET VALUE ASSETS	WARKET METRICS VALUES ▼ 6.5% ▼ 7.3% FMV FLV VOLUME ▲ 12.8% ▲ 31.6%	MARKET METRICS VALUES ▲ 3.5%	PRICE STABILITY INDEX ™ 103.92 95 □ 105 □ 105 □ 105 □ 105 □ 105 □ 105 □ 105 □ 105 □ 1			
LIFT/ACCESS \$1,142,512,042 37,026 MARKET VALUE ASSETS	VALUES V 5.7% A 3.9% FMV FLV VOLUME A 14.7% TO.0% AUCTION RESALE AUCTION	VALUES ▼ 0.5% A 8.7% FMV FLV VOLUME A 5.7% A 707.9% AUCTION	95 99.13 105 DEFLATED STABLE INFLATED			
AGRICULTURE \$12,573,891,007	VALUES ▲ 0.1% ▼ 1.1% FMV FLV VOLUME ▲ 27.2% ▲ 41.2% AUCTION	VALUES ▲ 1.9% ▼ 0.1% FLV VOLUME ▼ 2.2% ▲ 385.6% AUCTION	95 100.46 DEFLATED STABLE INFLATED			
COMMERCIAL TRUCK \$2,585,168,212 61,703 MARKET VALUE ASSETS	VALUES ▼ 10.9% ▼ 7.3% FLV VOLUME ▼ 7.4% A 35.5% AUCTION	VALUES ▼ 1.1% ▼ 0.8% FMV FLV VOLUME ▼ 4.1% AUCTION	98.73 95 V 105 DEFLATED STABLE INFLATED			



Did you miss a previous Market Report?

Click any of the buttons below to download the report

February 2018

November 2017

January 2018

October 2017

December 2017

September 2017



You are reading the free version of the EquipmentWatch Market Report™

The Premium Market Report is exclusively available to EquipmentWatch customers.

Click here to see a sample of the Premium Market Report

Subtype Trends • Brand Analysis • Regional Price Stability

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TYPE TRENDS

BRAND TRENDS

REGIONAL TRENDS

How is the Price Stability INDEX calculated?



MARKET PERFORMANCE

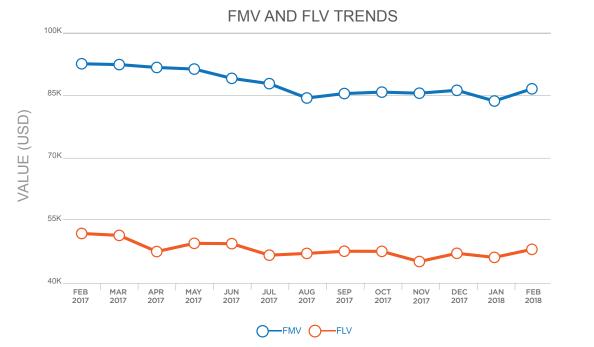
The auction channel stole the spotlight for February 2018. Ritchie Brothers' expectation to see a 30% or higher increase in auctioned assets over the previous year seemed to be in the ball park. There were 31.6% more assets sold in February 2018 than in February 2017 for all auctioneers covered. Auction market activity skyrocketed 810% over the previous month, but it is not uncommon to see this type of wild swing in February as Ritchie Brothers holds no auctions in January and follows up with their biggest auction in February.

MARKET HIGHLIGHTS

- Values increased on both resale and auction channels.
 FMVs went up by 3.5% and FLVs rose by 4.2% from January 2018 to February 2018.
- It's interesting to note that while monthly values were going up, average age also went up significantly, which we consider to be a sign of a thin market.
- Average age decreased slightly on the resale and auction channels from January 2018 to February 2018.

MARKET FORECAST

Construction companies are preparing for the start of construction season, large investments in infrastructure are anticipated and construction sentiment is high, all of which line up for a good year to see values and market activity rise over the coming months. We expect the changes on the auction channel to normalize over the coming month.









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MARKET PERFORMANCE

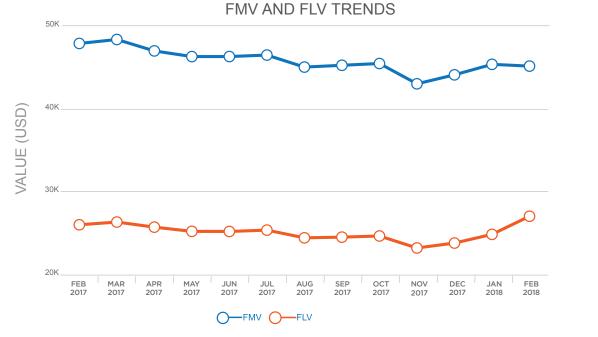
Lift values were split once again in February, with FMV having a slight decrease and FLV having an 8.7% increase. Resale and auction market activity both increased in February, while year over year auction activity had a decrease of 10%.

MARKET HIGHLIGHTS

- The large increase in FLVs in February was driven by the yearly Ritchie Bros auctions, which bring people from all over the world and is the largest auction in the world.
- The overall market value and the number of assets decreased by about 13% and 10%, respectively, in February. This is due to the decrease in overall resale activity in the entire lift market from January to February.
- Average age and utilization decreased in the resale channels, when compared to January, while they both increased in the auction channels.

MARKET FORECAST

Looking forward to March data, we should see increases again in auction market activity with the Ritchie Brothers Orlando events continuing, while seeing a decline in FLV. March usually sees higher auction activity than February, but with lower prices.





LIFT/ACCESS

NEXT TYPE TRENDS

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MARKET PERFORMANCE

February is a fascinating month because the impacts of seasonality influence the auction channel greatly in the areas of volume, age and utilization. Since the average age of equipment has fallen 15.6% from last month, usage has also declined. Regarding the resale channel there is an increase in age relative to last year of 11.9%, however this is mostly due to the increase in volume of 27.2%.

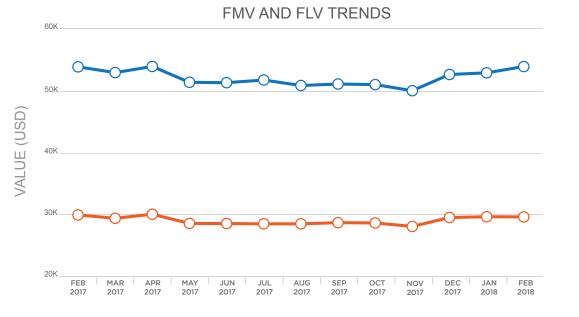
MARKET HIGHLIGHTS

- Usage has decreased on the auction channel; since volume has increased significantly this is an indicator that there have been a lot of newer models introduced this month.
- As a piece of equipment ages the value of that equipment depreciates. Compared to January, equipment introduced to the resale channel is slightly younger. This explains why there is a slight increase in FMV for the month.
- The resale channel has experienced a marginal increase in values this month. Usage and average age did not fluctuate significantly either due to minute increase in volume change. In February the resale channel has minimal changes, due to seasonality changes being geared toward the auction channel.

MARKET FORECAST

Typically values for agricultural equipment are not very volatile. We can expect that the markets will continue to stabilize with no major changes in values.

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→ FMV
→ FLV

<u>)</u> .		VOLUME	CHANGE	AVERA	GE AGE	USA	.GE
0	MONTH OVER MONTH	▲ 1.9% RESALE	▲ 385.6% AUCTION	▼ 1.0% RESALE	▼ 15.6% AUCTION	▲ 0.3% RESALE	▼ 13.0% AUCTION
	YEAR OVER YEAR	▲ 27.2% RESALE	▲ 41.2% AUCTION	▲ 11.9% RESALE	▲ 3.4% AUCTION	▼ 3.2% RESALE	▲ 2.7% AUCTION



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MARKET PERFORMANCE

With the expected shift in activity from the resale channel to auction last month, FMV and FLV changes were quite similar across the two channels. The average age and usage changes however, were not similar between the channels. Average age increases were much larger on auction while average usage increased at a higher rate for resale.

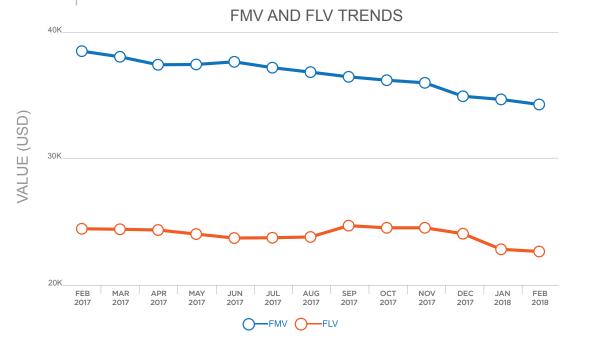
MARKET HIGHLIGHTS

- As predicted, the month over month increase in auction channel activity was greater than previous months.
- Surprisingly, FLV did not drop a full 1% despite the large increase in activity, indicating prices holding steady as more trucks are selling on the channel.
- As average age increased on the resale channel, it came as no surprise that FMV was down for the month.

MARKET FORECAST

Expect market activity to slow down on the auction channel and the number of available trucks on resale to remain close to where it stood last month.

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	VOLUME CHANGE		AVERAGE AGE		USAGE	
MONTH OVER MONTH	▼ 4.1% RESALE	▲ 187.4% AUCTION	▲ 0.8% RESALE	▲ 8.8% AUCTION	▲ 2.1% RESALE	▲ 0.9% AUCTION
YEAR OVER YEAR	▼ 7.4% RESALE	▲ 35.5% AUCTION	▲ 5.6% RESALE	▼ 19.7% AUCTION	▼ 15.7% RESALE	▲ 4.0% AUCTION

COMMERCIAL TRUCK

NEXT TYPE TRENDS



INTRODUCTION

The EquipmentWatch Market Report is a compilation of a wide array of EquipmentWatch's data, designed to bring you an in-depth look at used equipment markets over the last month.

This Appendix is designed to answer your questions regarding this report. Here we define and illustrate how we think about values, market activity, age, Usage, and regional influence for the most common types of equipment seen on used markets across North America.

OUR DATA

Selection Criteria for OEMs and Subtypes

EquipmentWatch tracks Resale and Auction prices and activity for over 15,000 models across 389 manufacturers throughout North America. With over \$800 billion in collected equipment transactions, EquipmentWatch is your primary source for intelligence regarding used equipment markets.

The data in this report is divided into four distinct equipment markets: Construction, Lift/Access, Agriculture, and Commercial Trucks. For each market, we selected the top equipment types based on their market share from January 2015 to December 2015. They're listed in the table to the right.

Construction	Lift/Access	Agriculture	Commercial Trucks
4-Wd Articulated Wheel Loaders	Electric Self Propelled Scissor Lifts	Track Tractors	Heavy Duty: Conventional - Sleeper (Heavy Tractor)
Articulated Frame Graders	I.C. Pneumatic Tire Lift Trucks	Balers	Heavy Duty: Conventional - Day Cab (Heavy Tractor)
Articulated Rear Dumps	I.C. Self Propelled Telescopic Boom Aerial Lifts	Combines	Heavy Duty: Conventional - Day Cab (Heavy Cab Chassis)
Compact Track Loaders	I.C. Self-Propelled Articulating Boom Aerial Lifts	Corn Headers	Medium Duty: Conventional - Day Cab (Cab Chassis)
Crawler Mounted Compact Excavators	Telescoping Boom Rough Terrain Lift Trucks	Wheel Tractors	Medium Duty: Cabover - Day Cab (Cab Chassis)
Crawler Mounted Hydraulic Excavators	I.C. Cushion Tire Lift Trucks	Planters	Medium Duty: Crew (Cab Chassis)
Large Generator Sets			
Single Drum Vibratory Compactors			
Skid Steer Loaders			
Standard Crawler Dozers			
Tandem Vibratory Compactors			
Tractor-Loader- Backhoes			



We have also limited the scope of the EquipmentWatch Market Report to the following brands in each market:

Construction	Lift/Access	Agriculture	Commercial Truck
Bobcat	Caterpillar	Deere	International
Case	Genie	Case IH	Freightliner
Caterpillar	JLG	New Holland	Volvo
Deere	Sky Trak	Massey Ferguson	Kenworth
Komatsu	Skyjack	Challenger	Peterbilt
Volvo	Hyster	Kubota	Hino

THE EQUIPMENTWATCH PRICE STABILITY INDEX™

Academic justification

The EquipmentWatch Price Stability Index[™] is a new metric for understanding used equipment markets for used heavy equipment. It measures resale price capacity based on the movement of market prices and market activity among the equipment types and manufacturers presented above.

Methodology and Calculation

The EquipmentWatch Price Stability Index™ is based on the Laspeyres Index, one of the many economic indices used to monitor changes in prices over time. To calculate it, we use the framework provided by the Laspeyres Index:

$$P_{L} = \frac{\sum (p_{c,t_{n}}) * (q_{c,t_{0}})}{\sum (p_{c,t_{0}}) * (q_{c,t_{0}})}$$

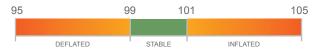
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This equation sums the product of prices in the current month and quantity of the previous month and divides that by the product of prices in the previous month and quantity in the previous month.

We have modified this method to track the change in prices for each equipment type from month-to-month against the change in market activity for each equipment type month to month.

Interpretation

The EquipmentWatch Price Stability Index™ can be thought of as an index of price capacity. In more formal terms, it measures how efficiently used markets adjust to equilibrium given previous adjustments in prices and market activity. There are three primary ranges in the EquipmentWatch Price Stability Index™, as noted below:



When the EquipmentWatch Price Stability Index™ is higher than 101, that indicates that equipment is valued at a higher level than expected, given last month's prices and amount of market activity. We categorize this range as "Inflated".

When the EquipmentWatch Price Stability Index[™] is lower than 99, it indicates that equipment is valued at a lower level than expected, given last month's prices and market activity. We categorize this range as "Deflated".

When the EquipmentWatch Price Stability Index™ is between 99 and 101, it is typically demonstrating that equipment prices and market activity are moving appropriately towards market equilibrium. We categorize this range as "Stable".

It is important to note that a higher rating on EquipmentWatch Price Stability Index™ does not necessarily imply that used markets are better than a lower rating. For some, price inflation is desirable; for others, it is undesirable. However, all parties involved in buying or selling equipment on used markets can use the EquipmentWatch Price Stability Index™ to easily understand how prices in a particular region or equipment channel are moving relative to the previous month.



SECTION GUIDES

The Introduction

In the top left, we exhibit a tally of the estimated market value of market activity last month in the Resale channel and Auction channel.

In the main table, we display market activity and assets for each market, along with month over month and year over year changes in Fair Market Value and Forced Liquidation Value.

Overall Trends

This page is an overview of each channel. The graph highlights an overall FMV and FLV trend line for all of the equipment types and manufacturers in the report for the last 13 months. It also displays very general month over month and year over year trends across the entire channel.

Type Trends

This page subsets the analysis of the previous page across each of the key equipment types in this report.

Brand Trends

This page shows some of the key month over month trends for the manufacturers represented in this report, including equipment values, Usage, market activity, and age trends.

Regional Trends

This page shows the EquipmentWatch Price Stability Index[™] for each of the 14 regions, using the same calculation method as the EquipmentWatch Price Stability Index[™] shown on the first page of the report. The states and provinces which make up each region are listed in the table to the right.

Note that due to regional disparity in market activity, some regions with very little or no market activity in the last month are excluded from the analysis. These are marked with "NA" on the map.

Country	Region	State/Province
USA	А	CT, DE, MA, ME, NH, NJ, MY, RI, VT
USA	В	MD, P, VA, WV
USA	С	AL, FL, GA, KY, MS, NC, SC, TN
USA	D	IL, IN, MI, OH, WI
USA	Е	IA, KS, MO, NE
USA	F	AR, LA, OK, TX
USA	G	AZ, CO, NM, UT
USA	Н	ID, MN, MT, ND, SD, WY
USA	I	CA, NV, OR, WA
USA	J	HI
USA	K	AK
CAN	L	NT, NU, YT
CAN	M	AB, BC, MB, SK
CAN	N	NB, NL, NS, ON, PE, QC

FAQS

Why did you limit the equipment types in this report?

EquipmentWatch tracks market activity for over a hundred unique equipment types each month. For each channel, we selected the most popular equipment types, based on the frequency of appearance on the resale and auction channels.

Why are there only 24 manufacturers in this report?

EquipmentWatch tracks market activity for almost 400 unique manufacturers each month. For each market, we selected the top 6 manufacturers. As the markets shift and prominence on used markets changes, we will adjust our selections accordingly.



Why don't you use OLV?

Orderly Liquidation Value, or OLV, is a third major category of values. These are the values of an asset given a single seller and multiple potential buyers given a long or indefinite timeframe in which to dispose. Given the lack of clarity around the time dimension, we have chosen not to make assumptions about the orderly liquidation process. However, OLV is typically between FLV and FMV in gross value.

IMPORTANT DEFINITIONS

Fair Market Value (FMV): the value of an asset sold to a single buyer under no compulsion.

Forced Liquidation Value (FLV): the value of an asset sold at a properly advertised and conducted auction in which the seller is under compulsion to sell on an as-is, where-is basis as of a specific date.

Market Activity: A measure of the total number of observations collected by EquipmentWatch, including publicly-available dealer listings, auction results, and final sales data.

Meter Reads: A measure of Usage that varies by equipment market. For most equipment types, this represents engine hours at the time of observation.

Age: the age of an asset, based on model year and the year of observation.

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ABOUT EQUIPMENTWATCH

EquipmentWatch is the trusted source for heavy equipment data and intelligence. EquipmentWatch produces the leading database information products for the construction equipment industry and is the world leader in heavy construction research and serves more than 15,000 professional, high-volume users of construction and lift-truck data. Our online and print products are valuable tools in decisions surrounding the purchase, valuation, operation, and disposal of equipment.

For nearly 50 years, EquipmentWatch has served contractors, equipment manufacturers, dealers, rental companies, lenders and insurers, and government agencies involved in heavy civil construction.

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